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Section 42A Report

Section 42A of the Resource Management Act 1991

Date: 22 July 2025

To: Lacey Bragg
Consents Manager

From: Ryan Hodgson

IRIS ID: APP-20242761

Subject: ***Section 42A Report – Resource Consent Application considered under Delegated Authority***

1. The Application

1.1 The proposed activities

Applicant: Paul Turner (representing the Paul Turner Farm Trust)
Application: APP-20242761
Site address or location: 237 Sinclair Road, Opio
Legal description: Lot 2 DP 608014 and Lot 1 DP 6203
Map Reference: NZTM2000 1218892E 4900083N

- 1.1.1 The application is for the following activities at 237 Sinclair Road, Opio:
- to increase the area of a dairy farm by 57 hectares and increase the existing milking herd from 450 to 550 dairy cows;
 - the incidental discharge of contaminants from farming activities;
 - the discharge agricultural effluent to land from the proposed dairy operation;
 - to take and use up to 83,306 litres/day and 23,582,952L/year of groundwater for a dairy operation; and
 - to vary a consent to use land for two self-feeding silage pads to include their use in May.
- 1.1.2 Paul Turner, representing the Paul Turner Farm Trust (the applicant), owns and operates an existing farm at Opio in Western Southland. The farm is 229.7 hectares (ha) (220ha effective area) and includes a dairy milking platform (160ha effective area) with runoff and cut and carry blocks (60ha effective area). The Applicant has agreed to purchase an adjoining 35ha sheep and beef block, and at the same time has agreed to sell part of their existing dairy farm to a neighbour. The resulting exchange of land and farming system will result in a 57 hectare increase in the effective size of the Applicants dairy milking platform from 160 hectares to 217 hectares (effective area). The Applicant is also proposing to increase the milking herd from 450 cows to 550 cows. As such, the Applicant is seeking to modify existing consents to reflect the new farm boundary and farming

systems and to apply for a new land use and discharge consent to increase the milking operation and milking platform and to authorise the incidental discharge of contaminants from farming.

- 1.1.3 Figures 1 to 4 below illustrate the current farm operation, the proposed land transfers, and the resulting increase in size of the dairy farm.



Figure 1 The current farm boundary (includes both the dairy platform and runoff/cut and carry blocks)



Figure 2 The dairy platform on 3 June 2016 authorised under rule 20 (pSWLP). The South East (purple) and North East Blocks (pink) were part of the dairy platform on 3 June 2016. The North East Block (pink) has since been sold however.



Figure 3 Proposed new dairy platform after all land transactions have been completed (red and purple land). Current farm (red), lease relinquishing/land being sold (yellow), and area being added (purple).



Figure 4 Proposed new dairy platform after all transactions are completed

1.1.4 Table 1 below demonstrates the land area changes, and the proposed 57 hectare increase in the size of the dairy platform from 160 hectares to 217 hectares (effective area).

Table 1 Overview of current and proposed land areas of the farm

Current	Area ha
Dairy Land Owned	113
Dairy Land Leased	47
Total Dairy	160
Other Leased	60
Total Current	220
Proposed	Area ha
Currently Owned Dairy	113
Currently Leased Dairy	47
Sell 22 ha Dairy	-22
Other Leased land	60
Relinquish lease 16ha	-16
Buy 35 ha	35
Total Proposed Dairy	217

1.1.5 The following tables identify other key details relating to the application

Table 2 - Discharge permit details

FDE discharge permit	
Relevant rule(s)	pSWLP: Rule 35(c): Discretionary
Cow numbers	Current: 450 cows Proposed: 550 cows
Stocking rate (cows/ha)	2.5
Winter milking proposed?	no
Other sources of effluent?	Self-feeding silage pads: Pad 1 (2,275 m ²) Pad 2 (1,925m ²)
Effluent disposal area (ha)	Current: 202 ha (only uses 40ha) Proposed: 186 ha
Irrigation method	Low-rate pod, low-rate travelling rain gun, slurry tanker and an umbilical system
Application rate and depth	Low-rate effluent application methods: - Not exceeding the rate of 10 mm/hour and not exceeding the depth of 25mm per application; High-rate effluent application methods: - Slurry tanker, not exceeding the depth of 5 mm per application; - An umbilical system, not exceeding the depth of 10 mm per application.
Storage available (m ³)	7,035 m ³
Massey pond calculator 90% storage requirement (m ³)	5,454 m ³
Monitoring proposed?	Inspections as per consent conditions

Table 3 Water permit details

Water permit	
Relevant rule(s)	RWP: Rule 23 (c) – Restricted Discretionary pSWLP: Rule 54 (a) – Permitted
Source of water (bore or watercourse)	Bore D45/0037
Groundwater zone/name of watercourse	Upper Aparima
Aquifer type (for groundwater takes)	Terrace
Rate of take (L/s)	2 L/s
Freshwater storage onsite? How much?	2 tanks with total capacity of 60 m ³
Daily volume (L/day)	Current: 66,600 L/day Proposed: 83,306 L/day
Consistent with 140 L/cow/day and 45L/dry stock/day (Reasonable use of water for stock water)	No. However, the proposal meets the permitted baseline of rule 54(a) in the pSWLP as the daily

and dairy use established in Appendix L.4 of the pSWLP)?	water take is less than 86,000L/day.
Consistent with 95 L/cow/Year and 30L/dry stock /year (Reasonable use of water for stock water and dairy use established in Appendix L.4 of the pSWLP)?	No. However, the proposal meets the permitted baseline of rule 54(a) in the pSWLP as the daily water take is less than 86,000L/day.
Yearly volume (m ³ /year)	Current: 21,379.5 m ³ /year Proposed: 23,582.952 m ³ /year
Discretionary allocation (m ³ /year)	RWP: 93,000,000 m ³ /year
Amount currently allocated (m ³ /year and % of discretionary allocation)	RWP: 2,915,317 m ³ /year (3%)

Table 4 Farming consent details

Land use consent	Expanded dairy farm
Relevant rule(s)	pSWLP: Rule 20(c) – non-complying
Dairy platform increasing in size?	Yes, by 57ha
Peak milking cow number increasing?	Yes, from 450 to 550
IWG proposed?	No (8ha of IWG will be removed)
OverseerFM predicted change in average N/loss/ha	22% reduction in Nitrogen losses
OverseerFM predicted change in average P/loss/ha	5% reduction in Phosphorus losses
Mitigations (Outside of OverseerFM nutrient budgets)	• 250 metres of riparian planting • Slope dairy lanes away from waterways

Table 5 Incidental discharge details

Discharge consent	Incidental discharges from farming activities
Relevant rule(s)	RWP: Rule 3 – Discretionary

Table 6 Variation details

Land use consent variation	Self-feeding silage pads
Relevant rule(s)	RMA s127
Proposed change	To add an additional month (May) for the use of two self-feeding silage pads

1.2 Description of the affected environment

- 1.2.1 The existing site (see figures 1 and 2 above) includes a 160ha (effective area) operational dairy farm located at 237 Sinclair Road, Opio, Southland. Currently the Applicant holds the following permits:
- discharge permit (AUTH-20211674-01-V1) - authorising the discharge of agricultural effluent to land (expires 31 May 2032);
 - water permit (AUTH-20211674-02) - authorising the abstraction of up to 66,600L/day and 21,379,000L/year (expires 31 May 2032); and
 - land use permit (AUTH-20233661) - authorising the use of land for two self-feeding silage pads (expires 31 May 2034).

- 1.2.2 South of the dairy platform are runoff and cut and carry blocks (60ha effective area) which support the Applicant's dairy operation. The proposed new 35-hectare block is further to the south and is currently used for sheep and beef grazing by the neighbouring farmer (See figures 1-3 above).
- 1.2.3 These parcels of land are in an area dominated by pasture based agricultural activities (sheep, beef, and dairy farming).

Surface water

- 1.2.4 The farm is located within the Opio Stream, Aparima River, and Kenny Creek catchments which are part of the wider Aparima Freshwater Unit. Tributaries from the farm reaches the Aparima River approximately 6.5km downstream.
- 1.2.5 The nearest State of the Environment (SoE) water quality monitoring site to the property is at the Aparima River in Thornbury, which is located approximately 38km south of the property. The results indicate improving trends across most metrics except for E.coli, Ammoniacal Nitrogen and Total Phosphorus which are showing degrading trends. These results are summarised in the below table

Table 7 SoE results - Aparima River in Thornbury

Parameter	5-year median	State	Trend
E. coli	220 n/100ml	Worst 50% of all sites / Attribute Band D	Very Likely Degrading
Clarity	1.92 metres	Best 50% of all sites	Indeterminate
Turbidity	2.1 NTU	Best 50% of all sites	Likely Improving
Total Nitrogen	0.98 mg/L	Worst 50% of all sites	Very Likely Improving
Total Oxidised Nitrogen	0.77 mg/L	Worst 25% of all sites	Very Likely Improving
Dissolved Inorganic Nitrogen	0.775 mg/L	Worst 25% of all sites	Very Likely Improving
Ammoniacal Nitrogen	0.005 mg/L	Best 25% of all sites / Attribute Band A	Likely Degrading
Nitrate Nitrogen	0.77 mg/L	Worst 25% of all sites / Attribute Band B	Very Likely Improving
Dissolved Reactive Phosphorus	0.007 mg/L	Best 50% of all sites / Attribute Band B	Likely Improving
Total Phosphorus	0.018 mg/L	Best 50% of all sites	Very Likely Degrading

- 1.2.6 Modelled water quality information at farm scale has been undertaken by Land and Water Planning on behalf of Environment Southland. This information is available on the Environment Southland website¹. The modelled water quality information at the relevant river segments within the proposed farm boundary is summarised in the table below.

Table 8 Modelled water quality at the relevant river segments within the farm

Parameter	Current
E. coli	448 n/100ml (median)
Total Nitrogen	2.257
Total Oxidised Nitrogen	1.002

¹ <https://esgis.maps.arcgis.com/apps/webappviewer/index.html?id=07f074588a5d49a4907a02e9d2907d1b>

Dissolved Reactive Phosphorus	0.031
Total Phosphorus	0.55 mg/L

- 1.2.7 The modelling above indicates that the farm is having a greater impact on localised water quality than what is occurring 38km downstream. Whilst the concentration of contaminants is higher in the minor tributaries on the farm, this isn't surprising given the water flows will be much lower compared to the Aparima River at Thornbury.
- 1.2.8 The proposed farm is within a degraded catchment under Schedule X of the proposed Southland Water and Land Plan (pSWLP). Specifically, the relevant river segments within the proposed farm boundary are degraded for Macroinvertebrate Community Index (MCI), *Escherichia coli* (*E. coli*) and suspended sediment.
- 1.2.9 The Aparima River at Thornbury is a popular bathing site as per Appendix G of the pSWLP. High *E. coli* concentrations that are showing a deteriorating trend is therefore a potential concern.
- 1.2.10 The nearest surface water based drinking water site is the Riverton town supply 39km downstream of the farm which serves a population of 501 to 5,000 people.
- 1.2.11 The information provided by the applicant was reviewed by Council scientists. They confirm that:
- freshwater ecosystem health is poor in many parts of the Aparima catchment.
 - The Jacobs River Estuary is in poor ecological condition and classed as eutrophic.
 - the proposed activity is situated within a degraded catchment as defined by Schedule X for Total Nitrogen, suspended sediment, *E. coli*, and MCI.
 - throughout the catchment, pathogens, sediment, and nutrients are the main drivers of declining ecosystem health and increased risks to human health.
- 1.2.12 Overall, they conclude that the evidence shows that there are significant adverse effects on aquatic life in this catchment.

Groundwater

- 1.2.13 The nearest downgradient groundwater based drinking water site is the Otautau town supply 20km south of the farm which serves a population of 25 to 500 people.
- 1.2.14 The farm is located in the Upper Aparima groundwater management zone. Total groundwater nitrogen concentrations on the farm have been modelled at 4 - 4.2 mg/L reflecting moderate to high land use impacts. This remains within the drinking water standards of 11.3 mg/L.
- 1.2.15 The information provided by the applicant was reviewed by Council scientists. They confirm that contaminant losses are more likely to occur via overland flow or artificial drainage, rather than leaching to groundwater.

Soils and Physiographic zones

Table 9 Summary of physiographic zones and soil types

Soils	Soil Type	Vulnerability Factors		
		Structural	Nutrient Leaching	Waterlogging

		Compaction		
	Makarewa	Moderate	Slight	Severe
	Aparima	Moderate	Moderate	Moderate
Physiographic Zone	Gleyed, Central Plains			
FDE land classification	Category B – Impeded drainage or low infiltration rate Category C – Sloping land			

- 1.2.16 The Gleyed physiographic zone comprises predominately flat to undulating land that occurs between major river systems where soils are fine-textured and poorly drained. Soils in this zone are prone to waterlogging and have some ability to remove nitrogen from the water via denitrification. However, this process can be bypassed when contaminants are flushed to nearby surface water bodies via artificial drains and overland flow following heavy or sustained rainfall events.
- 1.2.17 Contaminant losses in the Central Plains physiographic zone varies depending on whether soils are wet or dry. The soils crack and shrink when dry and swell when wet. The key pathways for losses are deep drainage to groundwater and artificial drainage. Under the right conditions, the soil has some ability for denitrification, which can reduce the losses of nitrogen through the soils.
- 1.2.18 The Central Plains physiographic zone only makes up approximately 5% of the farm area and is primarily Makarewa Soil. Makarewa soil has only a slight risk of nutrient leaching therefore the primary contaminant pathways on this farm are via overland flow and artificial drainage.

1.3 Planning framework

- 1.3.1 Resource consents are required under the Regional Water Plan (RWP) and the proposed Southland Water and Land Plan (pSWLP). Consents are required under the following rules and regulations:
- 1.3.2 Discharge permit
Rule 35(c) pSWLP - Discretionary
- Water permit
Rule 23(c) RWP - Restricted Discretionary
- Land Use permit (farming)
Rule 20(c) pSWLP - Non-Complying
- Land Use permit (self-feeding silage pads and effluent storage)
Section 127 RMA - Discretionary
- 1.3.3 Overall, the application is considered to be a **non-complying** activity.
- 1.3.4 When considering a **non-complying activity**, the Council may only, in accordance with Section 104D, grant a resource consent for the activity if it is satisfied that the adverse effects of the activity are minor or the application is for an activity that will not be contrary to the objectives and policies of the relevant plan or proposed plan. If the application passes the “gateway” tests in

Section 104D, under Section 104B the Council may grant or refuse consent for a non-complying activity, and if it grants the application, may impose conditions under Section 108 of the RMA.

1.4 Notification, written approvals, and submissions

- 1.4.1 The application was publicly notified on 16 April 2025. There is one submission received from Te Ao Marama Inc. initially in opposition with a request to be heard. Since direct dialogue with the Applicant, Te Ao Marama Inc. informed Council they no longer wished to be heard as part of their submission and they are no longer opposing the consent application.²

1.5 Effects on the environment

- 1.5.1 The application for a discharge permit to discharge agricultural effluent to land, water permit to abstract groundwater for a dairy operation, and land use permit to use land for farming requires consideration of the following effects:

- Effects on water quality, including potential for contamination of groundwater and surface water, effects on aquatic life and habitats, and effects on human health (eg drinking water and bathing sites);
- Effects on water quantity (including stream depletion effects);
- Effects on soil health;
- Odour effects; and
- Cultural and spiritual effects.

Water Quality effects

Water quality effects - The effluent discharge and self-feeding silage pads

- 1.5.2 Potential adverse effects of discharging agricultural effluent onto land include contamination of groundwater and surface waterways. Surface water is degraded in this catchment and has been identified as the primary receiving environment.
- 1.5.3 It is proposed to increase cow numbers which will increase the effluent volume generated on the farm. The proposed discharge area of 186 hectares will ensure effluent will be discharged at a rate of 37.7 kg N/ha/year. This is well within the 150 kg N/ha/year specified in the permitted activity criteria of rule 35(a)(viii) of the pSWLP. Furthermore, the disposal area to stock ratio of 33.8ha/100 cows is well within Council's guidelines which is 4 ha/100 cows to limit nitrogen loading to 150 kg N/ha/year. It is also within 8 ha/100 cows as recommended in the Best Practice Guidelines Booklet³.
- 1.5.4 In accordance with Policy 17 if the pSWLP, proposed maximum application rates and depths will adhere to best practice according to Dairy NZ's guidelines '*A farmer's Guide to Managing Farm Dairy Effluent – A Good Practice Guide for Land Application Systems*'.
- 1.5.5 Storage for agricultural effluent will remain unchanged from the system authorised under the existing discharge permit and an updated DESC calculation was submitted to show that this will be sufficient for the increased cow numbers.

² Environment Southland Document ID: A1294020

³ Farm Dairy Effluent, Best Practice Guidelines (2007), Environment Southland

- 1.5.6 Other mitigations proposed by the Applicant to minimise the effects related to the effluent discharge activity and the variation to the land use consent for self-feeding silage pads include:
- Adhering to standard buffer distances to surface waterways (20m), water abstraction points (100m), farm boundary (20m), and dwellings/places of assembly not on the landholding (200m) in accordance with the permitted activity criteria of rule 35(a) of the pSWLP.
 - The discharge system meets industry best practice standards by using deferred storage and low rate and low depth application technologies that are equipped with fail safe measures.
 - Effluent will only be spread onto land when conditions are suitable, this means no effluent will be applied unless there is a soil moisture deficit available.
 - The proposal includes the continual use of the existing agricultural effluent storage pond. This facility was constructed with a resource consent (AUTH-301200), is synthetically lined and has a leak detection system meeting the permitted activity criteria of Rule 32D and 32E (pSWLP).
 - The proposal includes the continual use of the twin sludge bed/weeping wall facility. This facility passed a visual inspection by a suitably qualified person which was verified by a CPEng.
 - All other remaining effluent storage structures are under 35 cubic metres and meet the permitted activity criteria in the pSWLP.
 - There is sufficient storage volume to enable deferred storage of agricultural effluent.
 - There will be a 28-day return period between applications in accordance with the permitted activity criteria of rule 35(a)(x) of the pSWLP.
 - The use of land for self-feeding silage pads (including the proposed additional month of May) will help avoid nutrient losses via overland flow and artificial drainage during high rainfall months due to the cows being taken off pasture. This preserves soil structure and subsequent sediment loss to water and prevents point source discharges from cattle on pasture during the wetter months. This significantly reduces contaminant losses to groundwater and surface water and enables the deferred storage of agricultural effluent until a soil moisture deficit exists.
- 1.5.7 When effluent is applied to soil in an appropriate manner, the effluent can act as a nutrient. The nutrient loading rate of 37.7 kg N/ha/year is well below nitrogen requirements to maintain soil fertility and will offset fertiliser use rather than adding to it. This should ensure that the loading of nutrients from the discharge will not increase nutrient losses to water. The proposed storage capacity will allow for scheduling of effluent irrigation based on soil moisture deficits, decreasing the potential for nutrient loss to water. Provided conditions of consent are adhered to, adverse effects from the discharge of agricultural effluent to land on water quality should be avoided as far as practicably possible.
- 1.5.8 Including the use of the existing self-feeding silage pads in the month of May will further reduce contaminant losses as effluent is collected into the effluent storage system to be irrigated to land in a controlled manner when a soil moisture deficit exists. The use of these facilities in the proposed new farming system will further reduce contaminant losses to surface water bodies, particularly phosphorus, microbial contaminants, and sediment.

Water quality effects - Use of land for farming and associated discharges

- 1.5.9 Consideration has also been given to potential adverse effects on surface and groundwater quality that may occur because of the proposed new farm system (where there is an increase in dairy farm area and dairy cow numbers).
- 1.5.10 The Applicant has provided a baseline nutrient budget from the 2023/24 season to represent the current farm system (status quo) and compared it with a nutrient budget of the proposed new farm system. This is to demonstrate anticipated contaminant losses from each farm system and to

show how there will be an overall reduction in contaminant losses from the proposed expanded dairy farm system improving water quality. The nutrient budgets were prepared by Lee Baldwin, Baldwin Agri Solutions Ltd, and reviewed by Miranda Hunter, Roslin Consultancy Ltd, who are both Certified Nutrient Management Advisors.

- 1.5.11 As shown in the summary table below, Overseer modelling⁴ (version 3) predicts that nitrogen and phosphorus losses will be reduced by 22% and 5% respectively as a result of the proposed new farming system.

Table 10 Overseer summary (Overseer version 6.5.8)

	Total Baseline farm system	Revised Total baseline	Proposed new farm system	Difference between baseline and proposed new farm systems
Effective Area (ha)	255	217	217	
Total Farm N Loss (kg)	12,259	9,936 (12,259 -2,323)	7,752	- 22%
N Loss/ha (kg N/ha/yr)			35	
Total Farm P Loss (kg)	256	218 (256 -38)	208	- 5%
P loss/ha (kg P/ha/yr)			0.9	
RSU	5,643	4,684 (5,643 -959)	6,509	+ 39%

- 1.5.12 The revised baseline accounts for the removal of the 22ha and 16ha blocks (sold land) from the Dairy platform to reflect the baseline of the proposed dairy platform (which includes the new sheep and beef block) on a pro rata basis that is relative to the total area.
- 1.5.13 It is important to note that the Overseer modelling assumes good management practices are already employed on farm. As such all proposed good management practices are already accounted for in Overseer. The various good management practices are detailed in the Farm Environment Management Plan for the proposed new farming system.
- 1.5.14 Key drivers for the modelled reduction in nitrogen (N) and phosphorus (P) losses in Overseer are:
- The removal of intensive winter grazing (8 ha)
 - The removal of sheep and beef stock
 - Reduced replacement rate
 - Addition of a second self-feeding silage pad
 - Increased use of self-feeding silage pads
 - Increased effluent disposal area
 - Spread solid effluent in lower risk time of year
 - Management systems rotate through all blocks
 - Overall decrease in Olsen P
 - Fertiliser applied to maintenance using low solubility phosphate fertiliser

⁴ The latest updated version (version 3) provided on 16 January 2025 – Environment Southland Document ID: A1217704

- 1.5.15 The Council commissioned Nicky Watt of Irricon, who is a Certified Nutrient Management Advisor, to review the nutrient budgets for a sense check. She considers that the robustness of the nutrient loss estimates for the proposed model is high⁵.
- 1.5.16 Sediment and microbiological contaminants are not modelled in Overseer. The Applicant has assessed P loss modelling as a proxy for sediment and microbial contaminant losses. This is because phosphorus in soil readily binds to fine soil particles and is lost to the environment via the same contaminant particles. Microbiological contaminants are also lost to the environment through water flow via these same pathways. Using P loss modelling as a proxy, the applicant considers that sediment and microbiological contaminant losses will also decrease.
- 1.5.17 A technical comment⁶ from Environment Southlands internal Science team suggested that the use of modelled P loss is insufficient to assess the change in sediment and microbial contaminant losses. For example, the modelled change in P loss includes changes to P fertiliser use, thereby increasing the likelihood that reductions in sediment and microbial contaminant loss would not be proportional to the reductions in P losses.
- 1.5.18 The use of P loss modelling as a proxy for sediment and microbiological contaminant losses only provides a broad assumption of the likely losses and risks to the environment from these contaminants. In addition, the Government's Science Advisory Panel's review of the effectiveness of Overseer in assessing and predicting farm-scale nitrogen losses, concluded that the current Overseer model is not fully fit for purpose in the way it is being currently used in the consenting process. Taking these matters into account, mitigation measures to offset the effects of the proposed new farm system are of critical importance when assessing this application.
- 1.5.19 The proposal involves increasing the size of the existing dairy platform⁷ and increasing the number of dairy cows on the farm. Specifically, increasing the dairy platform by 57 ha, and increasing the milking herd by 100 cows. The table below outlines risks to the environment from the proposed new farm system by considering the specific water quality issues in the catchment and the likely contaminant pathways that would impact on these issues. The Applicant considered mitigations to address the relevant contaminants and contaminant pathways which are detailed in the below table.

Table 11 Mitigations and impacts on water quality

Mitigation	Included in Overseer	Timeframe	Impact on water quality	Physiographic Zone Contaminant Pathways and Key Contaminant being protected
No intensive winter grazing (removing 8ha)	Yes	From the first exercise of consent	1. Reduced nutrient run-off 2. Less soil damage and erosion 3. Lower bacterial contamination 4. Improved riparian protection	Nitrogen, phosphorus Sediment and microbes in overland flow, sub-surface drainage, tile drainage.
Addition of	Yes	From the first	1. Reduced soil	Nitrogen, phosphorus,

⁵ Environment Southland Document ID: A1225937

⁶ Environment Southland Document ID: A1257173

⁷ An area of a landholding where dairy cows being milked on a daily basis are kept during the milking season.

Mitigation	Included in Overseer	Timeframe	Impact on water quality	Physiographic Zone Contaminant Pathways and Key Contaminant being protected
second feed pad (self-feeding silage pad) and including the use of the feed pads in May		exercise of consent	damage, erosion and sediment loss. 2. Decreased microbial contamination. 3. Reduced nutrient run-off. 4. Lower nitrogen leaching.	sediment and microbes in overland flow and artificial drainage.
Targeting optimum Olsen P and applying fertiliser maintenance. Use of low solubility phosphate fertiliser.	Yes	26 October 2027	1. Less phosphorus run-off. 2. Minimising risk of algal blooms. 3. Reduced sediment loss.	Phosphorus, sediment, bacterial contamination in overland flow and deep drainage.
Riparian planting	No	Proposed in 2026	1. Reduced erosion and sediment loss. 2. Improved nutrient filtering. 3. Enhanced riparian buffering. 4. Improved habitat and diversity.	Nitrogen, phosphorus, sediment and microbes in overland flow and artificial drainage.
Laneway improvements	No	26 October 2026	1. Reduced nutrient run-off 2. Less soil damage and erosion 3. Lower bacterial contamination	Nitrogen, phosphorus, sediment and microbes in overland flow

- 1.5.20 The Applicant has also identified that the removal of sheep and beef cattle is a mitigation. However, I do not consider that it is a mitigation as there will be an overall 39% increase in revised stocking units (RSU) in the proposed new farming system.
- 1.5.21 Additionally, it is noted that the farmer has only been applying effluent to 40ha even though the farmer is currently consented to discharge effluent to 186ha. Provided the farmer utilises the whole discharge area (which will significantly exceed best practice guidelines of 8ha/100 cows), there will be reduced potential for nitrogen leaching.
- 1.5.22 Overseer does not estimate effects on water quality as a result of laneway improvements and riparian planting. These mitigations are anticipated to result in additional contaminant loss reductions over and above the modelled Overseer reductions. How these mitigations improve water quality is further discussed below.

- 1.5.23 The Applicant is proposing to slope a high use laneway east of the dairy shed away from the adjacent surface waterbody to ensure runoff from the laneway is directed to land. Doing this will ensure that stormwater runoff will be redirected through vegetated areas to allow for filtering. Research has suggested that such improvement to laneway management will reduce P losses by 38-58%. It will also reduce losses of associated contaminants such as sediment and microbes lost.
- 1.5.24 The Applicant is also proposing to undertake 250m of riparian planting using native plants along an unnamed tributary of the farm in 2026. This will further reduce the potential for contaminants to be lost to surface waterways, through increased infiltration rate by physically intercepting any overland flow before contaminants in that flow reach surface waterways. The proposed plantings will also take up nutrients further reducing contaminants lost to water. Additionally, riparian planting will provide positive biodiversity effects and possible improvements to instream habitat quality and suitability for aquatic life. The site of the proposed riparian planting is shown by W3 in figure 5 below.



Figure 5 Proposed riparian planting location (thick green line by W3)

- 1.5.25 When considering the anticipated 22% reduction in Nitrogen and 5% reduction in Phosphorus as modelled in Overseer, as well as the additional mitigations not accounted for in Overseer, I consider the effects of the proposed new farming system and associated discharge on water quality is likely to be minor and likely to result in water quality improvement.

Water quality effects – cumulative effects

- 1.5.26 While the above assessment of water quality effects is related primarily to the site and the local environment, the effects of the application on the wider Aparima Freshwater Management Unit (FMU) need to be considered. Some of those effects are inherently considered in the above assessment, particularly in relation to the calculated reduction in contaminant losses from the application site, and the positive contribution of improved laneway management and riparian planting in terms of water quality and habitat creation.
- 1.5.27 The Council's science team has identified that the Aparima River catchment and estuary are suffering significant adverse effects due to land use activities and incidental discharges, primarily from farming. The proposal, in reducing contaminant losses, improved laneway management and riparian planting, is likely to contribute to a reduction in the adverse cumulative effects of water quality in the catchment.

Water Quantity

- 1.5.28 The applicant is applying for a water permit to allow the take and use of a total of 83,306L/day and 23,582,952L/year of groundwater from bore D45/0037. These volumes are within the permitted activity criteria of the pSWLP and is therefore considered to be reasonable and efficient in accordance with the permitted baseline of rule 54(a) in the pSWLP and subsequently Policy 20 (pSWLP).
- 1.5.29 Consideration was given to the current allocation status of the groundwater management zone (RWP), the potential effects of the proposed abstraction rate on the groundwater management zone, and potential stream depletion effects on neighbour's bores and the nearest stream. Any adverse effects associated with the water take will be less than minor because:
- The allocation status for the Upper Aparima groundwater management zones is low at 3% (RWP).
 - The rate of take is low at a maximum of 2L/s and the nearest neighbouring bore is approximately 680m away and the nearest surface waterway is at least 600m away. Therefore, given the low rate of take, and distance to these receptors, I do not anticipate any interference effects or stream depletion effects.
- 1.5.30 With the low allocation status of the groundwater management zone, there remains sufficient water available for future generations.

Soil health

- 1.5.31 The proposed discharge area is more than the area needed to meet the minimum requirement of 4 hectares per 100 cows, which is calculated to achieve a maximum loading of 150 kg of nitrogen/ha/year from effluent irrigation and more than the 8 hectares per 100 cows as recommended in the Best Practice Guidelines Booklet⁸.
- 1.5.32 Taking cows off pasture and using the feed pads will preserve soil structure during the wetter months enabling topsoil to be retained. This will protect pasture from pugging and prevent sedimentation and other contaminants entering surface waterbodies that may otherwise occur if those cows were to remain on pasture.

Odour effects

⁸ Farm Dairy Effluent, Best Practice Guidelines (2007), Environment Southland

- 1.5.33 Drifting of aerosols from agricultural effluent discharges can cause odour problems beyond the boundary of the farm. The applicant has proposed to use low rate application technology, to adhere to required buffer zones and to consider wind direction and strength when applying effluent. Through implementing these practices, the activity will have less than minor adverse effects from odour and spray drift on other surrounding landowners and occupiers.
- 1.5.34 The use of feed pads will also adhere to the required buffer distances to neighbouring properties ensuring adverse effects from odour will be no more than minor.

Cultural and spiritual effects

- 1.5.35 After receiving a submission opposing the application, the Applicant carried out consultation with Te Ao Marama Inc. (TAMI). TAMI have since withdrawn their right to be heard and no longer opposes the application⁹ after agreeing on a condition for the Applicant to undertake riparian planting in accordance with a riparian planting plan and implementation timeframe as a condition of consent. I have considered the submission and amended position stance and consequently, I consider cultural and spiritual effects have been addressed.

Positive effects

- 1.5.36 I have had regard to the measures proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to mitigate or offset any adverse effects that will or may result from allowing the activity. These are:
- Intensive winter grazing will cease resulting in a reduction in contaminant losses as modelled in Overseer.
 - Water quality is expected to improve as Overseer modelling of the new farm system anticipates a significant reduction in nitrogen (-22%), a reduction in phosphorus (5%), and likely reductions in phosphorus associated contaminants (microbial contaminants [*E. coli*] and sediment).
 - A Farm Environment Management Plan will be implemented which proposes additional mitigations beyond what is considered in this consent application that are anticipated to further reduce contaminant losses over time.
 - New riparian planting along a surface waterway on the farm will help reduce contaminant losses to surface water and improve biodiversity.
 - Cambering an existing dairy lane to slope away from a nearby watercourse will ensure any surface water runoff carrying contaminants from the lane will wash off into pasture for plant uptake of nutrients rather than discharging into the nearby watercourse significantly reducing contaminant losses to water in this location.

Conditions of consent

- 1.5.37 When considering all the potential effects from the proposed activities as discussed above, I consider the recommended conditions of consent will ensure that potential effects from the proposed activities will be no more than minor.

Alternatives

- 1.5.38 Alternatives to the proposed discharge activities have been considered by the Applicant. Primarily, this includes maintaining the status quo of the current farming system. However, as discussed, the proposed new farming system and proffered mitigations is anticipated to result in a

⁹ Environment Southland Document ID: A

net decrease in contaminant losses. Therefore, changing the farm system from the status quo is likely to result in better environmental outcomes. Consequently, I consider the proposed new farming system will have no more than minor effects on the environment.

2. Statutory Considerations

Section 104 of the Act sets out the matters to be considered when assessing an application for a resource consent. Section 104(1) of the Resource Management Act, 1991, states:

- (1) *When considering an application for a resource consent and any submission received, the consent authority must, subject to Part 2, have regard to:*
- (a) *any actual and potential effects on the environment of allowing the activity; and*
 - (b) *any relevant provisions of –*
 - (i) *a national environmental standard;*
 - (ii) *other regulations;*
 - (iii) *a national policy statement;*
 - (v) *a regional or proposed regional policy statement;*
 - (vi) *a plan or proposed plan; and*
 - (c) *any other matter the consent authority considers relevant and reasonably necessary to determine the application.*

Those matters which relevant for this application are discussed in the following sections.

2.1 Part 2 of the Resource Management Act 1991

- 2.1.1 This application is consistent with the purpose and the principles of the Act, as set out in Section 5. The proposed activities will have no more than minor adverse effects on the ability of the receiving environment to meet the reasonably foreseeable needs of future generations, or on the life-supporting capacity of the land or any ecosystem associated with it. Proposed consent conditions will ensure that any potential adverse effects of the activities will be avoided, remedied or mitigated.
- 2.1.2 There are no matters of national importance, as outlined in Section 6 of the Act, that may be affected by the proposed activities. The application is also consistent with Section 7 of the Act, with particular regard given to the maintenance and enhancement of the quality of the environment. With regard to Section 8 of the Act, the proposed activities are not inconsistent with the principles of the Treaty of Waitangi.

2.2 Actual and potential effects (Section 104(1)(a))

- 2.2.1 The actual and potential effects of the proposed activities were considered earlier of this report. Recommended conditions of consent will ensure that any adverse effects are avoided, remedied or mitigated.

2.3 Relevant provisions of National Environmental Standards and other regulations (Section 104(1)(b)(i) and (ii))

- 2.3.1 There are no relevant requirements under any National Environmental Standards and other regulations under Section 104(1)(b)(i) and (ii).

2.4 Relevant provisions of national policy statements (Section 104(1)(b)(iii))

2.3.2 **National Policy Statement for Freshwater Management 2020**

- Policy 1 Freshwater is managed in a way that gives effect to Te Mana o te Wai*
- Policy 2 Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori and freshwater values are identified and provided for.*
- Policy 3 Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.*
- Policy 5 Freshwater is managed (including through a National Objectives Framework) to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.*
- Policy 9 The habitats of indigenous freshwater species are protected.*
- Policy 15 Communities are enabled to provide for their social, economic and cultural well-being in a way that is consistent with the National Policy Statement.*

Comment

- 2.3.3 The proposal is not inconsistent with the above policies. The proposed new farming system is likely to improve water quality giving effect to Te Mana o te Wai.

2.3.4 **National Policy Statement for Highly Productive Land 2022**

- Policy 1 Highly productive land is recognised as a resource with finite characteristics and long-term values for land-based primary production.*
- Policy 2 The identification and management of highly productive land is undertaken in an integrated way that considers the interactions with freshwater management and urban development.*
- Policy 3 Highly productive land is mapped and included in regional policy statements and district plans.*
- Policy 4 The use of highly productive land for land-based primary production is prioritised and supported.*
- Policy 5 The urban rezoning of highly productive land is avoided, except as provided in this National Policy Statement.*
- Policy 6 The rezoning and development of highly productive land as rural lifestyle is avoided, except as provided in this National Policy Statement.*
- Policy 7 The subdivision of highly productive land is avoided, except as provided in this National Policy Statement.*
- Policy 8 Highly productive land is protected from inappropriate use and development.*
- Policy 9 Reverse sensitivity effects are managed so as not to constrain land-based primary production activities on highly productive land.*

Comment

- 2.3.5 The proposal is not inconsistent with the above policies as the land will continue to be used as farmland for primary production and will not result in the loss of highly productive land.

2.5 Relevant provisions of the New Zealand Coastal Policy Statement (Section 104(1)(b)(iv))

- 2.5.1 Consideration has been given to the impact the proposal may have on the coastal marine area. Given this is for one medium sized dairy farm approximately 50km upstream of the coastal marine area, and because water quality is anticipated to improve, the effect this farm will have on the

coastal marine area is likely negligible. As such, I have not given any further consideration to the New Zealand Coastal Policy Statement beyond recognising that the proposal is likely to improve freshwater water quality in the catchment to a marginal degree and consequently will contribute to improving water quality at Jacob's Creek Estuary in the Coastal Marine Area.

2.6 Relevant provisions of the Southland Regional Policy Statement 2017 (Section 104(1)(b)(v))

- 2.6.1 The application is not inconsistent with the relevant objectives of the Regional Policy Statement (2017). The following policies in the Regional Policy Statement are of particular relevance to this application:

Objective RURAL.1 – Sustainable use of rural land resource

Achieve sustainable use of Southland's rural land resource, in respect of:

- (a) *agriculture and primary sector activities;*
- (b) *subdivision, use and development activities;*
- (c) *.....*
- (d) *the use of soil resources;*
- (e) *....*
- (f) *....*

Objective RURAL.2 – Life-supporting capacity of soils

Safeguard the life-supporting capacity, mauri and health of soils in rural areas, and prevent or minimise soil erosion and sedimentation from land use soil disturbance.

Policy RURAL.5 – Effects of rural land development

The effects of rural land development shall be sustainably managed and land management practices encouraged so that:

- (a) *soil properties are safeguarded;*
- (b) *soil erosion is minimised;*
- (c) *soil compaction and nutrient and sediment loss is minimised;*
- (d) *soil disturbance is reduced;*
- (e) *water quality is maintained or enhanced;*
- (f) *indigenous biodiversity is maintained or enhanced;*
- (g) *the mauri of water and soils is safeguarded.*

Objective WQUAL.2 – Lowland water bodies

Halt the decline, and improve water quality in lowland water bodies and coastal lakes, lagoons, tidal estuaries, salt marshes and coastal wetlands in accordance with freshwater objectives formulated in accordance with the National Policy Statement for Freshwater Management 2014.

Policy WQUAL.2 – All waterbodies

Maintain or improve water quality, having particular regard to the following contaminants:

- (a) *nitrogen;*
- (b) *phosphorus;*
- (c) *sediment;*
- (d) *microbiological contaminants.*

Policy WQUAL.8 – Preference for discharge to land

Prefer discharges of contaminants to land over discharges of contaminants to water, where:

- (a) *a discharge to land is practicable;*
- (b) *the adverse effects associated with a discharge to land are less than a discharge to water.*

Objective WQUAN.1 – Sustainably managing the region’s water resources

Flows, levels and allocation regimes of surface water and groundwater in the region are developed in accordance with the National Policy for Freshwater Management 2014 to:

- (a) safeguard the life-supporting capacity of water, catchments and related ecosystems;*
- (b) support the maintenance or improvement of water quality in accordance with Policy WQUAL.1;*
- (c) meet the needs of a range of uses, including the reasonably foreseeable social, economic and cultural needs of future generations;*
- (d) comply with limits or targets set to achieve freshwater objectives.*

Policy WQUAN.1 – Instream values

Maintain instream values of surface water that derive from flows and levels of water, while recognising the special circumstances of the Waiau catchment.

Policy WQUAN.2 – Overallocation

Avoid over-allocation of surface water and groundwater, and resolve any historical instances of overallocation, while recognising the special provisions made for the Waiau catchment.

Policy WQUAN.6 – Efficient use of water

- (a) Ensure that any water taken from surface water or groundwater is used efficiently.*
- (b) Where freshwater bodies are approaching full allocation, consider establishing management provisions to maximise the efficiency of using any available water.*

Comment

- 2.6.2 The proposal is not inconsistent with the above policies. The proposed new farming system is likely to improve water quality using best practices and mitigations to sustainably manage Southland’s land and water resources.

2.7 Relevant provisions of the relevant regional plan objectives, policies and rules (Section 104(1)(b)(v))
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- 2.7.1 Council is currently operating under two Regional Plans – the Regional Water Plan (RWP) and the proposed Southland Water and Land Plan (pSWLP). The pSWLP was made operative in part in May 2024 and subsequently supersedes most provisions in the RWP. The below assessment considers the relevant objectives and policies of these plans for this application. A rule assessment has already been provided earlier in section 1.1.5 of this report.

Regional Water Plan (2010)

- 2.7.2 The application is not inconsistent with the relevant objectives of the Regional Water Plan (2010). The objectives, policies and rules of the Regional Water Plan that are relevant to this application have been grouped according to topic:

Water quality, soil, and freshwater ecosystems

Objective 9A To manage discharges onto or into land so that the quality and structure of soil resources are maintained.

Objective 9B To manage discharges onto or into land so that adverse effects on human health are avoided.

Objective 9C To manage discharges onto or into land so that any adverse effects on:

- (a) *the diversity and integrity of habitats and ecosystems; and*
- (b) *amenity and historic heritage values are avoided, remedied or mitigated to ensure that these values are maintained or enhanced.*

- Policy 3** *Notwithstanding any other policy or objective in this plan, allow no discharges to surface water bodies that will result in a reduction of water quality beyond the zone of reasonable mixing, unless it is consistent with the promotion of the sustainable management of natural and physical resources, as set out in Part 2 of the Resource Management Act 1991, to do so.*
- Policy 7** *Prefer discharges to land over discharges to water where this is practicable and the effects are less adverse.*
- Policy 25** *To avoid, remedy or mitigate the adverse effects arising from point source and non-point source discharges so that there is no deterioration in groundwater quality after reasonable mixing, unless it is consistent with the promotion of the sustainable management of natural and physical resources, as set out in Part 2 of the Resource Management Act 1991, to do so.*

Water quantity

- Policy 21** *To ensure that the rate of abstraction and abstraction volumes specified on water permits to take and use water are no more than reasonable for the intended end use.*
- Policy 28** *To manage groundwater abstraction to avoid significant adverse effects on:*
- Long-term aquifer storage volumes
 - existing water users
 - surface water flows and aquatic ecosystems and habitats
 - groundwater quality

Comment

- 2.7.3 The effluent discharge to land and any associated incidental discharges associated with the new farm system will be managed in such a way that improves water quality. This improvement is anticipated by the new farming system regime, use of best management practices, and mitigations proffered by the Applicant. These have been assessed by the nutrient modelling tool, Overseer and as otherwise referenced in research by the Applicant (e.g. dairy lane improvements and riparian planting).
- 2.7.4 The requested rate of abstraction and abstraction volumes are no more than reasonable for the intended end use and is well within the allocation limits of the groundwater management zone. The rate of take is small and will not result in drawdown and stream depletion effects. Finally, the volumes requested are within the permitted activity criteria of rule 54(a) in the pSWLP so any effects are anticipated and permitted by that plan.

Proposed Southland Water and Land Plan

- 2.7.5 The proposed Southland Water and Land Plan (2024 Court version) has been made operative in part with most provisions superseding many parts of the Regional Water Plan.

- 2.7.6 The application is not inconsistent with the relevant objectives of the proposed Southland Water and Land Plan (2024 Court Version). In accordance with the interpretation statement the relevant objectives are grouped together. The relevant policies have been grouped according to topic:

Interpretation Statement

All persons exercising functions and powers under this Plan and all persons who use, develop or protect resources to which this Plan applies shall recognise that:

- (i) Objectives 1 and 2 are fundamental to this plan, providing an overarching statement on the management of water and land, and all objectives are to be read together and considered in that context; and*
- (ii) The plan embodies ki uta ki tai and upholds Te Mana o Te Wai and they are at the forefront of all discussions and decisions about water and land;*
- (iii) The Policies in this plan must be interpreted and applied in a manner that implements the Objectives.*

Objectives

- Objective 1 Land and water and associated ecosystems are sustainably managed as integrated natural resources, recognising the connectivity between surface water and groundwater, and between freshwater, land and the coast.*
- Objective 2 The mauri of water provides for te hauora o te taiao (health and mauri of the environment), te hauora o te wai (health and mauri of the waterbody) and te hauora o te tangata (health and mauri of the people).*
- Objective 4 Tangata whenua values and interests are identified and reflected in the management of freshwater and associated ecosystems. Tangata whenua values and interests are identified and reflected in the management of freshwater and associated ecosystems.*
- Objective 6 Water quality in each freshwater body, coastal lagoon and estuary will be*
(a) maintained where the water quality is not degraded; and
(b) improved where the water quality is degraded by human activities.
- Objective 8*
(a) The quality of groundwater that meets both the Drinking Water Standards for New Zealand 2005 (revised 2008) and any freshwater objectives, including for connected surface water bodies, established under Freshwater Management Unit processes is maintained; and
(b) progressively improved where it does not meet Objective 8(a) because of the effects of land use or discharge activities is progressively improved so that:
1. groundwater (excluding aquifers where the ambient water quality is naturally less than the Drinking Water Standards for New Zealand 2005 (revised 2008)) meets the Drinking Water Standards for New Zealand 2005 (revised 2008); and
2. groundwater meets any freshwater objectives and freshwater quality limits established under Freshwater Management Unit processes.
- Objective 11 The amount of water abstracted is shown to be reasonable for its intended use and water is allocated and used efficiently.*
- Objective 13 Provided that:*

- (a) the quantity, quality and structure of soil resources are not irreversibly degraded through land use activities or discharges to land; and
 - (b) the health of people and communities is safeguarded from the adverse effects of discharges of contaminants to land and water; and
 - (c) ecosystems (including indigenous biological diversity and integrity of habitats), are safeguarded,
- then land and soils may be used and developed to enable the economic, social and cultural wellbeing of the region.

- Objective 14** *The range and diversity of indigenous ecosystems and habitats within rivers, estuaries, wetlands and lakes, including their margins, and their life-supporting capacity are maintained or enhanced.*
- Objective 15** *Taonga species listed in Appendix M, and related habitats, are recognised and provided for.*
- Objective 17** *Preserve the natural character values of wetlands, rivers and lakes and their margins, including channel and bed form, rapids, seasonably variable flows and natural habitats, and protect them from inappropriate use and development.*
- Objective 19** *The passage of fish is maintained, or is improved, by instream structures, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages, or their habitats.*

Ngāi Tahu Policies

- Policy 1** **Enable papatipu rūnanga to participate**
Enable papatipu rūnanga to effectively undertake their kaitiaki (guardian/steward) responsibilities in freshwater and land management through the Southland Regional Council:
1. *providing copies of all applications that may affect a Statutory Acknowledgement area, tōpuni (landscape features of special importance or value), nonorange, mātaītai or taiāpure to Te Rūnanga o Ngāi Tahu and the relevant papatipu rūnanga;*
 2. *identifying Ngāi Tahu interests in freshwater and associated ecosystems in Murihiku (includes the Southland Region); and*
 3. *reflecting Ngāi Tahu values and interests in the management of and decision-making on freshwater and freshwater ecosystems in Murihiku (includes the Southland Region), consistent with the Charter of Understanding.*
- Policy 2** **Take into account iwi management plans**
Any assessment of an activity covered by this Plan must:
1. *take into account any relevant iwi management plan; and*
 2. *assess water quality and quantity, taking into account Ngāi Tahu indicators of health.*
- Policy 3** **Ngai Tahu ki Murihiku taonga species**
To manage activities that adversely affect taonga species, identified in Appendix M, and their related habitats.

Physiographic zone policies

Policy 5

Central Plains

In the Central Plains physiographic zone:

1. *avoid, as a first priority, risk to water quality from contaminants, and where avoidance is impractical, requiring risk to water quality from contaminants to be minimised by:*
 - i. *identifying contaminant pathways to ground and surface water bodies;*
 - ii. *requiring implementation of good management practices to manage adverse effects on water quality from contaminants transported via artificial drainage and deep drainage;*
 - iii. *having particular regard to adverse effects on water quality from contaminants transported via artificial drainage and deep drainage when assessing resource consent applications and preparing or considering Farm Environmental Management Plans; and*
2. *avoid dairy farming and intensive winter grazing where contaminant losses will increase as a result of the proposed activity.*

Policy 6

Gleyed

In the Gleyed physiographic zone avoid, as a first priority, risk to water quality from contaminants, and where avoidance is impractical, requiring risk to water quality from contaminants to be minimised by:

1. *identifying contaminant pathways to ground and surface water bodies;*
2. *requiring implementation of good management practices to manage adverse effects on water quality from contaminants transported via artificial drainage, and overland flow where relevant; and*
3. *having particular regard to adverse effects on water quality from contaminants transported via artificial drainage, and overland flow where relevant when assessing resource consent applications and preparing or considering Farm Environmental Management Plans.*

Water quality policies

Policy 13

Management of land use activities and discharges

The amount of water abstracted is shown to be reasonable for its intended use and water is allocated and used efficiently.

Policy 15A

Approach where Appendix E or Appendix C standards are met

Where existing water quality meets the Appendix E Water Quality Standards or bed sediments meet the Appendix C ANZECC sediment guidelines, maintain water quality by:

- *Avoiding where reasonably practicable or otherwise minimising any adverse effects, including residual adverse effects, of discharges, so that those standards or sediment guidelines will continue to be met (beyond the zone of reasonable mixing for point source discharges)*

Policy 15B

Approach where Appendix E or Appendix C standards are not met

Where existing water quality does not meet the Appendix E Water Quality Standards or bed sediments do not meet the Appendix C ANZECC sediment guidelines, water quality will be:

1. *maintained by avoiding any adverse effects of new point source discharges to surface water on water quality or sediment quality so that the exceedance of*

those standards or sediment guidelines is, as a minimum, not exacerbated beyond the zone of reasonable mixing; and

- 1a. maintained by avoiding, where reasonably practicable, or otherwise minimising any adverse effects, including residual adverse effects, on water quality or sediment quality from new discharges to land, new discharges to groundwater or new diffuse discharges to water so that the exceedance of those standards or sediment guidelines is, as a minimum, not exacerbated; and*
- 2. improved by requiring any application for the replacement of an expiring discharge permit, seeking a discharge permit for an existing but previously unconsented discharge, or seeking a different discharge permit for an existing activity, including a variation under ss 127-129 RMA which do not involve a new discharge, to demonstrate how adverse effects will be avoided where reasonably practicable and otherwise remedied or mitigated so that water quality will be improved to assist with meeting those standards or sediment guidelines (beyond the zone of reasonable mixing for point source discharges).*

Policy 16

Farming activities that affect water quality

- 1. Avoid where reasonably practicable, or otherwise minimise any adverse environmental effects (including on the quality of water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries and salt marshes, and groundwater) from farming activities by:*
 - (a) Ensuring that all farming activities:*
 - (i) do not increase nitrogen, phosphorus, sediment or microbial contaminant discharges; and*
 - (ii) minimise nitrogen, phosphorus, sediment or microbial contaminant discharges; and*
 - (iii) reduce adverse effects on water quality where the farming activity occurs within the catchment of a waterbody identified in Schedule X; and*
 - (b) ensuring that new, or further intensification of existing, dairy farming of cows, or any intensive winter grazing or pasture-based wintering activities are not located in close proximity to Regionally Significant Wetlands, Sensitive Water bodies identified in Appendix A, nohoanga listed in Appendix B, mātaihai reserves, taiāpure, estuaries or the coastal marine area; and*
 - (c1) subject to (a) and (b) being achieved across the whole of the land holding, recognising that a limited proportion of intensive winter grazing or pasture-based wintering is required on most land holdings to carry stock over winter; and*
 - (c) Requiring all farming activities to:*
 - (i) Be undertaken in accordance with a Farm Environmental Management Plan that:*
 - 1) Identifies whether the farming activity is occurring, or would occur, in a catchment of a waterbody identified in Schedule X;*

- 2) identifies and responds to contaminant loss risk, and the contaminant pathways (and variants) for the relevant Physiographic Zones;
 - 3) sets out how adverse effects on water quality from the discharge of contaminants from farming activities will be minimised or, where the farming activity is occurring in a catchment of a waterbody identified in Schedule X, reduced;
 - 4) is certified as meeting all relevant requirements of this Plan and any regulation under Part 9A of the RMA; and
 - 5) is independently audited and reported on;
- (ii) avoids where reasonably practicable, or otherwise minimises sediment run-off risk from farming and hill country development activities by identifying critical source areas and implementing actions and maintaining practices including setbacks from water bodies, sediment traps, riparian planting, limits on areas or duration of exposed soils and the prevention of stock entering the beds of surface water bodies; and
- (iii) avoids where reasonably practicable, otherwise minimises collected and diffuse run-off and leaching of nitrogen, phosphorus, microbial contaminants and sediment through the identification and management of critical source areas and the contaminant pathways identified for the relevant Physiographic Zones (and variants) within individual properties.
2. When considering a resource consent application for farming activities, consideration should be given to the following matters:
- a. Whether multiple farming activities (such as cultivation, riparian setbacks, and winter grazing) can be addressed in a single resource consent; and
 - b. granting a consent duration of at least 5 years where doing so is consistent with Policy 40.

Policy 17

Agricultural effluent management

1. Avoid where reasonably practicable, or otherwise minimise, any adverse effects on water quality, and avoid, remedy, or mitigate other adverse effects of the operation of, and discharges from, agricultural effluent management systems including by:
 - (a) Designing, constructing and locating systems appropriately and in accordance with best practice;
 - (b) maintaining and operating effluent systems in accordance with best practice guidelines;
 - (c) avoiding any surface run-off or overland flow or ponding resulting from the discharge of agricultural effluent to pasture;
 - (d) minimising contamination of water by agricultural effluent via sub-surface drainage; and
 - (e) avoiding the discharge of untreated agricultural effluent to water.

Policy 18

Stock exclusion from water bodies

Avoid where reasonably practicable, or otherwise remedy or mitigate, any adverse effects from the discharge of sediment or microbial contaminants to water bodies and improve river and riparian ecosystems and habitats by:

1. *requiring progressive exclusion of all stock, except sheep, from lakes, rivers, natural wetlands, artificial watercourses, and modified watercourses on land with a slope of less than 15 degrees by 2030;*
2. *...*
3. *encouraging the establishment, maintenance and enhancement of healthy vegetative cover in riparian areas, particularly through use of indigenous vegetation; and*
4. *ensuring that stock access to lakes, rivers, natural wetlands, artificial watercourses and modified watercourses is managed in a manner that avoids adverse effects on water quality, bed and bank integrity and stability, mahinga kai, and aquatic and riparian ecosystems and habitats; and*
5. *showing, in a Farm Environmental Management Plan prepared, and certified, and compliance with it is audited, in accordance with Appendix N, how 1-4 will be achieved and by when.*

- Policy 32 **Protect significant indigenous vegetation and habitat**
Protect significant indigenous vegetation and significant habitats of indigenous fauna and maintain indigenous biodiversity associated with natural wetlands, lakes and rivers and their margins.
- Policy 39 **Application of the permitted baseline**
When considering any application for resource consent for the use of land for a farming activity, the Southland Regional Council shall consider all adverse effects of the proposed activity on water quality, whether or not this Plan permits an activity with that effect.
- Policy 41 **Matching monitoring to risk**
Consider the risk of adverse environmental effects occurring and their likely magnitude when determining requirements for auditing and supply of monitoring information on resource consents.

Water quantity

- Policy 20 **Management of water resources**
Manage the taking, abstraction, use, damming or diversion of surface water and groundwater so as to:
- 1A. *recognise that the use and development (such as primary production) of Southland's land and water resources can have positive effects including enabling people and communities to provide for their social, economic and cultural wellbeing;*
 1. *...*
 2. *avoid where reasonably practicable, or otherwise remedy or mitigate, adverse effects from the use and development of groundwater resources on:*
 - (a) *long-term aquifer storage volumes;*
 - (b) *the reliability of supply for lawful existing groundwater users, including those with existing, but not yet implemented, resource consents;*
 - (c) *surface water flows and levels, particularly in spring-fed streams, natural wetlands, lakes, aquatic ecosystems and habitats (including life*

supporting capacity and ecosystem health and processes of water bodies) and their natural character; and
(d) *water quality, including temperature and oxygen content;*

3. *ensure water is used efficiently and reasonably by requiring that the rate and volume of abstraction specified on water permits to take and use water are no more than reasonable for the intended end use following the criteria established in Appendix O and Appendix L.4.*

Policy 22

Management of the effects of groundwater and surface water use

Manage the effects of surface and groundwater abstractions by:

1. ...
2. *ensuring interference effects are acceptable, in accordance with Appendix L.3; and*
3. *utilising the methodology established in Appendix L.2 to:*
 - (a) *manage the effects of consented groundwater abstractions on surface water bodies; and*
 - (b) ...

Policy 42

Consideration of water permit applications

When considering resource consent applications for water permits to take and use water:

1. ...
2. ...
3. *Installation of water measuring devices will be required on all new permits to take and use water and on existing permits in accordance with the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010;*
4. ...
5. ...

Comment

- 2.7.7 The proposal is not inconsistent with the above policies. The proposed new farming system is likely to improve water quality using best practices and mitigations to sustainably manage Southland's land and water resources.
- 2.7.8 In accordance with Policy 17 (pSWLP) The proposed discharge to land of agricultural effluent will meet best practice which will aid in meeting other water quality objectives and policies that seek to maintain or improve water quality.
- 2.7.9 The requested rate of abstraction and abstraction volumes are no more than reasonable for the intended end use and is well within the allocation limits of the groundwater management zone. The rate of take is small and will not result in drawdown and stream depletion effects. Finally, the volumes requested are within the permitted activity criteria of rule 54(a) in the pSWLP so any effects are anticipated and permitted by that plan.
- 2.7.10 The proposed new farm system and any associated incidental discharges will be managed in such a way that improves water quality. This improvement is anticipated by the new farming system regime, use of best management practices, and mitigations proffered by the Applicant. These have been assessed by the nutrient modelling tool, Overseer and as otherwise referenced in research by the Applicant (e.g. dairy lane improvements and riparian planting).

2.8 Any other matters considered relevant and reasonably necessary to determine the application (Section 104(1)(c))
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- 2.8.1 Consideration of Te Tangi a Taurira (Iwi Management Plan) is required according to Policy 2 of the proposed Southland Water and Land Plan (Operative in Part) May 2024. The below assessment considers the relevant objectives and policies of these plans for this application.

Section 3.5.1 – Farm Effluent Management

- Policy 4 Sustain and safeguard the life supporting capacity of soils for future generations.*
- Policy 7 Require soil risk assessments (type and percolation 7. of the soils) prior to consent for discharge to land, to assess the suitability and capability of the receiving environment. Effluent should be applied at rates that match the ability of land to absorb it.*
- Policy 8 Require best practice for land application of managing farm effluent, in order to minimise adverse effects on the environment. This includes:*
- a. application rates that are specific to region and soil type;*
 - b. use of low rate effluent irrigation technology;*
 - c. use of appropriate irrigation technology to avoid irrigating over tile drains (e.g. K-line);*
 - d. storing effluent when the soil is too wet or heavy to irrigate;*
 - e. storing effluent when heaving pugging by stock has occurred;*
 - f. sealed storage ponds to avoid leaching of nutrients to groundwater;*
 - g. avoiding ponding of effluent on paddocks;*
 - h. monitoring of soils and groundwater (see Policy 16);*
 - i. developing contingency plans (e.g. for exceptionally wet years)*
- Policy 11 Avoid any surface run off /overland flow, ponding or contamination of water resulting from the application of dairy shed effluent to pasture.*
- Policy 12 Require that farm management plans include provisions for the establishment and maintenance of riparian areas, to mitigate the effects of discharge.*
- Policy 13 Require the establishment of appropriate buffer zones between discharge activities and waterways (including ephemeral and waterways <3 m). The size of buffer zones should reflect local geography (e.g. size of the waterway, nature and extent of existing riparian area, boundary fences)*

Section 3.5.10 – General Water Policy

- Policy 3 Protect and enhance the mauri, or life supporting capacity, of freshwater resources throughout Murihiku.*

Section 3.5.11 – Rivers

- Policy 14 Use riparian enhancement, buffer zones, fencing, and related streamside management tools as conditions of consent to ensure that human use of rivers and their water does not compromise river health.*
- Policy 15 Avoid the use of rivers as a receiving environment for the discharge of contaminants (e.g. industrial, residential, recreational or agricultural sources).*
- Policy 17 Ensure that activities in upper catchments have no adverse effect on mahinga kai, water quality and water quantity in lower catchments.*

Section 3.5.13 – Water Quality

- Policy 6 Avoid impacts on water as a result of inappropriate discharge to land activities.*

- Policy 7 When assessing the effects of an activity on water quality, where the water source is in a degraded state, the effects should be measured against the condition that the water source should be, and not the existing condition of the water source*
- Policy 8 Promote the restoration of wetlands and riparian areas as part of maintaining and improving water quality, due to the natural pollution abatement functions of such ecosystems.*

Section 3.5.14 – Water Quantity - Abstractions

- Policy 1 Adopt the precautionary principle when making decisions on water abstraction resource consent applications, with respect to the nature and extent of knowledge and understanding of the resource.*

Section 3.5.19 – Riparian Zones

- Policy 1 Promote riparian zone establishment and management in Resource Management Act policy, planning and consent processes, as a tool to mitigate adverse effects of land use activities on streams.*
- Policy 3 Promote riparian zone establishment and management as a tool to improve water quality in the waterways of Murihiku.*
- Policy 4 Require that riparian restoration or establishment, when used as a condition of consent or otherwise, uses plant species that are appropriate to the area in which they will be established.*
- Policy 6 Avoid stock access to riparian zones and streambeds, except when required for intermittent vegetation control.*
- Policy 7 Encourage fencing of streams to protect riparian vegetation, and promote healthy riparian establishment.*

Section 3.5.20 – Freshwater Fisheries

- Policy 2 Advocate for the protection, restoration and enhancement of waterways, riparian margins, and wetlands as a means of protecting and enhancing freshwater fishery values.*
- Policy 6 Ensure that all native fish species have uninhibited passage from the river to the sea at all times, through ensuring continuity of flow ki uta ki tai.*

Comment

- 2.7.11 Te Ao Marama initially opposed the application however, having visited the site, they have agreed to a consent condition with the Applicant¹⁰ and have since stated they are no longer opposed to the consent application and subsequently withdrew their right to be heard at a hearing. Consequently, I consider the proposal is not inconsistent with the above policies. The proposed new farming system is likely to improve water quality using best practices and mitigations to sustainably manage Southland's land and water resources. Furthermore, the Applicant will undertake riparian planting to help mitigate and address any effects on surface waterbodies, consistent with many of the above policies.

2.9 Value of investment of the existing consent holder if an application affected by Section 124 (Section 104(2A))

- 2.9.1 I have had regard to the value of the investment the applicant has made exercising their current resource consents. The value is significant due to the asset value of dairy farming infrastructure and stock on site and the farm requiring consents to operate.

2.10 Section 105 matters relevant to discharge or coastal permits

¹⁰ Environment Southland Document ID: A1294020

- 2.10.1 The application includes a discharge permit for the discharge of dairy effluent, and a discharge permit for the incidental discharge of nutrients from farming. Section 105 matters need to be considered for these permits. Under Section 105 the consent authority must have regard to:
- (a) *the nature of the discharge and the sensitivity of the receiving environment to adverse effects;*
 - (b) *the applicant's reasons for the proposed choice; and*
 - (c) *any possible alternative methods of discharge, including discharge into any other receiving environment.*
- 2.10.2 The sensitivity of the receiving environment has been taken into account for both discharges, and mitigation is proposed to address the risks to water quality for the different areas on the farm. This includes utilising the whole discharge area on the farm, dairy lane management to ensure contaminants don't enter waterbodies, and no intensive winter grazing on any part of the property.
- 2.10.3 The applicant has outlined their reasons for the proposed choice for discharging dairy effluent, and considers that the proposed discharge via low-rate methods is the best method for avoiding adverse effects on water quality. The alternative receiving environment is direct discharge to water, which is not an appropriate method and would result in greater adverse effects on the waterbodies than the proposed discharge to land.

2.11 Section 107 restriction on grant of certain discharge permits

- 2.11.1 Section 107 restricts the grant of certain discharge permits, including the discharge permits sought in this application (for activities that would otherwise contravene section 15 of the RMA) which are:
- a. The discharge of agricultural effluent to land from up to 550 cows; and
 - b. The incidental discharge of contaminants to water associated from the farming land use activity on the property.
- 2.11.2 Section 107(1) sets out the restrictions on granting discharge permits and subsections (2) and (2A) of section 107 set out the exemptions to this restriction.
- 2.11.3 Section 107(1) states that a consent authority shall not grant a discharge permit allowing the discharge of a contaminant onto or into land in circumstances which may result in that contaminant entering water, if after reasonable mixing, the contaminant, either by itself or in combination with the same, similar or other contaminants, is likely to give rise to all or any of the following effects in the receiving waters:
- (c) *the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;*
 - (d) *any conspicuous change in the colour or visual clarity;*
 - (e) *any emission of objectionable odour;*
 - (f) *the rendering of fresh water unsuitable for consumption by farm animals;*
 - (g) *any significant adverse effects on aquatic life*

- 2.11.4 The proposed activity is situated within a degraded catchment and technical advice from council scientists is that the available evidence suggests that significant adverse effects on aquatic life are occurring in the catchment. The farming activities occur above an aquifer that flows beneath the property and into the Aparima River and has tributaries on the property that reach the Aparima River. Therefore, I consider that the discharges are, in combination with other discharges in the catchment, giving rise to significant adverse effects on aquatic life in the Aparima River, and section 107(1)(g) prevents the granting of the discharge permits, unless subsections (2) or (2A) apply.
- 2.11.5 Subsection (2) of Section 107 is not applicable because:
- There are no exceptional circumstances that justify the granting of the permit;
 - The discharges are not temporary; and
 - The discharges are not associated with maintenance work.
- 2.11.6 I consider that Subsection (2A) of Section 107 is applicable. It states that the consent authority may grant a discharge permit that may allow the effects in subsection 1(g) if the consent authority:
- is satisfied that, at the time of granting, there are already effects described in subsection (1)(g) in the receiving waters; and*
 - imposes conditions on the permit; and*
 - is satisfied that those conditions will contribute to a reduction of the effects described in subsection (1)(g) over the duration of the permit.*
- 2.11.7 For the discharge of dairy effluent, the applicant has agreed to the following condition which I consider will reduce the effects on water quality, and consequently the effects on aquatic life in the Aparima River:
- The discharge shall be spread over a minimum of 90 hectares of the property shown on Appendix 1 in any 12 month period.
- 2.11.8 For the incidental discharge of nutrients from farming, the applicant has agreed to the following mitigations which I consider will reduce the effects on water quality, and consequently the effects on aquatic life in the Aparima River:
- No intensive winter grazing on the property;
 - Dairy lane management to ensure run-off and effluent is effectively managed; and
 - Riparian planting requirements.
- 2.11.9 Given the proposed mitigations, I consider that all of the requirements of Section 107(2A) are met, and section 107 does not restrict the granting of the discharge permits for this proposal.

3. Recommendations

3.1 Whether to grant

- 3.1.1 The application is considered to be a non-complying activity and may be granted or declined in accordance with s104B of the RMA. When considering a non-complying activity, the Council may only, in accordance with Section 104D, grant a resource consent for the activity if it is satisfied that the adverse effects of the activity are minor or the application is for an activity that will not be contrary to the objectives and policies of the relevant plan or proposed plan.
- 3.1.2 I recommend that the application be granted for the following reasons:
- a. The activities are consistent with the requirements of the RWP, pSWLP, SRPS, RMA, and NPSFM; and
 - b. the adverse effects of the activity are predicted to be minor;
 - c. mitigation measures are proposed to reduce the effects on water quality;
 - d. the relevant s105 matters have been taken into account for the discharge permits, and the proposed methods and location of discharges are considered to be the most appropriate given the nature of the discharge and sensitivity of the receiving environment; and
 - e. conditions are proposed for the discharge permits that meet the requirements of s107(2A), and therefore s107 does not restrict the granting of the discharge permits;
- 3.1.3 My recommendation is based on the existing plan provisions. However, I note that the Southland Water & Land Plan anticipates catchment limits. Therefore, a decision on the application has to be made without direction about the scale of reductions in contaminant loss to water that should be achieved.
- 3.1.4 Overall, I recommend, that for the above reasons, the application be granted pursuant to Sections 104B and 108 of the Resource Management Act 1991, subject to the conditions attached.

3.2 Term of consent

- 3.1.5 The applicant has requested a consent term of 15 years which reflects the value of the investment in the consents and the mitigations proposed, and that there is time remaining on the current permits. They provided an assessment against Policies 14A and 43 of the RWP, and Policy 40 of the pSWLP (which were all relevant when the application was lodged) and note the following:
- a. **Certainty about the nature, scale, duration and frequency of effects**
Potential effects of the proposed activities are understood reasonably well, and these are to be managed as far as reasonably practicable. Potential adverse effects have in the first instance been mitigated by appropriate management techniques on farm followed by contingency planning, ongoing monitoring and reporting in an auditable format. Council's level of knowledge regarding the underlying aquifer, the receiving soils and surface water management zone is also improving but suggests that there is still a lot to be understood. It is because of this that a 35-year term is not proposed;
 - b. **Matching consent duration to the level of risk of adverse effects**
The extent and nature of the actual and potential adverse effects of the activities on the existing environment (which includes the current dairy farm) are no more than occurring historically in the existing environment, with potential for ongoing improvement;

c. Relevant tangata whenua values and Ngāi Tahu indicators of health

The application has been assessed as consistent with the relevant tangata whenua values as outlined in the iwi management plan, with particular regard to the proposed consent duration being less than 25 years;

d. The permanence and economic life of any capital investment

Significant investment has been required just to get to the point of making application. The economic life of the farm is firstly dependent on the granting of the relevant consents, and secondly that those resource consents be granted for a reasonable duration.

e. Common expiry date

A common expiration date for all the permits applied for is considered appropriate.

f. Compliance history

The applicant has demonstrated an overall good compliance history with the existing resource consents;

g. Timing and development of FMU sections

It is considered that granting a longer consent duration (i.e. 15 years) will better enable implementation of any revised framework establish in the FMU section of the PSWLP, as Council will be able to review all consents in the catchment collectively, which will serve to better implement any limit setting process.

3.2.2 I agree with the applicant's conclusions in regard to c, e and f above. However, there is some uncertainty about the potential adverse effects in a degraded catchment, and the effectiveness of the proposed mitigation to reduce those effects. In addition, the existing consents for the discharge of dairy effluent and water permit expire in 2032 and 2034, and do not form part of the existing environment beyond that date.

3.2.3 Taking into account Policies 39 and 40 of the pSWLP, a consent term until 31 May 2034 is hereby recommended for all resource consents for the following reasons:

- A common expiry date is appropriate for all consents. Aligning the expiry date with the land use consent for self-feeding silage pads is particularly important as the use of land for these facilities contributes to a reduction in contaminant losses which is crucial to the recommendation to grant the land use permit for farming;
- The proposed activities are in a degraded catchment, and there is some uncertainty about the ability of the proposed mitigations to reduce the adverse effects of the activity on water quality (as required by Policy 16(a) of the pSWLP);
- Approximately 8 years and 10 months takes into account the time remaining on existing consents; and
- A duration until 31 May 2034 still provides for economic certainty while recognising the investment in the activities, including the proposed riparian planting.

Date: 21 July 2025



Ryan Hodgson

Senior Consents Officer

Attached:

<i>Discharge Permit</i>	<i>AUTH-20242761-01</i>
<i>Water Permit</i>	<i>AUTH-20242761-02</i>
<i>Land Use Consent</i>	<i>AUTH-20242761-03</i>
<i>Discharge Permit</i>	<i>AUTH-20242761-04</i>
<i>Land Use Consent</i>	<i>AUTH-20233661-V1</i>

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