BEFORE THE ENVIRONMENT COURT I MUA I TE KOOTI TAIAO O AOTEAROA

UNDER the Resource Management Act 1991

IN THE MATTER of appeals under Clause 14 of the First Schedule of the

Act

BETWEEN TRANSPOWER NEW ZEALAND LIMITED

(ENV-2018-CHC-26)

FONTERRA CO-OPERATIVE GROUP

(ENV-2018-CHC-27)

HORTICULTURE NEW ZEALAND

(ENV-2018-CHC-28)

ARATIATIA LIVESTOCK LIMITED

(ENV-2018-CHC-29)

(Continued next page)

MEMORANDUM OF COUNSEL FOR SOUTHLAND REGIONAL COUNCIL UPDATING REVISED PROVISIONS FOLLOWING ALL OF PARTIES HEARING 22 March 2022

Judicial Officer: Judge Borthwick

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WYNNWILLIAMS

WILKINS FARMING CO

(ENV-2018-CHC-30)

GORE DISTRICT COUNCIL, SOUTHLAND DISTRICT COUNCIL & INVERCARGILL CITY COUNCIL

(ENV-2018-CHC-31)

DAIRYNZ LIMITED

(ENV-2018-CHC-32)

H W RICHARDSON GROUP

(ENV-2018-CHC-33)

BEEF + LAMB NEW ZEALAND

(ENV-2018-CHC-34 & 35)

DIRECTOR-GENERAL OF CONSERVATION

(ENV-2018-CHC-36)

SOUTHLAND FISH AND GAME COUNCIL

(ENV-2018-CHC-37)

MERIDIAN ENERGY LIMITED

(ENV-2018-CHC-38)

ALLIANCE GROUP LIMITED

(ENV-2018-CHC-39)

FEDERATED FARMERS OF NEW ZEALAND

(ENV-2018-CHC-40)

HERITAGE NEW ZEALAND POUHERE TAONGA

(ENV-2018-CHC-41)

STONEY CREEK STATION LIMITED

(ENV-2018-CHC-42)

THE TERRACES LIMITED

(ENV-2018-CHC-43)

CAMPBELL'S BLOCK LIMITED

(ENV-2018-CHC-44)

ROBERT GRANT

(ENV-2018-CHC-45)

SOUTHWOOD EXPORT LIMITED, KODANSHA TREEFARM NEW ZEALAND LIMITED, SOUTHLAND PLANTATION FOREST COMPANY OF NEW ZEALAND

(ENV-2018-CHC-46)

TE RUNANGA O NGAI TAHU, HOKONUI RUNAKA, WAIHOPAI RUNAKA, TE RUNANGA O AWARUA & TE RUNANGA O ORAKA APARIMA

(ENV-2018-CHC-47)

PETER CHARTRES

(ENV-2018-CHC-48)

RAYONIER NEW ZEALAND LIMITED

(ENV-2018-CHC-49)

ROYAL FOREST AND BIRD PROTECTION SOCIETY

OF NEW ZEALAND

(ENV-2018-CHC-50)

Appellants

AND SOUTHLAND REGIONAL COUNCIL

Respondent

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MAY IT PLEASE THE COURT

- This Memorandum of Counsel is filed on behalf of the Southland Regional Council in respect of the appeals against the Council's decision on the proposed Southland Water and Land Plan.
- As directed,¹ the Council filed a consolidated set of provisions with the further revisions proposed by Mr McCallum-Clark and Ms Maciaszek following the hearing, on Friday 18 March 2022.
- The Court directed that the provisions be updated to include any amendments subsequently agreed on by the relevant parties and filed by Tuesday 22 March 2022.²
- 4 Counsel has received a response from the following parties:
 - (a) Dairy Interest Parties;
 - (b) Forest and Bird, and Fish and Game; and
 - (c) Territorial Authorities.
- Following feedback, Mr McCallum-Clark has recommended a further change to Policy 15B(1a)(b) to ensure that the intention of that subclause is better expressed.
- The Dairy Interest Parties have also pointed out that the second reference to clause (1a) in Policy 15B appears to be an error. The second clause should have been deleted (it having been replaced with a new clause (1a)).
- 7 The further changes are highlighted in the updated **Appendix A**.
- Counsel for Forest and Bird, and Fish and Game, has advised that those parties do not agree with the proposed wording for Policy 15B, Policy 16A, Rule 13 (with respect to the percentage change in sediment cover), Rule 15 (with respect to the percentage change in sediment cover), and Appendix E (regarding sediment cover). Those provisions therefore remain in dispute and it is understood that Counsel for Forest and Bird

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At the adjournment of the Tranche 1 hearing on 17 March, and recorded in the Minute dated 18 March 2022 at [2](a).

Minute dated 18 March 2022 at [2](b).

- and Fish and Game will make submissions on these provisions on Thursday.
- Ocunsel for the Territorial Authorities has also advised that the Territorial Authorities do not agree with the proposed wording for Policies 15A, 15B, and 17A. Those provisions therefore remain in dispute and it is understood that Counsel for the Territorial Authorities will make submissions on these policies on Thursday.
- No other parties have raised any issues with the remaining proposed changes.³

DATED this 22nd day of March 2022

PACMaw/AMLangford

Counsel for the Southland Regional Council

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Counsel is unable to affirmatively confirm that agreement has been reached in relation to the other provisions. Counsel simply did not receive any response from those parties.

Southland Regional Council

Final Consolidated Tracked Changes

22 March 2022

Key:

Black $\underline{\text{underline}}$ and $\underline{\text{strike-out}} = \text{draft consent order text}$

Red <u>underline</u> and <u>strike-out</u> = further changes to reflect

- (a) agreed changes (forestry provisions and Rule 13) and
- (b) Council's further changes following hearing of 14-17 March 2022

highlight = further changes filed on 22 March following discussion with parties

Sub-topic B1 - Water Takes

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 (<u>such as primary production</u>) of Southland's land and water resources, <u>including for primary production</u>, can have positive effects including enabling people and communities to provide for their social, economic and cultural wellbeing;
- 1. Avoid where reasonably practicable, or otherwise remedy or mitigate, adverse effects from the use and development of surface water resources on:
 - (a) the quality and quantity of aquatic habitat, including the life supporting capacity and ecosystem health and processes of water bodies;
 - (b) natural character values, natural features, and amenity, aesthetic and landscape values;
 - (c) areas of significant indigenous vegetation and significant habitats of indigenous fauna:
 - (d) recreational values;
 - (e) the spiritual and cultural values and beliefs of tangata whenua;

Commented [MMC1]: All instances of "reasonably" before "practicable" now recommended to be deleted, as it is considered to add little to the interpretation of practicable.

- (f) water quality, including temperature and oxygen content;
- (g) the reliability of supply for lawful existing surface water users, including those with existing, but not yet implemented, resource consents;
- (h) groundwater quality and quantity; and
- (i) mātaitai, taiāpure and nohoanga; and
- (j) historic heritage values.
- Avoid remedy or mitigate where reasonably practicable, or otherwise remedy or mitigate, significant 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;
- 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 25 - Priority takes

When issuing a water shortage direction, the Southland Regional Council will give priority to reasonable water abstractions for the following uses (in no particular order):

- 1. domestic needs, including community water supplies;
- 2. reasonable animal drinking needs;

2a. industries that process perishable foods;

- 3. fire-fighting purposes;
- 4. public health needs; and
- 5. animal welfare needs -;

and as a second priority industries that process perishable primary produce.

Rule 49 - Abstraction, diversion and use of surface water

(a) The take and use of surface water is a permitted activity provided the following conditions are met: ...(vi) the following details are supplied to the Southland Regional Council upon request (if applicable):...

(5) maximum instantaneous rate of take;

...

Rule 54 - Abstraction and use of groundwater

...

(a) The take and use of groundwater is a permitted activity provided the following conditions are met:

...

(iv) where the volume of the take exceeds 20,000 litres per day, a water meter capable of recording the rate of take and daily volume of take must be used. Water take data must be recorded daily at least weekly and provided to the Southland Regional Council on request. The accuracy of the water meter must be verified every 12 months.

Appendix K - Surface Water Appendix

...

Assessments of environmental effects for surface water takes, diversion and use

...

Method 1 – Assessment using Generalised Habitat Models

The process for undertaking an assessment of environmental effects using generalised habitat models is as follows:

- Step 1: Determine the relevant surface water management unit and flow range using Southland Regional Council flow data.
- Step 2: Determine the appropriate critical value from the data obtained in Step 1 using following table which shows critical values by surface water management unit and flow

range:

Median	Surface Water Management Unit		
flow	Lowland	Hill/Mountain	Hill2
			(Hokonui/Catlins)
0 – 300	Diadromous galaxiid	Non-diadromous	Diadromous galaxiids
L/s		galaxiid	(low elevation) and
			non-diadromous
			galaxiids at higher
			elevations
300 –	<u>Trout</u>	Trout	Trout
750 L/s	spawning/juvenile	spawning/juvenile	spawning/juvenile
	rearing or	rearing or non-	rearing or non-
	Redfin/common bully	diadromous galaxiid if	diadromous galaxiid if
	if trout excluded	trout excluded	trout excluded
		Large adult trout	Large adult trout
0.75 –	Trout	Trout	Trout
$2.5 \text{ m}^3/\text{s}$	spawning/juvenile	spawning/juvenile	spawning/juvenile
	rearing*	rearing	rearing
	Large adult trout	Large adult trout	Large adult trout
2.5 – 5	Trout	Large adult trout	Large adult trout
m³/s	spawning/juvenile		
	rearing*		
$> 5 \text{ m}^3/\text{s}$	Large adult trout	Large adult trout	Large adult trout

. . .

Table L.4 of Appendix L.5

Groundwater Zone	Primary Allocation (m³ x 10 ⁶ /year)
Te Anau	118.25 <u>88.94</u>

Sub-topic B2 - General Discharges

Policy 13 - Management of land use activities and discharges

- Recognise that the use and development of Southland's land and water resources, including for primary production, enables people and communities to provide for their social, economic and cultural wellbeing.
- 2. Manage land use activities and discharges (point source and non-point source) to enable the achievement of Policies 15A_r and 15B and 15C.

Policy 15A - Maintain water quality where 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 including by:

- 4. avoiding, where practicable or otherwise minimise any residual where reasonably practicable, or otherwise remedying or mitigating any the adverse effects of new discharges, so that beyond the zone of reasonable mixing, those standards or sediment guidelines will continue to be met (beyond the zone of reasonable mixing for point source discharges); and
- requiring any application for replacement of an expiring discharge permit to
 demonstrate how the adverse effects of the discharge are avoided, remedied or
 mitigated, so that beyond the zone of reasonable mixing those standards or sediment
 quidelines will continue to be met.

Policy 15B - Improve water quality where 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, improve water quality including by:

- avoiding where practicable and otherwise remedying or mitigating any adverse effects
 of new point source discharges to surface water on water quality or sediment quality
 that would exacerbate the exceedance of those standards or sediment guidelines
 beyond the zone of reasonable mixing; and
- <u>1a.</u> avoiding any adverse effects of other new discharges on water quality or sediment <u>quantity except for discharges resulting from new or upgraded:</u>

Commented [MMC2]: An editorial change, recognising the agreed deletion of Policy 15C.

Commented [MMC3]: After further consideration, "avoiding where practicable or otherwise minimise any residual effects..." is preferred to "avoiding as a first priority or otherwise minimise any residual effects...", following the cross examination of Mr Garbett. "Practicable" is also more closely aligned with the mediation agreement.

"Minimise" is preferred in this policy, due to the need to maintain water quality.

- (a) new or upgraded nationally or regionally significant infrastructure; or
- (b) on-farm infrastructure mitigation actions that reduces more than offset the discharge of point-source and non-point source contaminants from the farming activity offsets of the new discharge and does not result in further intensification of the farming activity.

and in these cases, the residual effects are minimised; and

- 1a. avoiding where reasonably practicable and otherwise remedying or mitigating any adverse effects of other new discharges on water quality or sediment quality that would exacerbate the exceedance of those standards or sediment guidelines; and
- requiring any application for replacement of an expiring discharge permit to
 demonstrate how and by when adverse effects will be avoided where reasonably
 practicable and otherwise remedied or mitigated, so that beyond the zone of
 reasonable mixing 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 16A - Industrial and trade processes that may affect water quality

Provided the quality of water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries, salt marshes, and groundwater is maintained where it is not degraded and improved where it is degraded, require the adoption of the best practicable option to manage the treatment and discharge of contaminants derived from industrial and trade processes.

<u>Subject to Policies 15A and 15B, require the adoption of best practicable option to manage</u> the treatment and discharge of contaminants by:

- (a) Avoiding where practicable, or otherwise remedying or mitigating the adverse effects of discharges from any new industrial or trade process
- (b) At the time of any replacement discharge permit, minimising the adverse effects of discharges from any existing industrial or trade process.

The adverse effects to be managed in accordance with (a) and (b) above include effects on the quality of water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries, salt marshes and groundwater.

Minimise the adverse environmental effects (including on the quality of water in lakes, rivers, artificial watercourses, modified water courses, wetlands, tidal estuaries, salt marshes and

Commented [MMC4]: With this wording, there isn't a need to make explicitly subject to Policies 15A and 15B, as the mediation version did.

groundwater) by requiring the adoption of best practicable option to manage the treatment and discharge of contaminants derived from industrial and trade processes.

Policy 17 - Agricultural effluent management

- Avoid significant where reasonably practicable, or otherwise minimise remedy or mitigate, 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:
- Manage agricultural effluent systems and discharges from them by:-
 - designing, constructing and locating systems appropriately and in accordance with best practice;
 - (b) maintaining and operating effluent systems in accordance with best practice quidelines;
 - (c) avoiding any surface run-off or overland flow, or ponding and minimise or contamination of water, including via sub-surface drainage, resulting from the application discharge of agricultural effluent to pasture; and
 - (d) avoiding the discharge of untreated agricultural effluent to water.
- Note: Examples of best practice referred to in Policy 17(2)(a) for agricultural effluent include IPENZ Practice Note 21: Farm Dairy Effluent Pond Design and Construction and IPENZ Practice Note 27: Dairy Farm Infrastructure (although these will not be applicable to all above ground tanks).

Note: Examples of best practice guidelines referred to in Policy 17(2)(b) for agricultural effluent include DairyNZ's guidelines A Farmer's Guide to Managing Farm Dairy Effluent – A Good Practice Guide for Land Application Systems, 2015 and A Staff Guide to Operating Your Effluent Irrigation System, 2013.

Policy 17A – Community sewerage schemes and on-site wastewater systems

- Minimise Avoid where reasonably practicable, or otherwise minimise remedy or mitigate, any adverse effects on water quality, and avoid, remedy, or mitigate other adverse effects of the operation of, and discharges from, community sewerage schemes including by:
 - designing, operating and maintaining community sewerage schemes in accordance with recognised industry standards;

Commented [MMC5]: Consideration has been given to whether this policy should reference risk instead. As it has not been specifically sought in appeals or debated by the parties at mediation, no change has been suggested.

Commented [MMC6]: Wording as I understood it, which was suggested at the hearing.

- implementing measures to progressively reduce the frequency and volume of wet weather overflows from community sewerage schemes; and
- ensuring community sewerage schemes are operated and maintained to minimise the likelihood of dry weather overflows occurring.

...

Rule 5 - Discharges to surface water bodies

- (a) Except as provided for elsewhere in this Plan the discharge of any:
 - contaminant, or water, into a lake, river, artificial watercourse, modified watercourse or natural wetland; or
 - (ii) contaminant onto or into land in circumstances where it may enter a lake, river, artificial watercourse, modified watercourse or natural wetland;

is a discretionary activity provided the following conditions are met:

- where the water quality upstream of the discharge meets the standards set for the relevant water body in Appendix E "Water Quality Standards", the discharge does not reduce the water quality below those standards at the downstream edge of the reasonable mixing zone; or
- where the water quality upstream of the discharge does not meet the standards set for the relevant water body in Appendix E "Water Quality Standards", the discharge must not further reduce the water quality below those standards at the downstream edge of the reasonable mixing zone; and
- except for discharges from a territorial authority reticulated stormwater or wastewater system, the discharge does not contain any raw sewage.

Rule 9 - Discharge of agrichemicals onto or into surface water

- (a) The discharge of agrichemicals and any associated wetting, antifoaming and antidrifting agent and marker dyes into or onto surface water is a permitted activity provided the following conditions are met:
 - (i) the discharge is for the purpose of eradicating, modifying or controlling excessive growth of aquatic plants, and does not exceed the quantity, concentration or rate necessary_T as approved by the Environmental Protection Authority, or if no <u>Environmental Protection Authority approval exists</u>, as recommended by the manufacturer or approved by the Environmental Protection Authority;
 - (ii) ...

Rule 13 - Discharge from subsurface drainage systems

- (a) The discharge of land drainage water to water from an on-farm subsurface drainage system is a permitted activity, provided the following conditions are met:
 - (i) the discharge does not cause:
 - (1) a conspicuous change to the colour or clarity of the receiving waters beyond 20 metres from the point of discharge that exceeds the maximum percentage change specified for the relevant water body class in Appendix E: or
 - (2) more than a 10% change in the sediment cover of the receiving waters beyond 20 metres from the point of discharge; or
 - (3)(2) conspicuous oil or grease films, scrums or foams, or floatable or suspended materials beyond 20 metres from the point of discharge;
 - (ii) the discharge does not render freshwater unsuitable for consumption by farm animals:
 - (iii) the discharge does not cause the flooding of any other landholding;
 - (iv) the discharge does not cause any scouring or erosion of any land or bed of a water body beyond the point of discharge;
 - (vi) the discharge does not cause any significant adverse effects on aquatic life;
 - (vii) the subsurface drainage system does not drain a natural wetland; and
 - (viii) for any known existing drains and for any new drains, the locations of the drain outlets are mapped and provided to the Southland Regional Council on request.
- (b) The discharge of land drainage water to water from an on-farm subsurface drainage system that does not comply with Rule 13(a) is a discretionary activity.

Rule 15 - Discharge of stormwater

- (a) The discharge of stormwater onto or into land in circumstances where contaminants may enter water, or into a lake, river, artificial watercourse, modified watercourse or wetland, is a permitted activity provided the following conditions are met:
 - (i) the discharge is not from a reticulated system; and
 - (ii) the discharge does not originate from industrial or trade premises where hazardous substances are stored or used unless:
 - (1) hazardous substances cannot enter the stormwater system; or

Commented [MMC7]: This wording is unchanged from the changes agreed by the parties - it is shown in red as it is in addition to changes shown in the draft consent orders.

- (2) there is an interceptor system in place to collect stormwater that may contain hazardous substances and discharge or divert it to a trade waste system; or
- (3) the stormwater contains no hazardous substances except oil and grease and the stormwater is passed through an oil interceptor system prior to discharge; and
- (iii) the discharge does not contain any sewage, contaminants from on-site wastewater systems and mobile toilets, or agricultural effluent; and
- (iv) for discharges to a lake, river, artificial watercourse, modified watercourse or wetland, the discharge does not result in:
 - the production of any conspicuous oil or grease films, scums, foams or floatable or suspended materials; or
 - (2) the rendering of freshwater unsuitable for the consumption by farm animals; or
 - (3) significant adverse effects to aquatic life; or
 - (4) any conspicuous change in the colour or visual clarity of the receiving waters at the downstream edge of the reasonable mixing zone; and more than a 20% change in the colour or visual clarity of the receiving waters at the downstream edge of the reasonable mixing zone; or
 - (5) more than a 10% change in sediment cover of the receiving waters at the downstream edge of the reasonable mixing zone;
- (v) except for the discharge of stormwater from a roof, road or vehicle parking area, the discharge is not into water within natural state waters; and
- (vi) for discharges to land, the discharge does not cause flooding, erosion, or land instability to any other person's property.
- (ab) The discharge of stormwater <u>and any contaminants contained within, from a</u>

 <u>reticulated system</u> onto or into land where contaminants may enter water, or into a

 lake, river, artificial watercourse, modified watercourse or wetland, that does not meet

 Rule 15(a)(i) is a discretionary activity provided the following conditions are met:
 - the reticulated system is owned by a territorial authority and is operated by them or their agent; and
 - (ii) a management plan is provided with the application that sets out, in a manner that reflects the scale and significance of water quality improvements required in the catchment:
 - (1) targets for the reduction in the volume and frequency of wastewater overflows into the stormwater network, and methods to monitor the volume and frequency of those overflow discharges; and

- (2) a monitoring and investigation programme to identify and remedy wastewater cross-connections on private and public land; and
- (3) methods to improve the quality of the discharge, which may include capital works, bylaws, investigations, education and preventative activities; and
- (iii) demonstration of funding for implementing the management plan is provided with the application—<u>; and</u>
- (iv) the discharge does not contain any contaminants from on-site wastewater systems and mobile toilets, or agricultural effluent; and
- (v) where the water quality upstream of a point source discharge meets the standards set for the relevant waterbody in Appendix E "Water Quality Standards", the discharge does not reduce the water quality below those standards at the downstream edge of the reasonable mixing zone; or
- (vi) where the water quality upstream of a point source discharge does not meet the standards set for the relevant water body in Appendix E "Water Quality Standards", the discharge must not further reduce the water quality below those standards at the downstream edge of the reasonable mixing zone.
- (b) The discharge of stormwater onto or into land in circumstances where contaminants may enter water, or into a lake, river, artificial watercourse, modified watercourse or wetland, that does not meet one or more of the conditions in Rule 15(a), excluding condition (a)(iii), a(v) or a(vi), and which is not otherwise specified in Rule 15(ab) is a discretionary activity.
- (c) The discharge of stormwater onto or into land in circumstances where contaminants may enter water, or into a lake, river, artificial watercourse, modified watercourse or wetland, that does not meet Rule 15(a)(iii), a(v) or a(vi) and which is not otherwise specified in Rule 15(ab)is a non-complying activity.

Rule 32B – Construction, maintenance and use of new agricultural effluent management system storage facilities

(a) The use of land for the construction, maintenance and use of a new agricultural effluent storage facility, and any incidental discharge of agricultural effluent directly onto or into land from that facility which is, where relevant, within the normal operating parameters of a leak detection system or the pond drop test criteria set out in Appendix P, is a permitted activity provided the following conditions are met:

- (i) the tetal capacity of any individual agricultural effluent storage structure on a landholding, excluding storage authorised by a resource consent, does not exceed 35 cubic metres; and
- (ii) [unchanged]
- (iii) [unchanged]
- (iv) [unchanged]
- (v) [unchanged]
- (vi) [unchanged]
- (b) The use of land for the construction, maintenance and use of a new agricultural effluent storage facility, and any incidental discharge of agricultural effluent directly onto or into land from that facility which is, where relevant, within the normal operating parameters of a leak detection system or the pond drop test criteria set out in Appendix P, which does not meet condition (i) or condition (ii) of Rule 32B(a) is a controlled activity provided the following conditions are met:
 - (i) the design is certified by a Chartered Professional Engineer as being in accordance with IPENZ Practice Note 21: Farm Dairy Effluent Pond Design and Construction (2013) or IPENZ Practice Note 27: Dairy Farm Infrastructure (2013), except in the case of an above ground tank, those Practice Notes only apply to the extent they are relevant to above ground tanks; and
 - (ii) the application includes an operational management plan prepared by a Suitably Qualified Person that addresses operational procedures, emergency response, monitoring and reporting requirements, the undertaking of pond drop tests, and installation of monitoring devices; and
 - (iii) conditions (iii) to (vi) of Rule 32B(a).
- (c) The use of land for the construction, maintenance and use of a new agricultural effluent storage facility, and any incidental discharge of agricultural effluent directly onto or into land from that facility which is, where relevant, within the normal operating parameters of a leak detection system, or the pend drop test criteria set out in Appendix P, which meets conditions (i) and (ii) of Rule 32B(a), but which does not meet one or more of conditions (iii) to (vi) of Rule 32B(a), is a discretionary activity.
- (d) The use of land for the construction, maintenance and use of a new agricultural effluent storage facility, and any incidental discharge of agricultural effluent directly onto or into land from that facility which is, where relevant, within the normal operating parameters of a leak detection system, or the pend drop test criteria set out in Appendix P, which meets condition (i) of Rule 32B(b), but which does not meet one or more of conditions (ii) and (iii) of Rule 32B(b), is a discretionary activity.

Commented [MMC8]: Following discussion between Mr Duncan and Commissioner Dunlop.

(e) The use of land for the construction, maintenance and use of a new agricultural effluent storage facility, and any incidental discharge of agricultural effluent directly onto or into land from that facility which is within the normal operating parameters of a leak detection system or the pond drop test criteria set out in Appendix P, which does not meet condition (i) of Rule 32B(b) is a non-complying activity.

Rule 32D - Existing agricultural effluent management system storage facilities

- (a) The use of land for the maintenance and use of an existing agricultural effluent storage facility that was authorised prior to Rule 32D taking legal effect, and any incidental discharge directly onto or into land from that storage facility which is, where relevant, within the normal operating parameters of a leak detection system or the pond drop test criteria set out in Appendix P, is a permitted activity provided the following conditions are met:
 - (i) the construction of the existing agricultural effluent storage facility <u>was authorised</u> by a resource consent; or:
 - (ii) the construction of the existing agricultural effluent storage facility was lawfully carried out without a resource consent; and
 - (1) was authorised by a resource consent; or
 - (2) was lawfully carried out without a resource consent; and
 - (iiii) where the construction of the existing agricultural effluent storage facility was lawfully carried out without resource consent, the landholding owner or their agent must provide information to the Southland Regional Council upon request, demonstrating that any the component of an existing agricultural effluent storage facility is either:
 - (1) has a capacity of 35m³ or less, is constructed using an impermeable concrete or synthetic liner, and has no defect that would cause leakage; or
 - (42) is fully lined with an impermeable synthetic liner, or is of concrete construction, or is above ground level and:
 - (a) has a leak detection system that underlies the entire agricultural effluent storage facility which is inspected not less than monthly and there is no evidence of any leakage; and
 - (b) has been is certified by a Suitably Qualified Person in accordance with Appendix P within the last 10 years as meeting the relevant pond drop test criteria in Appendix P; or
 - (3) is an above ground storage tank constructed in accordance with a building consent and has been certified by a Suitably Qualified Person within the last 5

years, following an external visual inspection, as having no visible cracks, holes or defects in the tank that would allow effluent to leak or visible leakage from the sides or base of the tank; or

- (24) is certified by a Suitably Qualified Person within the last three years as:
 - (a) having no visible cracks, holes or defects that would allow effluent to leak from the effluent storage facility; and
 - (b) meeting the relevant pond drop test criteria in Appendix P.
- (b) The use of land for the maintenance and use of an existing agricultural effluent storage facility that was authorised prior to Rule 32D taking legal effect, and any incidental discharge directly onto or into land from that storage facility which is within the normal operating parameters of a leak detection system or the pond drop test criteria set out in Appendix P that does not meet one or more conditions of Rule 32D(a) is a discretionary activity.
- (c) The use of land for the replacement of an existing agricultural effluent storage facility's impermeable synthetic liner with a new impermeable synthetic liner or the installation of an impermeable synthetic liner in an existing agricultural effluent storage facility that does not have an impermeable synthetic liner is a controlled activity provided the following conditions are met:
 - (i) the construction of the existing agricultural effluent storage facility:
 - (1) was lawfully carried out without a resource consent; or
 - (2) was authorised by a resource consent; and
 - (ii) The design and installation of the impermeable synthetic liner and associated gas venting and leak detection system (if applicable) shall be carried out by a suitably gualified person; and
 - (iii) The existing agricultural effluent storage facility is not being enlarged or otherwise modified beyond the extent necessary to install the impermeable synthetic liner and associated components.
 - The Southland Regional Council will reserve its control to the following matters:
 - 1. The design, installation, and certification of the impermeable synthetic liner.
 - 2. The design and installation of a gas venting and leak detection system.
 - 3. Investigations into, and work to ensure, the structural integrity of the pond structure
 - 4. Testing requirements to ensure the impermeable synthetic liner and any associated gas venting and leak detection system has been installed and is operating correctly.
- (d) The use of land for the replacement of an existing agricultural effluent storage facility's impermeable synthetic liner with a new impermeable synthetic liner or the installation of an impermeable synthetic liner in an existing agricultural effluent storage facility that

does not have an impermeable synthetic liner that does not meet one or more conditions of Rule 32D(c) is a discretionary activity

Rule 32E - Incidental Discharges from Effluent Storage Facilities

- (a) The incidental discharge of agricultural effluent directly onto or into land from an agricultural effluent storage facility that is authorised under Rules 32B or 32D is a permitted activity provided the following conditions are met:
 - (i) The discharge is directly through the sides or base of the agricultural effluent storage facility; and
 - (ii) The incidental discharge amount is, where relevant, within the normal operating parameters of a leak detection system or within the pond drop test criteria set out in Appendix P.
- (b) The incidental discharge of agricultural effluent directly onto or into land from an agricultural effluent storage facility that is authorised under Rules 32B or 32D that does not meet one or more of the conditions of Rule 32E(a) is a discretionary activity.

Rule 33 - Community sewerage schemes (discharge to land)

- (aa) The discharge of effluent or biosolids onto or into land, from a community sewerage scheme that was constructed before 1 January 2017 in circumstances where contaminants may enter water is a discretionary activity.
- (a) The discharge of effluent or bio-solids onto or into land, in circumstances where contaminants may enter water, from a community sewerage scheme is a discretionary activity, provided the following conditions are met <u>for community sewerage schemes</u> <u>constructed after 1 January 2017:</u>
 - the discharge is not within 20 metres of a river, lake, artificial watercourse, modified watercourse, natural wetland or the coastal marine area;
 - (iii) the discharge is not within 200 metres of any place of assembly or dwelling not on the same landholding, or 20 metres of the boundary of any other landholding; and
 - (iv) the discharge is not within 100 metres of any authorised water abstraction point.
- (b) The discharge of effluent or bio-solids onto or into land, in circumstances where contaminants may enter water, from a community sewerage scheme <u>constructed after</u> <u>1 January 2017</u> that does not meet the conditions of Rule 33(a) is a noncomplying activity.

Rule 33A - Community sewerage schemes (discharge to water)

- (a) The discharge of effluent or bio-solids from a community sewerage scheme into water in a river, lake, artificial watercourse, modified watercourse or natural wetland where the Appendix E Receiving Water Quality Standards are met and the discharge does not reduce the water quality below those standards at the downstream edge of the reasonable mixing zone is a discretionary activity;
- (a)(b) The discharge of effluent or bio-solids from a community sewerage scheme into water in a river, lake, artificial watercourse, modified watercourse or natural wetland where Rule 33A(a) is not met the discharge is a non-complying activity.

Appendix E - Receiving Water Quality Standards

These standards apply to the effects of discharges following reasonable mixing with the receiving waters, unless otherwise stated. They do not apply to waters within artificial storage ponds such as effluent storage ponds or stock water reservoirs or to temporarily ponded rainfall.

The standard for a given parameter will not apply in a lake, river, artificial watercourse or modified watercourse or natural wetland where:

- (a) due to natural causes, that parameter cannot meet the standard; or
- (b) due to the effects of the operation of the Manapōuri hydro-electric generation scheme that alters natural flows, that parameter cannot meet the standard.

Plan users should contact the Southland Regional Council for guidance on standard methodologies for collecting water quality data. Monitoring requirements imposed as consent conditions require sample collection, preservation and analysis to be carried out in accordance with the most recent edition of American Public Health Association (APHA) "Standard Methods for the Examination of Water and Wastewater" or National Environmental Monitoring Standard (NEMS) and analyses to be carried out by a laboratory with International Accreditation New Zealand (IANZ) registration or equivalent.

Surface water bodies classified as "Natural State Waters"

The natural quality of the water shall not be altered.

Surface water bodies classified as "Lowland soft bed"

The temperature of the water:

- shall not exceed 23°C
- the daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

The pH of the water shall be within the range 6.5 to 9, and there shall be no pH change in water due to a discharge that results in a loss of biological diversity or a change in community abundance and composition.

The change in fine sediment (<2mm diameter) bed cover must not exceed 10%.

The concentration of dissolved oxygen in water shall exceed 80% of saturation concentration.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

When the flow is <u>at or</u> below the median flow, the visual clarity of the water shall not be less than 1.3 metres.¹

There shall be no more than a 33% change in clarity or colour at the edge of the reasonable mixing zone, relative to the clarity or colour upstream of the discharge point.

The concentration of total ammonia shall not exceed the values specified in Table 1 "Ammonia standards for Lowland and Hill surface water bodies".

The concentration of faecal coliforms shall not exceed 1,000 coliforms per 100 millilitres, except for popular bathing sites, defined in Appendix G "Popular Bathing Sites" and within 1 km immediately upstream of these sites, where the concentration of Escherichia coli shall not exceed 130 E. coli per 100 millilitres.

The Macroinvertebrate Community Index shall exceed <u>8090</u> and the <u>Semi-Quantitative</u> Macroinvertebrate Community Index shall exceed <u>3.54.5</u>.²

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies classified as "Lowland hard bed"

The temperature of the water:

¹ Visual clarity is assessed using the black disc method or other comparable method employed by Environment Southland.

² MCI and SQMCI indices to be determined using Environment Southland's SOE sampling protocol and MfE's Protocol P2 for sample processing (Stark et al. 2001)

- shall not exceed 23°C
- shall not exceed 11°C in trout spawning areas during May to September inclusive
- the daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

The pH of the water shall be within the range 6.5 to 9, and there shall be no pH change in water due to a discharge that results in a loss of biological diversity or a change in community composition.

The change in fine sediment (<2mm diameter) bed cover must not exceed 10%.

The concentration of dissolved oxygen in water shall exceed 80% of saturation concentration.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

When the flow is <u>at or</u> below the median flow, the visual clarity of the water shall not be less than 1.6 metres, except where the water is naturally low in clarity as a result of high concentrations of tannins, in which case the natural colour and clarity shall not be altered.³

There shall be no more than a 20% change in clarity or colour at the edge of the reasonable mixing zone, relative to the clarity or colour upstream of the discharge point.

The concentration of total ammonia shall not exceed the values specified in Table 1 "Ammonia standards for Lowland and Hill surface water bodies".

The concentration of faecal coliforms shall not exceed 1,000 coliforms per 100 millilitres, except for popular bathing sites, defined in Appendix G "Popular Bathing Sites" and within 1

³ Visual clarity is assessed using the black disc method or other comparable method employed by Environment Southland.

km immediately upstream of these sites, where the concentration of Escherichia coli shall not exceed 130 E. coli per 100 millilitres.

For the period 1 November through to 30 April, filamentous algae of greater than 2 cm long shall not cover more than 30% of the visible stream bed. Growths of diatoms and cyanobacteria greater than 0.3 cm thick shall not cover more than 60% of the visible stream bed.⁴

Biomass shall not exceed 35 grams per square metre for either filamentous algae or diatoms and cyanobacteria.⁵

Chlorophyll a shall not exceed 120 milligrams per square metre for filamentous algae and 200 milligrams per square metre for diatoms and cyanobacteria.⁶

The Macroinvertebrate Community Index shall exceed a score of 90 and the Semi-Quantitative Macroinvertebrate Community Index shall exceed a score of 4.5.

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies classified as "Hill"

The temperature of the water:

- shall not exceed 23°C
- shall not exceed 11°C in trout spawning areas during May to September inclusive
- the daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

⁴ Applies to the part of the bed that can be seen from the bank during summer low flows or walked on.

⁵ Expressed in terms of reach biomass per unit of exposed strata (i.e., tops and sides of stones) averaged across the full width of the stream or river

⁶ Expressed in terms of reach biomass per unit of exposed strata (i.e., tops and sides of stones) averaged across the full width of the stream or river

The pH of the water shall be within the range 6.5 to 9, and there shall be no pH change in water due to a discharge that results in a loss of biological diversity or a change in community composition.

The change in fine sediment (<2mm diameter) bed cover must not exceed 10%.

The concentration of dissolved oxygen in water shall exceed 80% of saturation concentration.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

When the flow is <u>at or</u> below the median flow, the visual clarity of the water shall not be less than 1.6 metres.⁷

There shall be no more than a 20% change in clarity or colour at the edge of the reasonable mixing zone, relative to the clarity or colour upstream of the discharge point.

The concentration of total ammonia shall not exceed the values specified in Table 1 "Ammonia standards for Lowland and Hill surface water bodies".

The concentration of faecal coliforms shall not exceed 1,000 coliforms per 100 millilitres, except for popular bathing sites, defined in Appendix G "Popular Bathing Sites" and within 1 km immediately upstream of these sites, where the concentration of Escherichia coli shall not exceed 130 E. coli per 100 millilitres.

Filamentous algae of greater than 2 cm long shall not cover more than 30% of the visible stream bed. Growths of diatoms and cyanobacteria greater than 0.3cm thick shall not cover more than 60% of the visible stream bed.

Biomass shall not exceed 35 grams per square metre for filamentous algae.

⁷ Visual clarity is assessed using the black disc method or other comparable method employed by Environment Southland.

Chlorophyll a shall not exceed 120 milligrams per square metre for filamentous algae.

The Macroinvertebrate Community Index shall exceed a score of 100 and the Semi-Quantitative Macroinvertebrate Community Index shall exceed a score of 5.5.

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies classified as "Mountain"

The temperature of the water:

- shall not exceed 21°C
- shall not exceed 11°C in trout spawning areas during May to September inclusive
- the daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

The pH of the water shall be within the range 7.2 to 8, and there shall be no pH change in water due to a discharge that results in a loss of biological diversity or a change in community composition.

The change in <u>fine</u> sediment <u>(<2mm diameter) bed</u> cover must not exceed 10%.

The concentration of dissolved oxygen in water shall exceed 99% of saturation concentration.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

When the flow is <u>at or</u> below the median flow, the visual clarity of the water shall not be less than 3 metres.

There shall be no more than a 20% change in clarity or colour at the edge of the reasonable mixing zone, relative to the clarity or colour upstream of the discharge point.

The concentration of total ammonia shall not exceed 0.32 milligrams per litre.

The concentration of Escherichia coli shall not exceed 130 *E. coli* per 100 millilitres in any sample.

Filamentous algae of greater than 2 cm long shall not cover more than 30% of the visible stream bed.

Biomass shall not exceed 35 milligrams per square metre for filamentous algae.

Chlorophyll a shall not exceed 50 milligrams per square metre for filamentous algae.

Growths of diatoms and cyanobacteria greater than 0.3 cm thick shall not cover more than 60% of the visible stream bed.

The Macroinvertebrate Community Index shall exceed a score of 120 and the Semi-Quantitative Macroinvertebrate Community Index shall exceed a score of 7.

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies classified as "Lake Fed"

The temperature of the water:

- shall not exceed 21°C
- shall not exceed 11°C in trout spawning areas during May to September inclusive
- the daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

The pH of the water shall be within the range 7.2 to 8, and there shall be no pH change in water due to a discharge that results in a loss of biological diversity or a change in community composition.

The change in fine sediment (<2mm diameter) bed cover must not exceed 10%.

The concentration of dissolved oxygen in water shall exceed 99% of saturation concentration.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

When the flow is <u>at or</u> below the median flow, the visual clarity of the water shall not be less than 3 metres.⁸

There shall be no more than a 20% change in clarity or colour at the edge of the reasonable mixing zone, relative to the clarity or colour upstream of the discharge point.

The concentration of total ammonia shall not exceed 0.32 milligrams per litre.

The concentration of Escherichia coli shall not exceed 130 *E. coli* per 100 millilitres in any sample.

Chlorophyll a shall not exceed 50 milligrams per square metre at any time or exceed a monthly mean of 15 milligrams per square metre for filamentous algae or diatoms and cyanobacteria.⁹

The Macroinvertebrate Community Index shall exceed a score of 90 and the Semi-Quantitative Macroinvertebrate Community Index shall exceed a score of 4.5.

⁸ Visual clarity is assessed using the black disc method or other comparable method employed by Environment Southland.

⁹ Expressed in terms of reach biomass per unit of exposed strata (i.e., tops and sides of stones) averaged across the full width of the river.

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies classified as "Spring Fed"

The temperature of the water:

- shall not exceed 21°C
- shall not exceed 11°C in trout spawning areas during May to September inclusive
- the daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

The pH of the water shall be within the range 6.5 to 9, and there shall be no pH change in water due to a discharge that results in a loss of biological diversity or a change in community composition.

The change in <u>fine</u> sediment (<2mm diameter) bed cover must not exceed 10%.

The concentration of dissolved oxygen in water shall exceed 99% of saturation concentration.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

When the flow is <u>at or</u> below the median flow, the visual clarity of the water shall not be less than 3 metres.¹⁰

There shall be no more than a 20% change in clarity or colour at the edge of the reasonable mixing zone, relative to the clarity or colour upstream of the discharge point.

The concentration of total ammonia shall not exceed 0.32 milligrams per litre.

¹⁰ Visual clarity is assessed using the black disc method or other comparable method employed by Environment Southland

The concentration of faecal coliforms shall not exceed 1,000 coliforms per 100 millilitres, except for popular bathing sites, defined in Appendix G "Popular Bathing Sites" and within 1 km immediately upstream of these sites, where the concentration of Escherichia coli shall not exceed 130 E. coli per 100 millilitres.

Chlorophyll a shall not exceed 50 milligrams per square metre at any time, or exceed a monthly mean of 15 milligrams per square metre for filamentous algae or diatoms and cyanobacteria.¹¹

The Macroinvertebrate Community Index shall exceed a score of 90 and the Semi-Quantitative Macroinvertebrate Community Index shall exceed a score of 4.5.

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies classified as "Lowland/Coastal Lakes and Wetlands"

The temperature of the water:

- shall not exceed 23°C
- the daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

The pH of the water shall be within the range 6.5 to 9, and there shall be no pH change in water due to a discharge that results in a loss of biological diversity or a change in community composition.

The change in sediment cover must not exceed 10%.

¹¹ Expressed in terms of reach biomass per unit of exposed strata (i.e., tops and sides of stones) averaged across the full width of the river.

The concentration of dissolved oxygen in water shall exceed 80% of saturation concentration.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

When lake inflows are below their median values, the Secchi depth clarity of the water shall not be less than 1.5 metres, except where the water is naturally low in clarity as a result of high concentrations of tannins, in which case the natural colour and clarity shall not be altered.¹²

The concentration of total ammonia shall not exceed the values specified in Table 1 "Ammonia standards for Lowland and Hill surface water bodies".

The concentration of faecal coliforms shall not exceed 1,000 coliforms per 100 millilitres, except for popular bathing sites, defined in Appendix G "Popular Bathing Sites", where the concentration of Escherichia coli shall not exceed 130 E. coli per 100 millilitres.

The concentration of chlorophyll a shall not exceed 5 milligrams per cubic metre. 13

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies classified as "Hill Lakes and Wetlands"

The temperature of the water shall not exceed 23°C the daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

¹² Visual clarity in lakes to be measured as Secchi depth.

¹³ Determination of lake chlorophyll concentration to be follow the protocols in Burns et al. (2000).

The pH of the water shall be within the range 6.5 to 9, and there shall be no pH change in water due to a discharge that results in a loss of biological diversity or a change in community composition.

The change in sediment cover must not exceed 10%.

The concentration of dissolved oxygen in water shall exceed 80% of saturation concentration.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

When lake inflows are below their median values, the Secchi depth clarity of the water shall not be less than 5 metres.

The concentration of total ammonia shall not exceed the values specified in Table 1 "Ammonia standards for Lowland and Hill surface water bodies".

The concentration of faecal coliforms shall not exceed 130 E. coli per 100 millilitres.

Biomass shall not exceed 35 grams per square metre for filamentous algae.

The concentration of chlorophyll a shall not exceed 5 milligrams per cubic metre.

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies classified as "Mountain Lakes and Wetlands"

The temperature of the water

- shall not exceed 21°C
- the daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

The pH of the water shall be within the range 6.5 to 9, and there shall be no pH change in water due to a discharge that results in a loss of biological diversity or a change in community composition.

The change in sediment cover must not exceed 10%.

The concentration of dissolved oxygen in water shall exceed 99% of saturation concentration.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

The natural colour and clarity of the waters must not be changed to a conspicuous extent.

When lake inflows are below their median values, the Secchi depth clarity of the water shall not be less than 10 metres.

The concentration of total ammonia shall not exceed 0.32 milligrams per litre.

The concentration of Escherichia coli shall not exceed 130 E. coli per 100 millilitres in any sample.

The concentration of chlorophyll a shall not exceed 2 milligrams per cubic metre.

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies classified as "Mataura 1"

The Protected Waters¹⁴ between map references NZMS 260 F45:967-503 to F45:963-508 (Mataura River).

¹⁴ Protected Waters means:

⁽a) the Mataura River from its source (approximate map reference NZMS 260 E42:502-333) to its confluence with the sea (approximate map reference NZMS 260 F47:877-946); and

⁽b) the Waikaia River and its tributaries, the Ōtamita Stream, and all other tributaries of the Mataura River upstream of its confluence with the Ōtamita Stream (approximate map reference NZMS 260 F45:881-582); and

Any discharge is to be substantially free from suspended solids, grease and oil.

The daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

The pH of the water must be within the range 6 to 8.5, except when due to natural causes.

The waters must not be tainted so as to make them unpalatable, nor must they contain toxic substances to the extent that they are unsafe for consumption by humans or farm animals, nor must they emit objectionable odours.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

There must not be any destruction of natural aquatic life by reason of a concentration of toxic substances.

The natural colour and clarity of the waters must not be changed to a conspicuous extent.

There shall be no more than a 20% change in clarity or colour at the edge of the reasonable mixing zone, relative to the clarity or colour upstream of the discharge point.

The change in fine sediment (<2mm diameter) bed cover must not exceed 10%.

The oxygen concentration in solution in the waters must not be reduced below 6 milligrams per litre.

Based on no fewer than five samples taken over not more than a 30-day period, the median value of the faecal coliform bacteria content of the water must not exceed 2000 per 100 millilitres and the median value of the total coliform bacteria content of the water must not exceed 10,000 per 100 millilitres.

⁽c) the Mimihau Stream and the Mokoreta River and each of their tributaries.

The Macroinvertebrate Community Index shall exceed a score of 120, 100 and 90 as the river progresses from mountain, hill to lowland hard bed. The Quantitative Macroinvertebrate Community Index shall exceed a score of 7.5, 5.5 and 4.5 as the river progresses from mountain, hill to lowland hard bed.

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies classified as "Mataura 2"

The Protected Waters between map references NZMS 260 F45:894-581 to F45:885-584 (Mataura River) and NZMS 260 F46:917-391 to F46:924-396 (Mataura River).

Any discharge is to be substantially free from suspended solids, grease and oil.

The natural water temperature must not be changed by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of a discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

The pH of the water must be within the range 6.5 to 8.3, except when due to natural causes.

The waters must not be tainted so as to make them unpalatable, nor must they contain toxic substances to the extent that they are unsafe for consumption by humans or farm animals, nor must they emit objectionable odours.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

There must not be any destruction of natural aquatic life by reason of a concentration of toxic substances.

The natural colour and clarity of the waters must not be changed to a conspicuous extent.

There shall be no more than a 20% change in clarity or colour at the edge of the reasonable mixing zone, relative to the clarity or colour upstream of the discharge point.

The change in fine sediment (<2mm diameter) bed cover must not exceed 10%.

The oxygen concentration in solution in the waters must not be reduced below 6 milligrams per litre.

Based on no fewer than five samples taken over not more than a 30-day period, the median value of the faecal coliform bacteria content of the water must not exceed 200 per 100 millilitres.

The Macroinvertebrate Community Index shall exceed a score of 120, 100 and 90 as the river progresses from mountain, hill to lowland hard bed. The Quantitative Macroinvertebrate Community Index shall exceed a score of 7.5, 5.5 and 4.5 as the river progresses from mountain, hill to lowland hard bed.

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Surface water bodies Classified as "Mataura 3"

The Protected Waters other than those parts classified as Mataura 1 and Mataura 2.

Any discharge is to be substantially free from suspended solids, grease and oil.

The daily maximum ambient water temperature shall not be increased by more than 3°C when the natural or existing water temperature is 16°C or less, as a result of any discharge. If the natural or existing water temperature is above 16°C, the natural or existing water temperature shall not be exceeded by more than 1°C as a result of any discharge.

The pH of the water must be within the range 6 to 9, except when due to natural causes.

The waters must not be tainted so as to make them unpalatable, nor must they contain toxic substances to the extent that they are unsafe for consumption by humans or farm animals, nor must they emit objectionable odours.

There shall be no bacterial or fungal slime growths visible to the naked eye as obvious plumose growths or mats. Note that this standard also applies to within the zone of reasonable mixing for a discharge.

There must not be any destruction of natural aquatic life by reason of a concentration of toxic substances.

The natural colour and clarity of the waters must not be changed to a conspicuous extent.

There shall be no more than a 20% change in clarity or colour at the edge of the reasonable mixing zone, relative to the clarity or colour upstream of the discharge point.

The change in <u>fine</u> sediment <u>(<2mm diameter) bed</u> cover must not exceed 10%.

The oxygen concentration in solution in the waters must not be reduced below 5 milligrams per litre.

The concentration of faecal coliforms shall not exceed 1,000 coliforms per 100 millilitres, except for popular bathing sites, defined in Appendix G "Popular Bathing Sites" and within 1 km immediately upstream of these sites, where the concentration of Escherichia coli shall not exceed 130 E. coli per 100 millilitres.

The Macroinvertebrate Community Index shall exceed a score of 120, 100 and 90 as the river progresses from mountain, hill to lowland hard bed. The Quantitative Macroinvertebrate Community Index shall exceed a score of 7.5, 5.5 and 4.5 as the river progresses from mountain, hill to lowland hard bed.

Fish shall not be rendered unsuitable for human consumption by the presence of contaminants.

Sub-topic B3 - Wetlands

Policy 32 - Protect significant indigenous vegetation and habitat

Protect significant indigenous vegetation and significant habitats of indigenous fauna <u>and maintain indigenous biodiversity</u> associated with natural wetlands, lakes and rivers and their margins.

Rule 74 - Wetlands

- (a) The use of land within a wetland for the purposes of:
 - (i) maintaining or enhancing the wetland, or
 - (ii) maintaining existing authorised structures within the wetland; or
 - (iii) removing plant matter for the purpose of mahinga kai undertaken in accordance with Tikanga Māori;

is a permitted activity provided the following conditions are met:

- (1) there is no destruction or removal of any indigenous vegetation from any natural wetland, unless the activity is for the purpose of mahinga kai undertaken in accordance with Tikanga Māori;
- (2) there is no reduction in the size of the wetland;
- (3) there is no flooding or ponding caused on any land owned or occupied by another person; and
- (4) there is no establishment of pest plant species that:
 - (A) are listed in the Regional Pest Management Strategy for Southland 2013
 or any replacement plan prepared under the Biosecurity Act, or Biosecurity
 NZ Register of Unwanted Organisms, in circumstances where the planting
 of those pest plant species is restricted under the Biosecurity Act; or
 - (B) may damage existing biodiversity values of the wetland; or
 - (C) will form the dominant vegetation type in the wetland.
- (ab) The use of land within a wetland for commercial peat harvesting is a discretionary activity provided the following conditions are met:

1 the applicant can show, by way of aerial photographs or other documentary evidence, that a commercial peat harvesting operation occurred within the wetland at some time during the period between 30 June 2006 and 30 June 2016; and

(ii) there is no establishment of pest plant species that:

- (1) are listed in the Regional Pest Management Strategy for Southland 2013 or any replacement plan prepared under the Biosecurity Act, or Biosecurity NZ Register of Unwanted Organisms, in circumstances where the planting of those pest plant species is restricted under the Biosecurity Act; or
- (2) may damage existing biodiversity values of the wetland; or
- (3) will form the dominant vegetation type in the wetland.
- (b) The use of land within a wetland (excluding a natural wetland) that is for one or more of the purposes listed in Rule 74(a) but which does not comply with the conditions of Rule 74(a), or the use of land within a wetland that is not a natural wetland that is not for one or more of the purposes listed in Rule 74(a), is a discretionary activity.
- (c) The use of land within a natural wetland that is not for one or more of the purposes listed in Rule 74(a) or 74(ab) is a non-complying activity.

Appendix A – Regionally Significant	Wetlands and	Sensitive	Water	Bodies i
Southland				

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Lake Te Anau

Lake Manapouri

Lakes on Stewart Island

The Reservoir (lake)

Waituna Lagoon

New River Estuary

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Note 1: For wetlands, this appendix only identifies those which are have been formally assessed and found to be of regional significance. There are also rules in this plan that manage activities in relation to all wetlands not only those identified in this appendix.

Note 2: A plan change process may identify additional wetlands to be included in this appendix.

Sub-topic B4 - Beds of Lakes and Rivers

Policy 28 – Structures and bed disturbance activities of rivers (including modified watercourses) and lakes

- a. Except where Policy 28b applies, mManage structures, bed disturbance activities and associated discharges in the beds and margins of lakes, rivers and modified watercourses, to avoid where reasonably practicable, or otherwise remedy or mitigate adverse effects on:
 - 1. water quality and quantity;
 - 2. habitats, ecosystems and fish passage;
 - 3. indigenous biological diversity;
 - 5. the spiritual and cultural values and beliefs of the tangata whenua;
 - 6. mātaitai and taiāpure;
 - 7. public access (except in circumstances where public health and safety are at risk) and amenity values;
 - 8. natural character values and outstanding natural features;
 - 9. river morphology and dynamics, including erosion and sedimentation;
 - 10. flood risk;
 - 11. infrastructural assets;
 - 12. navigational safety; and
 - 13. landscape values.
- b. The loss of river extent and values is avoided, unless the Southland Regional Council is satisfied:
 - (i) that there is a functional need for the activity in that location; and
 - (ii) that the effects of the activity are managed by applying the effects management hierarchy*
 - *As defined in the NPS-FM (2020)

[Note: Changes in relation to Policy 28(b) to be discussed with Counsel for Royal Forest and Bird Protection Society of New Zealand]

Policy 29 - Provide for the extraction of gravel

Recognise the value of gravel and provide for its extraction to meet the social, economic and cultural needs of the community in a way that:

- <u>a.</u> avoids, remedies or mitigates adverse effects on land, groundwater quality, rivers and their margins; and recreational values and;
- b. for river bed based extractions:
 - 1. for river based extractions, requires the restoration of aquatic, riverine and riparian habitat is restored or enhanced once the gravel extraction activity has ceased;
 - 2. results in no long-term net loss of habitat in the river channel, bed or floodplain;
 - 2a. ensures that the rate and volume of gravel extraction is sustainable;
 - 3. ensures no degradation of flood protection and erosion control infrastructure and the integrity of physical resources;
 - does not adversely affect the Ngāi Tahu cultural values and interests associated with the land or river, including taonga species habitat, mahinga kai, mātaitai and taiāpure;¹⁵
 - 5. results in no long-term adverse effects on recreational values; and
 - 6. maintains public access (except in circumstances where public health and safety are at risk)-;
 - 7. protects historic heritage values; and
 - 8. protects areas of significant indigenous vegetation and significant indigenous fauna.

Policy 30 - Drainage maintenance

In recognition of the community benefits of maintaining flood conveyance capacity and land drainage, ensure that drainage maintenance activities within artificial watercourses and the beds of modified watercourses <u>and their margins</u> are managed in a way that <u>either</u>:

- avoids, where reasonably practicable, or otherwise remedies or mitigates significant
 adverse effects on the aquatic environment and riparian habitat in modified
 watercourses and significant adverse effects on aquatic and riparian habitat in artificial
 watercourses; or
- 2. maintains or enhances habitat value, including fish passage, gravel spawning habitat and bank stability;- and
- 3. in addition to 1 or 2, minimises the quantity of sediment released from drainage maintenance activities.

 $^{^{15}}$ Mātaitai and taiāpure are defined in the Introduction to the Plan on page 10.

Rule 73 - Gravel extraction

Note: In addition to the provisions of this Plan and any relevant district plan, any activity which may modify, damage or destroy pre-1900 archaeological sites is subject to the archaeological authority process under the Heritage New Zealand Pouhere Taonga Act 2014. The responsibilities regarding archaeological sites are set out in Appendix S.

- (a) The excavation or disturbance of the bed of a lake, river or modified watercourse for the purpose of extracting gravel or aggregate (except where the extraction of gravel or aggregate is associated with the maintenance of structures which is otherwise authorised under Rule 66) is a restricted discretionary activity provided the following conditions are met:
 - (ai) the general conditions set out in Rule 55A other than conditions (i), (j) and (k) of that Rule; and
 - (i) the quantity of gravel removed is less than 120 cubic metres per year; and
 - (ii) there is no extraction from flowing water; and
 - (iii) the area is left level and tidy on completion of the activity.

The Southland Regional Council will restrict its discretion to the following matters:

- 1. the quantity of material extracted and location of the extraction; and
- any effects on infrastructure, river morphology and dynamics (including erosion or deposition), aquatic and riverine ecosystems and habitat, taonga species, natural character and amenity values, navigation hazard, public access, recreation values and the spiritual and cultural values and beliefs of the tangata whenua.
- (b) The excavation or disturbance of the bed of a lake, river or modified watercourse for the purpose of extracting gravel or aggregate (except where the extraction of gravel is associated with the maintenance of structures which is otherwise authorised under Rule 66) for flood or erosion control or the protection of infrastructure is a restricted discretionary activity provided the following conditions are met:
 - (ai) the general conditions set out in Rule 55A other than conditions (i), (j) and (k) of that Rule.

The Southland Regional Council will restrict its discretion to the following matters:

- 1. the quantity of material extracted and location of the extraction; and
- 2. the design of the works and the quantity of material extracted; and
- any effects on infrastructure, flood risk, river morphology and dynamics (including erosion or deposition), aquatic and riverine ecosystems and habitat, taonga species, natural character, navigation hazard, public access, recreational values and the spiritual and cultural values and beliefs of the tangata whenua.

. . .

Sub-topic B5 - Farming

Appendix N - Farm Environmental Management Plan Requirements

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Part B - Farm Environmental Management Plan Default Content

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3. The FEMP contains a map(s) or aerial photograph(s) of the landholding at a scale that clearly shows the locations of:

...

(k) any heritage site recorded in the relevant district plan, on the New Zealand Heritage List/Rārangi Kōrero or on the New Zealand Archaeological Association website; and

...

Cultivation

Preparing land for growing pasture or a crop by mechanical tillage, direct drilling, herbicide spraying, or herbicide spraying followed by over-sowing for pasture or forage crops (colloquially referred to as 'spray and pray'), but excludes: excluding any

- a. herbicide spraying undertaken solely for the control of pest plant species.
- b. herbicide spraying for the establishment or maintenance of plantation forestry; and
- c. stick raking or slash raking associated with a plantation forest

Stick raking or slash raking

means the use of machinery to clear slash from harvested plantation forest to enable the replanting of trees. It does not include breaking up of the soil profile or the disturbance of the stumps of the harvested plantation forest trees.

Commented [MMC9]: No further changes here - in red because they are not in the draft consent orders.

Sub-topic B6 - Infrastructure

Policy 26A - Infrastructure

Recognise and provide for the <u>sustainable and</u> effective development, operation, maintenance and upgrading of regionally significant, and nationally significant and critical infrastructure in a way that avoids where practicable, or otherwise remedies or mitigates, adverse effects on the environment.

Rule 52 - Water abstraction, damming, diversion and use from the Waiau catchment

- (a) Except as provided in Rules 49(a), 49(ab), 49(b), 49(c), 50(a), 50(b), 51(a), 51(b) and, 52A and 52B-(including takes authorised by section 14(3) of the Act), any take, damming, diversion or use of water from the Waiau catchment is a discretionary activity provided the following conditions are met:
 - the application is for the replacement of an expiring water permit pursuant to section 124 of the Act, and the rate of take and volume is not increasing, and use of the water is not changing; or
 - (ii) the application is for a groundwater take assessed as having a Low degree of hydraulic connection following the methodology specified in Appendix L.2.
- (b) Except as provided in Rules 49(a), 49(b), 49(c), 50(a), 50(b), 51(a), 51(b) and, 52A and 52B (including takes authorised by section 14(3) of the Act), any take, damming, diversion or use of water from the Waiau catchment that does not meet the conditions of Rule 52(a) is a non-complying activity.

Sub-topic B7 - Miscellaneous

1 The title of the Bed Disturbance section is to be amended as follows (new text underlined):

Bed disturbance activities in river and lake beds and wetlands

- 2 Rules 32B, 43, 53, 55, 57, 58, 59, 59A, 60, 61, 62, 63A, 64, 66, 67, 68, 72, 73, 75, 77, and 78 are to be amended as follows:
 - (a) The advice note (set out at (c) below) in Rules 57, 58, 59, 60, 61, 62, 64, 66, 67, 68, 72, 73, 75, 77, and 78 is to be relocated so that it is consistently located at the beginning of the rule cascade for each rule.
 - (b) The advice note (set out at (c) below) is to be added to Rules 32B, 43, 53, 55, 59A, and 63A (at the beginning of the rule cascade).
 - (c) For completeness, the advice note referred to above is:
 - Note: In addition to the provisions of this Plan and any relevant district plan, any activity which may modify, damage or destroy pre-1900 archaeological sites is subject to the archaeological authority process under the Heritage New Zealand Pouhere Taonga Act 2014. The responsibilities regarding archaeological sites are set out in Appendix S.
- 3 Amended text for Policy 39, Policy 39A, Policy 20, Policy 24 and Policy 28 (deleted text in strikethrough, new text underlined):

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 <u>shall should</u> consider all adverse effects of the proposed activity on water quality, whether or not this Plan permits an activity with that effect.

Advice Note: Nothing in this policy affects the ability of the Council to take into account the effects of activities lawfully occurring at the date an application is made when determining the existing environment.

Policy 39A - Integrated management

When considering the cumulative effects of land use and discharge activities within whole catchments, consider:

- how to improve the integrated management of freshwater and the use and development of land including the interactions between freshwater, land and associated ecosystems (including estuaries <u>and the wider coastal area</u>); and
- through the Freshwater Management Unit process, facilitating the collective management of nutrient losses, including through initiatives such as nutrient user groups and catchment management groups.

Policy 20 - Management of water resources

Manage the taking, abstraction, use, damming or diversion of surface water and groundwater so as to:

. . .

 avoid, remedy or mitigate adverse effects from the use and development of surface water resources on:

...

(k) historic heritage values;

. . .

Policy 24 - Water abstraction for community water supply

Recognise the need for, and assign priority to, the provision of water for community water supply when allocating water:

1. provided that significant adverse effects on the following are avoided as a first preference, and if unable to be avoided, are mitigated or remedied:

...

(h) historic heritage values; and

. . .

Policy 28 – Structures and bed disturbance activities of rivers (including modified watercourses) and lakes

Manage structures, bed disturbance activities and associated discharges in the beds and margins of lakes, rivers and modified watercourses, to avoid, remedy or mitigate adverse effects on:

. . .

- 12. navigational safety; and
- 13. landscape values; and
- 14. historic heritage values.

Further consequential change to the interpretation statement at the beginning of the Policies:

The Policies of this Plan <u>must be read together and interpreted in a manner that</u> implements the Objectives <u>of this Plan, including the Interpretation Statement.</u> and must be read in their entirety and considered together.