

**BEFORE THE ENVIRONMENT COURT
I MUA I TE KŌTI TAIAO O AOTEAROA**

**AT CHRISTCHURCH
KI ŌTAUTAHI**

IN THE MATTER of the Resource Management Act 1991

AND of appeals under clause 14 of the First Schedule of
the Act

BETWEEN **TRANSPower NEW ZEALAND LTD**
(ENV-2016-CHC-26)
Appellant

FONterra CO-OPERATIVE GROUP LTD
(ENV-2018-CHC-27)
[Continued on next page]

AND **SOUTHLAND REGIONAL COUNCIL**
Respondent

**Memorandum for the Director-General of Conservation Tumuaki Ahurei
setting out Changes to Provisions being sought in Topic B Tranche 1 hearing**

[Dated 23 February 2022 Updated 4 March 2022](#)

Department of Conservation
Planning, Permissions and Land
RMA Shared Services
Private Bag 4715
Christchurch 8140
Phone Waea: 027 408 3324
Solicitor Rōia: Pene Williams

BETWEEN

ARATIATIA LIVESTOCK LTD

(ENV-2018-CHC-29)

WILKINS FARMING CO

(ENV-2018-CHC-30)

GORE AND SOUTHLAND DISTRICT COUNCILS,

INVERCARGILL CITY COUNCIL

(ENV-2018-CHC-31)

DAIRYNZ LTD

(ENV-2018-CHC-32)

H W RICHARDSON GROUP LTD

(ENV-2018-CHC-33)

BEEF + LAMB NEW ZEALAND

(ENV-2018-CHC-34 AND 35)

DIRECTOR-GENERAL OF CONSERVATION

(ENV-2018-CHC-36)

SOUTHLAND FISH & GAME COUNCIL

(ENV-2018-CHC-37)

MERIDIAN ENERGY LTD

(ENV-2018-CHC-38)

FEDERATED FARMERS OF NEW ZEALAND

(ENV-2018-CHC-40)

**SOUTHWOOD EXPORT LTD, SOUTHLAND PLANTATION
FOREST COMPANY OF NZ**

(ENV-2018-CHC-46)

TE RUNANGA O NGAI TAHU, HOKONUI RUNAKA,

WAIHOPAI RUNAKA, TE RUNANGA O AWARUA AND TE

RUNANGA O ORAKA APARIMA

(ENV-2018-CHC-47)

RAYONIER NEW ZEALAND LTD

(ENV-2018-CHC-49)

**ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NZ
INC**

(ENV-2018-CHC-50)

Appellants

AND

SOUTHLAND REGIONAL COUNCIL

Respondent

May it please the Court,

The following matters are respectfully submitted on behalf of the Director-General of Conservation Tumuaki Ahurei (the Director-General):

1. The Topic B Tranche 1 provisions where the Director-General has an interest are listed in Appendix 1 by sub-topic.
2. The final version of amendments sought or supported by the Director-General are set out in Appendix 2.



P D Williams

Counsel for the Director-General

Appendix 1 – Table Summarising Director-General’s Position by Sub-topic

Topic	Plan Provision	Interest	Position
B1	Policy 20	S274	Support consent documentation version
B1	Rule 49(a)	S274	Support consent documentation version
B1	Appendix L.5, Table L.4, Te Anau	Appellant	Support consent documentation version
B2	Policy 13	S274	Support consent documentation version
B2	Policy 15A	S274	Support consent documentation version
B2	Policy 15B	S274	Support consent documentation version
B2	Policy 15C	S274	Agree as per Planners’ JWS dated 10.12.21 (JWS)
B2	Policy 16A	S274	Support consent documentation version
B2	Policy 17	S274	Support consent documentation version
B2	Policy 17A	S274	Support consent documentation version
B2	Rule 5	Appellant and S274	Support consent documentation version
B2	Rule 9	Appellant	Support consent documentation version
B2	Rule 13	S274	Agree as per JWS
B2	Rule 14	S274	Agree as per JWS
B2	Rule 15	S274	Support consent documentation version
B2	Rule 33	S274	Support consent documentation version
B2	Rule 33A	S274	Support consent documentation version
B2	Appendix E	S274	Agree as per JWS
B3	Policy 32	S274	Support consent documentation version

Topic	Plan Provision	Interest	Position
B3	Rule 51	S274	Agree as per JWS
B3	Rule 74	S274	Support consent documentation version
B3	Appendix A	S274	Support consent documentation version
B4	Policy 28	S274	Support consent documentation version
B4	Policy 29	Appellant and s274	Support consent documentation version
B4	Policy 30	S274	Support consent documentation version
B4	Rule 73	S274	Support consent documentation version
B4	Rule 78	Appellant and s274	As per rebuttal evidence of Linda Kirk dated 22 February 2022
B4	New Appendix with maps of habitat	Appellant and s274	As per rebuttal evidence of Linda Kirk dated 22 February 2022
B5	Policy 16	Appellant and s274	Agree as per JWS with minor amendments in rebuttal evidence of Linda Kirk dated 22 February 2022
B5	New definition of "minimise"	S274	Agree as per JWS with location in glossary as per rebuttal evidence of Linda Kirk dated 22 February 2022
B5	Policy 18	S274	Agree as per JWS with minor amendments in rebuttal evidence of Linda Kirk dated 22 February 2022
B5	Rule 20	S274	Agree as per JWS with minor amendments in rebuttal evidence of Linda Kirk dated 22 February 2022
B5	Rule 20A	S274	Agree as per JWS with minor amendments in rebuttal evidence of Linda Kirk dated 22 February 2022

Topic	Plan Provision	Interest	Position
B5	Rule 25	S274	Agree as per JWS
B5	Rule 70	S274	As per rebuttal evidence of Linda Kirk dated 22 February 2022
B5	Definition of “critical source area”	S274	Agree as per JWS
B5	Definition of “cultivation”	S274	Agree as per JWS
B5	New definition of “stick raking”	S274	Agree as per JWS
B5	Deletion of definition of “ephemeral river”	S274	Agree as per JWS
B5	Appendix N	S274	Agree as per JWS with amendments in rebuttal evidence of Linda Kirk dated 22 February 2022
B5	New Appendix X – Map of “catchments in need of improvement”	S274	As per rebuttal evidence of Linda Kirk dated 22 February 2022
B6	Policy 26A	S274	Support consent documentation version
B7	Policy 39	S274	Support consent documentation version
B7	Policy 39A	S274	Support consent documentation version

Appendix 2 – Provision Wording Supported by the Director-General

Glossary

Critical source area

- (a) a landscape feature like a gully, swale or a depression (including ephemeral flow paths) that accumulates runoff (sediment and nutrients) from adjacent flats and slopes, and delivers it to surface water bodies (including lakes, rivers, artificial watercourses and modified watercourses) or subsurface drainage systems; ~~and~~
- (b) a non-landscape feature that has high levels of contaminant losses, such as silage pits, fertiliser storage areas, stock camps and laneways.
- ~~(b) areas which arise through land use activities and management approaches (including cultivation and winter grazing) which result in contaminants being discharged from the activity and being delivered to surface water bodies.~~

Cultivation

Preparing land for growing pasture or a crop by mechanical tillage, direct drilling, herbicide spraying, or herbicide spraying followed by oversowing 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

Ephemeral rivers

~~Rivers which only contain flowing or standing water following rainfall events or extended periods of above average rainfall.~~

"Minimise" means to reduce to the smallest amount reasonably practicable.

Stick raking

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.

Objective 16

Public access to, and along, river (~~excluding ephemeral rivers~~) and lake beds is maintained and enhanced, except in circumstances where public health and safety or significant indigenous biodiversity values are at risk.

Policy 13 – Management of land use activities and discharges

1. 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, 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:

- ~~1. 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 guidelines will continue to be met.~~
- ~~2. 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 guidelines will continue to be met.~~
4. ~~avoiding 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~~

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:

1. ~~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

- 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
3. 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 15C – Maintaining and Improving water quality after FMU processes~~

~~Following the establishment of freshwater objectives and limits under Freshwater Management Unit processes, and including through implementation of non-regulatory methods, improve water quality where it is degraded to the point where freshwater objectives are not being met and otherwise maintain water quality where freshwater objectives are being met.~~

Policy 16 – Farming activities that affect water quality

1. ~~Minimising~~ Avoid where reasonably practicable, or otherwise minimise ~~remedy or mitigate, any~~ the 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:
 - (i) ~~(a) discouraging avoiding the establishment of new dairy farming of cows or new intensive winter grazing activities any new, or further intensification of any existing, dairy farming of cows or intensive winter grazing activities in close proximity to Regionally Significant Wetlands and Sensitive Water bodies identified in Appendix A; and~~
 - (ab) ensuring that, for existing farming activities:
 - (i) existing farming activities minimise ~~minimise~~ nitrogen, phosphorus, sediment and or microbial contaminant discharges ~~are minimised~~;

- (ii) reduce adverse effects on water quality where the farming activity occurs within the catchment of a waterbody that requires improvement identified in Schedule X; and
- (iii) demonstrate how (i) and (ii) is being or will be achieved through the implementation of Farm Environmental Management Plans prepared in accordance with (c) below and in addition,

(ba) ensuring that ~~for~~ the establishment of new, or further intensification of existing, dairy farming of cows or intensive winter grazing activities:

- (i) does not result in an increase in nitrogen, phosphorus, sediment and ~~of~~ microbial contaminant discharges; and
- (ii) minimises nitrogen, phosphorus, sediment or microbial contaminant discharges; and
- (iii) reduces nitrogen, phosphorus, sediment or microbial contaminant discharges where ~~it the farming activity~~ occurs ~~in a~~ ~~within the~~ catchment of a waterbody that requires improvement identified in Schedule X; and
- (iv) is avoided in close proximity to Regionally Significant Wetlands and Sensitive Water bodies identified in Appendix A; and

(c)2- requiring all farming activities, ~~including existing activities,~~ to:

- ~~(+)~~ be undertaken in accordance with ~~implement~~ a Farm Environmental Management Plan, ~~as set out in Appendix N;~~ ~~that which:~~
- (i) identifies whether the farming activity is occurring, or would occur, in a catchment of a waterbody that requires improvement identified in Schedule X;
- (ii) identifies and responds to the contaminant pathways (and variants) for the relevant Physiographic Zones;
- (iii) 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 that requires improvement identified in Schedule X, reduced;
- (iv) is certified as meeting all relevant requirements of this plan and regulation ~~prepared~~ under Part 9A of the RMA; and
- (v) is independently audited and reported on;

~~(ii)(b) actively manage~~ avoid where practicable, otherwise minimise remedy or mitigate, 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)(c) manage~~ avoid where practicable, otherwise minimise collected and diffuse run-off and leaching of nutrients, 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.

~~23.~~ 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 16A – Industrial and trade processes that may affect water quality

Subject to Policies 15A and 15B, require the adoption of best practicable option to manage 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 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

1. ~~Avoid significant~~ where reasonably practicable, or otherwise 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, by:
2. ~~Manage agricultural effluent systems and discharges from them 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, ponding 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

1. ~~Minimise~~ Avoid where reasonably practicable, or otherwise 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 by:

- (a) designing, operating and maintaining community sewerage schemes in accordance with recognised industry standards;
- (b) implementing measures to progressively reduce the frequency and volume of wet weather overflows from community sewerage schemes; and
- (c) ensuring community sewerage schemes are operated and maintained to minimise the likelihood of dry weather overflows occurring.

...

Policy 18 – Stock exclusion from water bodies

~~Reduce~~ Avoid where practicable, or otherwise remedy or mitigate, any adverse effects from the discharge of sedimentation and or microbial contamination of contaminants to water bodies and improve river (excluding ephemeral rivers) and riparian ecosystems and habitats by:

1. requiring progressive exclusion of all stock, except sheep, from lakes, rivers ~~(excluding ephemeral rivers)~~, natural wetlands, artificial watercourses, and modified watercourses on land with a slope of less than 15 degrees by 2030;
- 2a. requiring the management of sheep in critical source areas and in those catchments where *E.coli* levels could preclude contact recreation;
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 ~~(excluding ephemeral rivers)~~, natural wetlands, artificial watercourses and modified watercourses is managed in a manner that avoids ~~significant~~ adverse effects on water quality, bed and bank integrity and stability, mahinga kai, and ~~river~~ aquatic and riparian ecosystems and habitats; and
5. showing, in a Farm Environmental Management Plan prepared, certified, and implemented and audited in accordance with Appendix N, how 1-4 will be achieved and by when.

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, ~~including for primary production~~, 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;
 - (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) mātaītai, taiāpure and nohoanga; ~~and~~
 - (j) historic heritage values;
2. 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;
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 26A – Infrastructure

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

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. mātaihai 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; and
14. historic heritage 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)

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:

a. 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;
4. does not adversely affect the Ngāi Tahu cultural values and interests associated with the land or river, including taonga species habitat, mahinga kai, mātaítai and taiāpure;¹
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 and their margins are managed in a way that either:

1. 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

¹ Mātaítai and taiāpure are defined in the Introduction to the Plan on page 10.

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.

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~~ should 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:

1. 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 and the wider coastal area); and
2. 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.

Rule 5 – Discharges to surface water bodies

- (a) Except as provided for elsewhere in this Plan the discharge of any:
- (i) 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:
- 1. 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
 - 2. 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
 - 3. ~~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 anti-drifting 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, 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) ...

Rule 14 – Discharge of fertiliser

- (a) The discharge of fertiliser onto or into land in circumstances where contaminants may enter water is a permitted activity provided the following conditions are met:
 - (i) other than for incidental discharges of windblown fertiliser dust, there is no direct discharge of fertiliser into a lake, river (~~excluding ephemeral flow paths rivers~~), artificial watercourse, modified watercourse, or natural wetland or into groundwater;
 - (ii) there is no fertiliser discharged when the soil moisture exceeds field capacity;
 - (iii) there is no fertiliser discharged directly into or within 3 metres of the boundary of any significant indigenous biodiversity site identified in a district plan that includes surface water; and
 - (iv) where a lake, river (~~excluding ephemeral flow paths rivers~~), artificial watercourse, modified watercourse or wetland:
 - (1) ...

...

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

- (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:
 - (1) 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 and any contaminants contained within, from a reticulated system 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:
- (i) 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; and
- (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 20 – Farming

~~(aa) Unless stated otherwise by Rules 20, 25, 70 or any other rule in this Plan:~~

- ~~(i) intensive winter grazing; or~~
 - ~~(ii) cultivation; or~~
 - ~~(iii) the disturbance by livestock including cattle, deer, pigs or sheep;~~
- ~~in, on or over the bed of an ephemeral river is a permitted activity.~~

- (a) The use of land for a farming activity, other than for intensive winter grazing, is a permitted activity provided the following conditions are met:
- (i) the landholding is less than 20 hectares in area; or
 - (ii) where the farming activity includes a dairy platform on the landholding, the following conditions are met:
 - (1) the dairy platform has a maximum of 20 cows; or
 - (2) the dairy platform had a dairy effluent discharge permit on 3 June 2016 that specified a maximum number of cows; and
 - (3) cow numbers have not increased beyond the maximum number specified in the dairy effluent discharge permit that existed on 3 June 2016; and
 - (4) ~~from 1 May 2019~~, a Farm Environmental Management Plan for the landholding is prepared, certified, ~~and implemented~~ and audited in accordance with Appendix N; and
 - ~~(5) the landowner provides to the Southland Regional Council on request:~~
 - ~~(A) a written record of the good management practices, including any newly instigated good management practices in the preceding 12 months, occurring on the landholding; and~~
 - ~~(B) the Farm Environmental Management Plan prepared in accordance with Appendix N;~~
 - (6) the land area of the dairy platform is no greater than at 3 June 2016; and
 - ~~(7) no part of the dairy platform is at an altitude greater than 800 metres above mean sea level; and~~
 - ~~(iii) where the farming activity includes intensive winter grazing on the landholding, the following conditions are met:~~
 - ~~(1) from 1 May 2019, intensive winter grazing does not occur on more than 15% of the area of the landholding or 100 hectares, whichever is the lesser area;~~
 - ~~(2) from 1 May 2019, a Farm Environmental Management Plan for the landholding is prepared and implemented in accordance with Appendix N;~~
 - ~~(3) from 1 May 2019, all of the following practices are implemented:~~
 - ~~(A) if the area to be grazed is located on sloping ground, stock are progressively grazed (break-fed or block-fed) from the top of the slope to the bottom, or a 20 metre 'last bite' strip is left at the base of the slope;~~
 - ~~(B) when the area is being break-fed or block-fed, the stock (excluding sheep and deer) are back fenced to prevent stock entering previously grazed areas;~~

- ~~(C) transportable water trough(s) are provided in or near the area being grazed to prevent stock accessing a lake, river (excluding ephemeral rivers), artificial watercourse, modified watercourse or natural wetland for drinking water;~~
- ~~(D) if supplementary feed (including baleage, straw or hay) is used in the area being grazed it is placed in portable feeders;~~
- ~~(E) if cattle or deer are being grazed the mob size being grazed is no more than 120 cattle or 250 deer; and~~
- ~~(F) critical source areas (including swales) within the area being grazed that accumulate runoff from adjacent flats and slopes are grazed last;~~
- ~~(4) from 1 May 2019, a vegetated strip is maintained in, and stock excluded from, the area between the outer edge of the bed of a lake, river (excluding ephemeral rivers where intensive winter grazing is permitted under Rule 20(aa)), artificial watercourse, modified watercourse or natural wetland for a distance of at least 5 metres;~~
- ~~(5) from 1 May 2019, intensive winter grazing does not occur within 20 metres of the outer edge of the bed of any Regionally Significant Wetland or Sensitive Water Bodies listed in Appendix A, estuary or the coastal marine area; and~~
- ~~(6) no intensive winter grazing occurs at an altitude greater than 800 metres above mean sea level; and~~
- (iii)(iv) for all other farming activities, from 1 May 2020 a Farm Environmental Management Plan is prepared, certified, and implemented and audited in accordance with Appendix N.
- (iv) no part of the dairy platform occurs at an altitude greater than 800 metres above mean sea level.
- ~~(b) The use of land for a farming activity that includes intensive winter grazing on the landholding and which meets all conditions of Rule 20(a) other than condition (iii)(3) is a permitted activity, provided that:~~
 - ~~(i) from 1 May 2019, a vegetated strip is maintained in, and stock excluded from, the area between the outer edge of the bed of a lake, river (excluding ephemeral rivers where intensive winter grazing is permitted under Rule 20(aa)), artificial watercourse, modified watercourse or natural wetland for a distance of at least 20 metres.~~

~~(b)(c) Despite any other rule in this Plan, the use of land for a dairy platform or intensive winter grazing at an altitude greater than 800 metres above mean sea level is a prohibited activity.~~

~~(d)(c) The use of land for a farming activity, other than for intensive winter grazing, that meets all conditions of Rule 20(a) other than (i), (ii), (iii)(1), (iii)(4) or (iii)(5) or does not meet condition (i) of Rule 20(b) any one of conditions (ii)(1)-(6) or (iii) of Rule 20(a) is a restricted discretionary activity, provided the following conditions are met:~~

- ~~(i) a Farm Environmental Management Plan is prepared, certified, and implemented and audited in accordance with Appendix N; and~~
- ~~(ii) the application includes the following material, prepared by a suitably qualified person:

 - ~~(1) an assessment that shows that the annual amount risk of nitrogen, phosphorus, sediment and microbiological contaminants being discharged from the landholding will be no greater than that the risk of contaminant discharge which was lawfully discharged annually on average for the five years prior to the application being made; and~~
 - ~~(2) for any mitigation proposed, a detailed mitigation plan (taking into account contaminant loss pathways) that identifies the mitigation or actions to be undertaken including any physical works to be completed, their timing, operation and their potential effectiveness.~~~~

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

1. the quality of and compliance with the Farm Environmental Management Plan for the landholding;
2. whether the assessment undertaken under Rule 20~~(d)(c)~~(ii) above takes into account reasonable and appropriate mitigation actions ~~good management practices~~ to minimise the losses of contaminants from the existing farming activity;

2(a). whether the farming activity is being undertaken in a degraded catchment of a waterbody that requires improvement identified in Schedule X, and if so, the mitigations actions to be implemented to reduce adverse effects on water quality;

~~what reductions below existing losses will be required to improve water quality;~~

3. mitigation actions ~~good management practices~~ to be undertaken, including those to minimise the discharge of nitrogen, phosphorus, sediment and

microbiological contaminants to water from the use of land, taking into account contaminant loss pathways;

4. the potential benefits of the activity to the applicant, the community and the environment;
 5. the potential effects of the farming activity on surface and groundwater quality and sources of drinking water; and
 6. monitoring and reporting undertaken to assess the effectiveness of any mitigation implemented.
- ~~(e)(d)~~ The use of land for a farming activity that is not specified as a permitted, restricted discretionary or prohibited activity under which is not a restricted discretionary activity under Rule 20(c) is a discretionary non-complying activity.
- (e) The use of land for a farming activity that does not comply with Rule 20(a)(iv) is a prohibited activity.

Rule 20A – Intensive winter grazing

- (a) Intensive winter grazing is a permitted activity provided the following conditions are met:
- (i) intensive winter grazing does not occur on more than 50ha or 10% of the area of the land holding, whichever is the greater; and
 - (ii) the maximum allowable slope of land in a paddock that is used for intensive winter grazing must be 10 degrees or less; and
 - (iii) livestock must be kept at least:
 - (1) 20 metres from the bed of any Regionally Significant Wetland or Sensitive Water Bodies listed in Appendix A, nohoanga listed in Appendix B, mātaītai reserve, taiāpure, estuary or the coastal marine area; and
 - (2) 10 metres from the bed of any other river, lake, artificial watercourse (regardless of whether there is any water in it at the time), modified water course or natural wetland; and
 - (iv) critical source areas within the area being intensively winter grazed must:
 - (1) be identified in the Farm Environmental Management Plan; and
 - (2) have stock excluded from them; and
 - (3) not be cultivated into forage crops for intensive winter grazing or
 - (4) not be grazed during the period intensive winter grazing occurs; and

- (v) the land that is used for intensive winter grazing must be replanted as soon as practicable after livestock have grazed the land's annual forage crop; and
- (vi) a Farm Environmental Management Plan for the landholding is prepared, certified, and implemented and audited in accordance with Appendix N, that also includes a grazing plan that includes:
- (1) downslope grazing or a 20 metre 'last-bite' strip at the base of the slope; and
 - (2) back fencing to prevent stock entering previously grazed areas; and
 - (3) transportable water troughs; and
 - (4) supplementary feed (including baleage, straw or hay) being fed in such a way as to prevent the supplementary feed being trampled into the ground, such as by placing the supplementary feed in portable feeders or behind an electrified wire; and
 - (5) limiting the mob size to no more than 120 cattle or 250 deer; and
- (vii) no intensive winter grazing occurs at an altitude greater than 800 metres above mean sea level; and
- (b) The use of land for intensive winter grazing that does not meet conditions (a)(i)-(vi) of Rule 20A is a restricted discretionary activity provided the following conditions are met:
- (i) a Farm Environmental Management Plan is prepared, certified, and implemented and audited in accordance with Appendix N; and
 - (ii) the area used for intensive winter grazing on the property is no greater than the average area used on the property for the five years prior to the application being made;

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

1. the quality of and compliance with Appendix N and the Farm Environmental Management Plan for the landholding;
2. whether the intensive winter grazing activity is being undertaken in a degraded catchment of a waterbody that requires improvement identified in Schedule X, and if so, the mitigation actions to be implemented to improve water quality; ~~what reductions below existing losses will be required to improve water quality;~~
3. mitigation actions and good management practices to be undertaken, including those to minimise the discharge of nitrogen, phosphorus, sediment

and microbiological contaminants to water from the use of land, taking into account contaminant loss pathways;

4. the potential benefits of the activity to the applicant, the community and the environment;
 5. the potential effects of the farming activity on surface and groundwater quality and sources of drinking water;
 6. monitoring and reporting undertaken to assess the effectiveness of any mitigation implemented.
- (c) The use of land for intensive winter grazing that does not meet conditions of Rule 20A(b) is a non-complying activity.
- (d) The use of land for intensive winter grazing that does not meet condition (vii) of Rule 20A(a) is a prohibited activity.

Slope in Rule 20A is the average slope over any 20-metre distance.

Rule 25 – Cultivation

- (a) The use of land for cultivation is a permitted activity provided the following conditions are met:
- (i) cultivation does not take place within the bed of a lake, river (~~excluding ephemeral rivers where cultivation is permitted under Rule 20(aa)~~), artificial watercourse, modified watercourse or natural wetland;
 - (ii) cultivation does not take place within a distance of: ~~5 metres from the outer edge of the bed of a lake, river (excluding ephemeral rivers where cultivation is permitted under Rule 20(aa))~~ artificial watercourse, modified watercourse or natural wetland;
 - (1) 5 metres from the outer edge of the bed of a lake, or river, or modified watercourse or the edge of the a natural wetland on land with a slope of less than 10 degrees; and
 - (2) 10 metres from the outer edge of the bed of a lake, or river, or modified watercourse or the edge of the a natural wetland on land with a slope between 10 and 20 degrees;
 - ~~(iii)~~(iv) cultivation does not occur on land with a slope greater than 20 degrees; and
 - ~~(iv)~~(iii) cultivation does not occur at an altitude greater than 800 metres above mean sea level; and

- (v) critical source areas are not cultivated when forage crops used for intensive winter grazing are established and sediment detention is established when cultivating critical source areas for any other purpose; and
- (b) The use of land for cultivation that does not meet the setback distance of Rule 25(a)(ii)(2) is a permitted activity provided the following conditions are met:
- (i) cultivation does not take place within ~~the bed of a lake, river (excluding ephemeral rivers where cultivation is permitted under Rule 20(aa)), artificial watercourse, modified watercourse or natural wetland~~ and a distance of 5 3 metres from the outer edge of the bed of a lake, river, or modified watercourse or the edge of the a natural wetland;
 - (ii) cultivation does not take place more than once in any 5-year period;
 - (iii) cultivation is for the purpose of renewing or establishing pasture and is not undertaken to establish a crop used for intensive winter grazing, even as part of a pasture renewal cycle; and
 - (iv) all other conditions of Rule 25(a) are complied with ~~cultivation does not occur at an altitude greater than 800 metres above mean sea level.~~
- (c) The use of land for cultivation, which does not meet one or more of the conditions of Rule 25(a) or Rule 25(b) is a restricted discretionary activity.

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

1. potential adverse effects of discharges of sediment and other contaminants from the area being cultivated on water quality and biodiversity;
 - 1a. potential adverse effects on the preservation of the natural character of wetlands, lakes, rivers and their margins.
 - ~~2a.~~ 21a. mitigation measures for addressing adverse effects identified in 1 and 1a.;
and
 - ~~2a.~~ 2a. ~~the management of critical source areas in the area being cultivated.~~
 3. monitoring and reporting undertaken to assess the effectiveness of any mitigation implemented.
- (d) Despite any other rule in this Plan, the use of land for cultivation at an altitude greater than 800 metres above mean sea level is a non-complying activity.

Slope in Rule 25(a)(ii) and (iii) ~~(iv)~~ is the average slope over any 20 metre distance.

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 for community sewerage schemes constructed after 1 January 2017:
- (i) the discharge is not within 20 metres of a river, lake, artificial watercourse, modified watercourse, natural wetland or the coastal marine area;
 - (ii) 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
 - (iii) 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 constructed after 1 January 2017 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.

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 51 – Minor diversions of water

- (a) Despite any other rule in this Plan, the diversion of water within a river or lake bed is a permitted activity provided the following conditions are met:

...

- (b) Despite any other rule in this Plan, the diversion of water for the purpose of land drainage is a permitted activity provided the following conditions are met:

...

- (c) Notwithstanding any other rule in this Plan, the diversion of water at the mouth of:

- (i) a drain known as the North Drain on the Tiwai Peninsula, at about Map Reference NZTopo50 CG10 463 308;² or
- (ii) a drain known as the West Drain on the Tiwai Peninsula, at about Map Reference NZTopo50 CG10 457 302;³ or
- (iii) a drain known as the South Drain on the Tiwai Peninsula, at about Map Reference NZTopo50 CH10 456 2983⁴

is a permitted activity provided the following conditions are met:

...

- (d) Unless controlled by any other rule in this Plan, the diversion of water for the purpose of land drainage that does not meet Rules 51(a) to (c) is a discretionary activity.

- (e) The diversion of water from a natural wetland for the purpose of land drainage is a non-complying activity.

² The equivalent NZTM2000 coordinates are 1246300 mE 4830800 mN

³ The equivalent NZTM2000 coordinates are 1245700 mE 4830200 mN

⁴ The equivalent NZTM2000 coordinates are 1245600 mE 4829800 mN

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. Due to the high concentration of recorded archaeological sites in the vicinity of the above sites, it is possible that works will require an archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014. No work (even if permitted under the rule or authorised by resource consent) should commence without first contacting Heritage New Zealand.*

Rule 70 – Stock exclusion form water bodies

- (a) ~~From 1 July 2020,~~ The disturbance of roosting and nesting areas of the black-fronted tern, black-billed gull, banded dotterel or black-fronted dotterel ~~located in the bed of a lake, river, (including an ephemeral river), modified watercourse, or natural wetland~~ by stock including cattle, deer, pigs or sheep is a prohibited activity.
- (b) ~~From 1 July 2020,~~ The disturbance of the bed of a Regionally Significant Wetland or Sensitive Water Body listed in Appendix A by stock including cattle, deer, pigs or sheep is a prohibited activity.
- (c) The disturbance of the bed of a river ~~(excluding ephemeral rivers where stock access is permitted under Rule 20(aa))~~ or modified watercourse for the purposes of moving stock including cattle, deer, pigs or sheep (but excluding dairy cattle on a dairy platform or on land used for dairy support) is a permitted activity provided the stock are being supervised and are actively driven across the water body in one continuous movement.
- (ca) The disturbance of the bed of a lake, river or modified watercourse by sheep, other than as regulated by Rule 70(a) and 70(b), is a permitted activity, provided the following conditions are met:
- (i) the waterbody is not already fenced to prevent stock sheep access;
 - (ii) the sheep are not being break fed or intensively winter grazed;
 - (iii) there is no significant de-vegetation leading to exposure of soil of the bed and banks, pugging or alteration to the profile of the bed and banks,

other than at fords or stock crossings; and

(iv) a Farm Environmental Management Plan for the landholding is prepared, certified, and implemented and audited in accordance with Appendix N, and shows how access by sheep will be managed;

- (cb) The use of land within a natural wetland or the disturbance of the bed of a water body within a natural wetland for access or grazing by stock is a non-complying activity.
- (d) Bed disturbance activities that do not comply with Rule 70(c) are a non-complying activity.
- (e) Other than as provided for by Rules 70(c), 70(ca) and 70(d), the disturbance of the bed of a lake, river (~~excluding ephemeral rivers where stock access is permitted under Rule 20(aa)~~), modified watercourse, open drain, or ~~natural wetland~~ by cattle, deer or pigs is a permitted activity prior to the dates set out in Table 1 for the listed land slopes after which time it is respectively a discretionary activity on that land.

Table 1: Timetable for stock exclusion from water bodies

Farm/stock type	Land slope (as classified by the LRI slope dataset)		
	Plains (0-3°)	Undulating/rolling land (>3-15°)	Steeper land (>15° and over)
Dairy cattle (on dairy platforms) and pigs	All water bodies (<u>including open drains</u>) that are: <ul style="list-style-type: none"> • over 1 metre wide from 1 July 2017 on all slopes • less than 1 metre wide from 1 July 2020 on the plains and undulating/rolling land 		
Dairy support (on either land owned/leased by the dairy farmer or third party land)	All water bodies, <u>and open drains</u> from 1 July 2022	All water bodies, <u>and open drains</u> over 1 metre wide from 1 July 2022	All water bodies, <u>and open drains</u> where break feeding occurs from 1 July 2022
Beef cattle and deer	All water bodies (<u>including open drains</u>) from 1 July 2025	All water bodies (<u>including open drains</u>) over 1 metre wide from 1 July 2030, unless the average stocking rate on the land directly adjacent to the water body is less than 6 stock units per hectare	
	All water bodies (<u>including open drains</u>) where break feeding <u>or supplementary feeding</u> occurs from 1 July 2022.		

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
 2. 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
3. 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.

...

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 these 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.

Rule 78 – Weed and sediment removal for drainage maintenance

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) Until 31 December 2023, the~~The~~ removal of aquatic weeds and plants and sediment from any modified watercourse for the purpose of maintaining or restoring drainage outfall, and any associated bed disturbance and discharge resulting from carrying out the activity, is a permitted activity provided the following conditions are met:
- (ai) general conditions (e), (f), (g), (h) and (l) set out in Rule 55A;

- (i) the activity is undertaken solely to maintain or restore the drainage capacity of a modified watercourse that has previously been modified or maintained for drainage maintenance or restoration purposes at that location;
- (ii) the activity is restricted to the removal of aquatic weeds and plants or sediment deposits, provided that at least 95% of the sediment removed shall have a grain size of less than 2mm;
- ~~(iia) the removal of river bed material, other than aquatic weeds, plants, mud or silt is avoided as far as practicable;~~
- (iii) any incidental bed disturbance is only to the extent necessary to undertake the activity and must not result in lowering of the bed below previously modified levels;
- (iv) upon completion of the activity, fish passage is not impeded as a result of the activity;
- (v) the operator takes all reasonable steps to return any fish captured or stranded by the activity to water immediately preferably to a location upstream of the activity;
- (vi) between the beginning of June and the end of October, there is no disturbance of the spawning habitat of trout; ~~and~~
- (xiii) where the modified watercourse is spring-fed, removal of aquatic weeds and plants is only to the extent that is necessary to undertake the activity and is kept to the absolute minimum;
- (xiv) the modified watercourse is not shown in Map Series 8 as a habitat of threatened non-diadromous galaxias; and
- (xv) the modified watercourse is not shown in Map Series 8 as a habitat of Lamprey/kanakana or tuna in the Waituna catchment of Mataura and Waikawa.

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.*

- (b) The removal of aquatic weeds and plants and sediment from any modified watercourse for the purpose of maintaining or restoring drainage outfall and any associated bed disturbance and discharge resulting from the carrying out of the activity that cannot meet one or more of the conditions of Rule 78(a) is a discretionary activity.

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

... [insert in alphabetical order]

Lake Manapouri

Lake Te Anau

Lakes on Stewart Island

New River Estuary

The reservoir (lake)

Waituna Lagoon

...

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.

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) discharges associated with the maintenance ~~due to the effects of the operation~~ of the Manapouri hydro-electric generation scheme that ~~alters natural flows~~, results in that parameter ~~cannot~~ not meeting the standard for up to five days.

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 at or below the median flow, the visual clarity of the water shall not be less than 1.3 metres.⁵

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 ~~8090~~ and the Semi-Quantitative Macroinvertebrate Community Index shall exceed ~~3.54.5~~.⁶

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:

- 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

⁵ Visual clarity is assessed using the black disc method or other comparable method employed by Environment Southland.

⁶ 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)

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 at or 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.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.

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

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.⁸

Biomass shall not exceed 35 grams per square metre for either filamentous algae or diatoms and cyanobacteria.⁹

Chlorophyll a shall not exceed 120 milligrams per square metre for filamentous algae and 200 milligrams per square metre for diatoms and cyanobacteria.¹⁰

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.

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.

⁸ Applies to the part of the bed that can be seen from the bank during summer low flows or walked on.

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 stream or river

¹⁰ 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 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 at or below the median flow, the visual clarity of the water shall not be less than 1.6 metres.¹¹

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.

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.

¹¹ Visual clarity is assessed using the black disc method or other comparable method employed by Environment Southland.

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 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 at or 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 at or below the median flow, the visual clarity of the water shall not be less than 3 metres.¹²

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.¹³

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 “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

¹² Visual clarity is assessed using the black disc method or other comparable method employed by Environment Southland.

¹³ 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 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 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 at or below the median flow, the visual clarity of the water shall not be less than 3 metres.¹⁴

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 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.

¹⁴ Visual clarity is assessed using the black disc method or other comparable method employed by Environment Southland

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.¹⁵

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%.

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.

¹⁵ 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.

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.¹⁶

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.¹⁷

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.

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%.

¹⁶ Visual clarity in lakes to be measured as Secchi depth.

¹⁷ Determination of lake chlorophyll concentration to be follow the protocols in Burns et al. (2000).

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 Waters¹⁸ between map references NZMS 260 F45:967-503 to F45:963-508 (Mataura River).

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

¹⁸ 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
- (c) the Mimihau Stream and the Mokoreta River and each of their tributaries.

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.

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 fine sediment (<2mm diameter) bed 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.

...

Appendix L.5 Groundwater Allocation

Table L.4 of Appendix L.5

Groundwater Zone	Primary Allocation (m ³ x 10 ⁶ /year)
...	...
Te Anau	118.25 <u>88.94</u>
...	...

Appendix N - Farm Environment Management Plan Requirements

A Farm Environmental Management Plan must be:

- (1) A Freshwater Farm Plan prepared, certified, implemented and audited in accordance with regulations prepared under Part 9A of the RMA and which apply within the Southland region, plus any additional information or components required by Parts B (3) and (6)(b) as below; or
- (2) if Freshwater Farm Plans, under Part 9A of the RMA, are not yet required in the Southland region, a Farm Environmental Management Plan prepared, [certified](#), [and implemented](#) [and audited](#) in accordance with Parts A to C below.

Part A – Farm Environmental Management Plans

A Farm Environmental Management Plan (FEMP) can be based on either of:

1. the material default content set out in Part B below; or
2. industry prepared FEMP templates and guidance material, with Southland-specific supplementary material added where relevant, so that it includes the default material content set out in Part B below; or
3. A management plan and nutrient budget prepared in accordance with a condition of resource consent to discharge industrial wastewater onto land that is also used for farming activity, provided it includes the material set out in Part B below in relation to each farm receiving industrial wastewater’.

Part B – Farm Environmental Management Plan Default Content

1. ~~A written FEMP that is:~~
 - (a) ~~prepared and retained, identifying the matters set out in clauses 2 to 56 below; and~~
 - (b) ~~reviewed at least once every 12 months by the landholding owner or their agent and the outcome of the review documented; and~~
 - (c) ~~provided to the Southland Regional Council upon request.~~
2. The FEMP contains the following landholding details:
 - (a) physical address; and
 - (b) description of the landholding ownership and the owner’s contact details; and
 - (c) legal description(s) of the landholding; and

- (d) a list of all resource consents held for the landholding and their expiry dates; and
 - (e) The type of farming activities being undertaken on the property, such as “dairy” or “sheep and beef with dairy support”.
3. The FEMP contains a map(s) or aerial photograph(s) of the landholding at a scale that clearly shows the locations of:
- (a) the boundaries; and
 - (b) the physiographic zones (and variants where applicable) and soil types (or Topoclimate South soil maps); and
 - (c) all lakes, rivers, streams ~~(including ephemeral or intermittent flow paths rivers/streams)~~, springs, ponds, artificial watercourses, modified watercourses and natural wetlands; and
 - (d) all existing and proposed riparian vegetation and fences (or other stock exclusion methods) adjacent to waterbodies; and
 - (e) places where stock access or cross water bodies (including bridges, culverts and fords); and
 - (f) the location of all known subsurface drainage system(s) and the locations and depths of the drain outlets; and
 - (g) all land that may be cultivated and land to be cultivated over the next 12-month period; and
 - ~~(h) all land that may be break fed and/or intensively winter grazed and the land to be planted for winter grazing for the next period 1 May to 30 September; and~~
 - (ha) all critical source areas not already identified above; and
 - (i) for land to be cultivated or intensively winter grazed, or break fed on pasture between 1 June and 31 July, shows and the slope¹ of the land and intended setbacks from any lake, river, artificial watercourses, modified watercourse or natural wetland and any other critical source areas; and:
 - ~~(i) critical source areas; and~~
 - ~~(ii) intended setbacks from any lake, river (excluding ephemeral or intermittent rivers), artificial watercourses, modified watercourse or natural wetland; and~~
 - ~~(iii) land with a slope greater than degrees~~
 - (j) any areas of the land within a degraded catchment of a waterbody that requires improvement identified in Schedule X; and

- (k) any heritage site recorded in the relevant district plan, on the New Zealand Heritage List/ Rārangī Kōrero or on the New Zealand Archaeological Association website; and
- (l) the presence of taonga species listed in Appendix M within water bodies on the farm (if known); and
- (m) other significant values and uses (if known) on nearby land and waters.

4. Nutrient Budget/Nutrient Loss Risk Assessment

For all landholdings over 20ha, the FEMP contains either:

- (a) a nutrient budget (which includes nutrient losses to the environment) calculated, using a the latest version of the OVERSEER model in accordance with the latest version of the OVERSEER Best Practice Data Input Standards (or an alternative model nutrient loss assessment tool approved by the Chief Executive of Southland Regional Council); or
- (b) a nutrient loss risk assessment undertaken using a nutrient loss risk assessment tool approved by the Chief Executive of Southland Regional Council);

and the Nutrient Budget or Nutrient Loss Risk Assessment is repeated: which is repeated:

- (a1) where a material change in land use associated with the farming activity occurs (including a change in crop area, crop rotation length, type of crops grown, stocking rate or stock type) at the end of the year in which the change occurs, and also every three years after the change occurs; and
- (b2) each time the nutrient budget or nutrient loss risk assessment is repeated all the input data used to prepare it shall be reviewed by or on behalf of the landholding owner, for the purposes of ensuring the nutrient budget or nutrient loss risk assessment accurately reflects the farming system. A record of the input data review shall be kept by the landholding owner; and
- (c3) the nutrient budget or must be prepared by a Certified Nutrient Management Advisor and the nutrient loss risk assessment must be prepared by a suitably qualified person that has been approved as such by the Chief Executive of Southland Regional Council.

5. Objectives of Farm Environmental Management Plans

A description of how each of the following objectives will, where relevant, be

met:

- (a) Irrigation system designs and installation: To ensure that all new irrigation systems and significant upgrades meet Industry best practice standards;
- (b) Irrigation management: To ensure efficient on-farm water use that meets crop demands and minimises losses, including through upgrading existing systems to meet Industry best practice standards, and ensuring that water and contaminant losses to waterbodies are avoided where practicable or otherwise minimised;
- (c) Nutrient and soil management: To avoid where practicable, or otherwise minimise, nutrient and sediment losses from farming activities to ground and surface water, to maintain or improve water quality;
- (d) Waterways and wetland management: To manage activities within and nearby waterways, critical source areas, natural wetlands, and their margins, by avoiding stock damage, and avoiding where practicable, or otherwise minimising inputs of nutrients, sediment and faecal contaminants to ground and surface water.
- (e) Collected animal-agricultural effluent management: To manage the operation of animal effluent systems to avoid adverse effects on water quality avoid contaminant losses to water bodies do not have ... adverse effects on water quality; contaminant losses to water bodies do not occur; To manage the operation of collected agricultural effluent management systems in accordance with best industry practice, to ensure contaminants derived from collected animal-agricultural effluent do not cause adverse effects on water quality.
- (f) Drainage maintenance: To manage drainage maintenance activities to ensure contaminant losses to water bodies and damage to aquatic habitats are avoided where practicable, or otherwise minimised significant adverse effects on water quality and aquatic habitat.

The FEMP may must also identify additional objectives relevant to the farming activities and/or to address environmental risks associated with the land holding and the environment within which it is located. identified in accordance with Part (6) below.

6. The description for (5) above shall include, for each relevant objective in 5 above:

- (a) an assessment-identification of the adverse environmental effects, and risks associated with the farming activities on the property, including, where relevant, consideration of the risks associated with the relevant physiographic zone/s (and variants) characteristics of the property, and how the identified effects and risks will be managed-or-and mitigated (i.e., 'mitigations'); and and risks associated with the farming activities on the property and how theidentified effects and risks will be managed; and
- (b) where the farm is located within a catchment of a waterbody that requires improvement degraded waterbody identified in Schedule X, the measures mitigations that to demonstrate how farming activities will achieve a reduction inthe discharge of the contaminants where relevant to the farming activity that trigger the requiring improvement degraded status of the catchment; and
- (c) defined mitigations that clearly set a pathway and timeframe for achievement ofthe objectives; and
- (d) the records to be kept for demonstrating mitigations have been actioned measuring performance-and are achieving the objective achievement of theobjective; target; and
- (e) identification of any specific mitigations measures-required by a resource consent held for the property.

7. If any Intensive Winter Grazing is occurring on the landholding, the Farm Environmental Management Plan must also include an intensive winter grazing planthat addresses-takes into account and responds to the risk pathways for the relevantphysiographic zones (and variants).

5. ~~Good Management Practices~~

~~The FEMP contains a good management practices section which identifies:~~

- ~~(a) the good management practices implemented since 3 June 2016; and~~
- ~~(b) the good management practices which will be undertaken over the coming 12-month period. These must include practices for:~~
 - ~~(i) the reduction of sediment and nutrient losses from critical sourceareas, particularly those associated with overland flow;~~
 - ~~(ii) cultivation (including practices such as contour ploughing, stripcultivation or direct drilling);~~
 - ~~(iii) the use of land for intensive winter grazing (including those practicesspecified in Rule 20(a)(iii);~~

- (iv) ~~riparian areas (including those from which stock are excluded under Rule 70) and the type of riparian vegetation to be planted, how it will be maintained and how weeds will be controlled;~~
- (v) ~~minimising of the discharge of contaminants to surface water or groundwater, with particular reference to the contaminant pathways identified for the landholding.~~

~~Examples of general good management practices are provided on the Southland Regional Council, Dairy NZ and Beef and Lamb New Zealand websites and in the document 146 titled "Industry-agreed Good Management Practices relating to water quality, Version 2, 18 September 2015".~~

Part C – Farm Environmental Management Plan Certification, Auditing, Review and Amendment

1. Farm Environmental Management Plan Certification

- (a) The FEMP must be certified, prior to implementation on the farm, by a Suitably Qualified Person (SQP) that has been approved as such by the Chief Executive of Southland Regional Council.
- (b) The purpose of FEMP certification is to confirm that the farming activities on the farm will be carried out in a way that will achieve the Objectives in this Appendix and will comply with any resource consent for the property.
- (c) The FEMP must be re-certified, prior to implementation, following any amendments to the FEMP carried out in accordance with Part C(3)(a) of this appendix.
- (d) Within one month of a FEMP being certified, a copy of the certified FEMP must be provided to the Southland Regional Council.

2. Auditing of the certified Farm Environmental Management Plan

- (a) Within 12 months of the landholding's first FEMP being certified, the landholding owner must arrange for an audit of the farming activities' compliance with the certified FEMP. Thereafter, the frequency of auditing will be in accordance with the any conditions of consents held for the landholding, or alternatively, where there are no consent or consent conditions requiring auditing, auditing timeframes associated with the audit grade assigned. Note: Southland Regional Council will provide, on its website, a schedule of the auditing frequency required for each FEMP's

based on the audit grade assigned to each landholding.

- (b) The auditor must be a Suitably Qualified Person (SQP) that has been approved as such by the Chief Executive of Southland Regional Council and must not be the same person or from the same organisation that prepared the FEMP.
- (c) The auditor must prepare an audit report that:
 - (i) sets out the auditor's findings;
 - (ii) stating whether compliance has been achieved and the final compliance grade; and
 - (iii) any other recommendations from the auditor.
- (d) Within one month, of the final audit report being prepared, the audit report must be provided to the Southland Regional Council by the auditor.

3. Review and Amendment of the Farm Environmental Management Plan

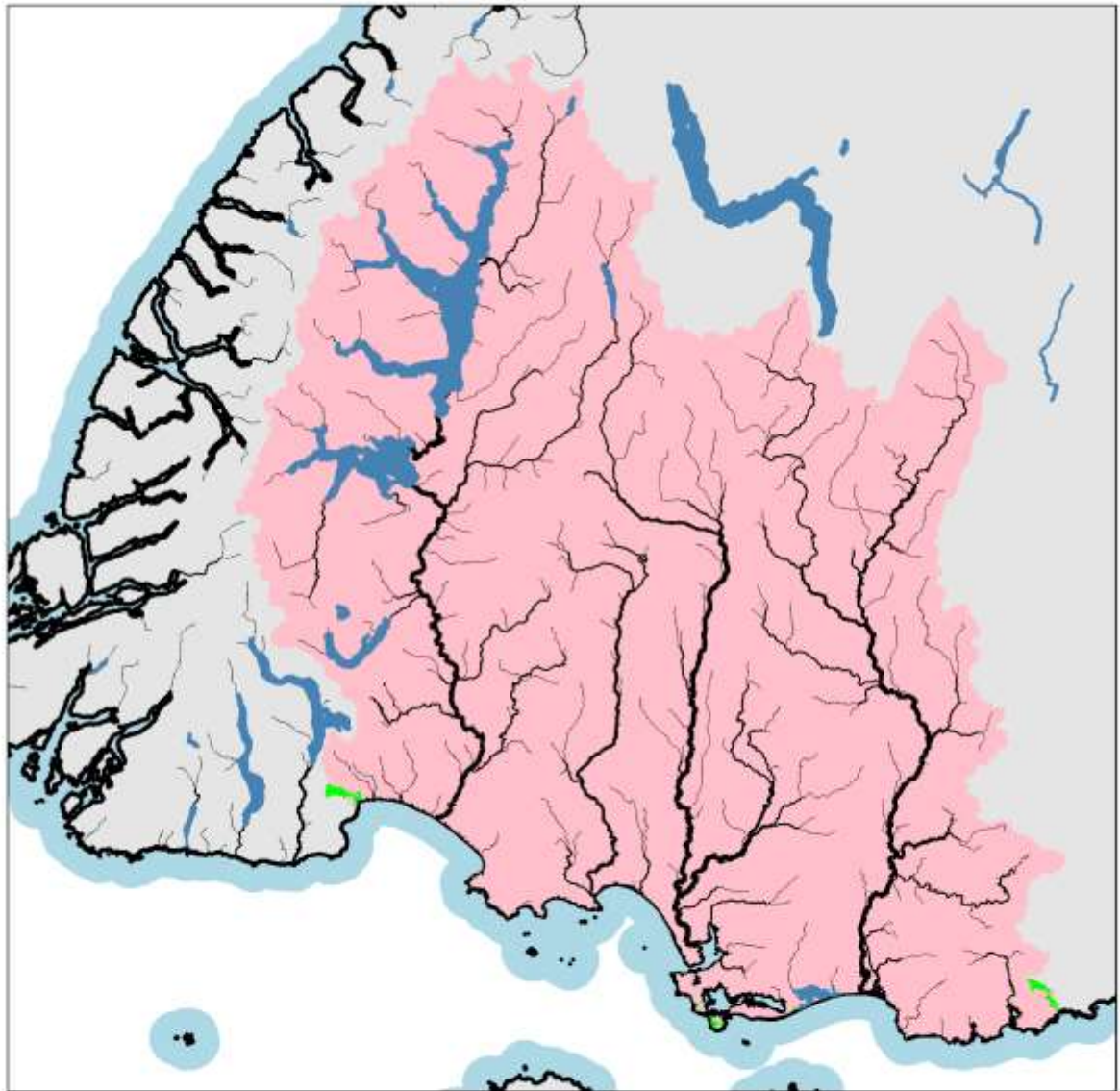
The FEMP must be reviewed, by the landholding owner, or their agent, as follows:

- (a) when there is a material change to the nature of the farming activities occurring on the landholding, and where that material change is not provided for within the landholding's certified FEMP; and
- (b) at least once every 12 months; and
- (c) to respond to the outcome of an audit.

The outcome of the review is to be documented and amendments to the FEMP must be made where Part C(3)(a) applies and in circumstances where the annual review identifies that amendments are required.

Maps

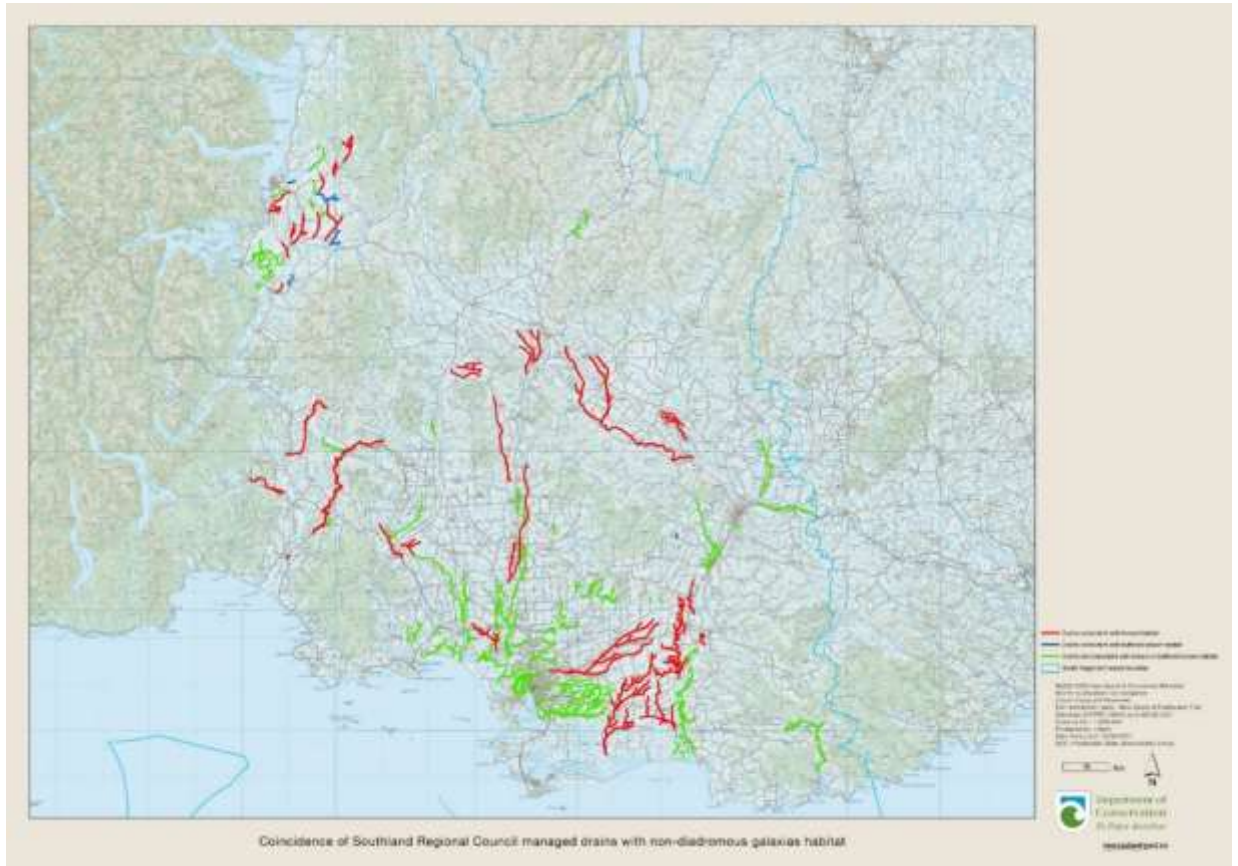
Include one map of "catchments in need of improvement" as provided for in Figure 4 of Dr Snelder's Statement of Evidence (dated 11 February 2021) (note that Figure 4 needs to be retitled to reflect "catchments in need of improvement" terminology):



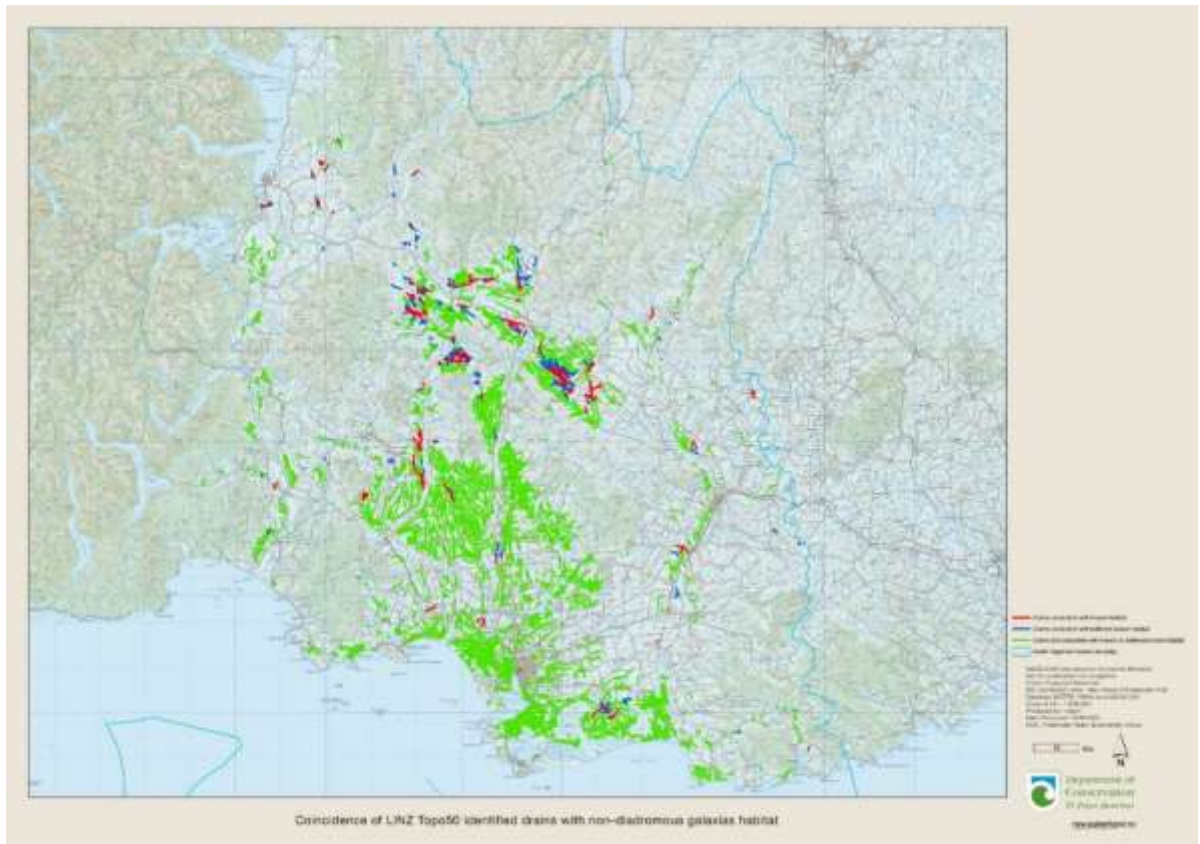
Catchment degradation status for all indicators
■ Degraded catchment ■ Not-degraded

Schedule X Maps:

Map 1: Southland Regional Council managed drains coincidence with non-diadromous galaxias habitat



Map 2: LINZ Topo50 identified drains coincidence with non-diadromous galaxias habitat



Map 3: LINZ Topo50 identified drains coincidence with lamprey/kanakana and tuna habitat in the Waituna catchment of Matura and Waikawa

Map to be developed.