

Text in **red** font indicates changes proposed to address appeal points and responds to s274 interests in the appeal points of other appellants. Relief presented below is pursued by both dairy interest parties subject only to the scope constraints of their respective interests.

This document does not record the provisions agreed between the parties at mediation or by direct negotiation (the 'resolved' issues for Topics B1 – B4). The changes below are to those provisions identified as 'unresolved' in the Council's table of issues and where the dairy interest parties are either appellant or have a s274 interest.

Policy 15C – Maintaining and improving water quality after FMU processes

Following the establishment of ~~freshwater objectives target attribute states~~ and limits ~~under Freshwater Management Unit processes~~, and including through implementation of non-regulatory methods, improve water quality where ~~that water~~ is degraded to the point where ~~freshwater objectives target attribute states~~ 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 remedy or mitigate~~ 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 ~~ensuring that~~:
 - (a) ~~discouraging~~ the establishment of new, ~~or further intensification of existing~~, dairy farming ~~of cows~~ or new intensive winter grazing activities ~~does not result in an increase in contaminant discharges in close proximity to Regionally Significant Wetlands and Sensitive Water bodies identified in Appendix A;~~ and
 - (b) ~~ensuring that, in the interim period prior to the development of freshwater objectives under Freshwater Management Unit processes~~, applications to establish new, or further intensify existing, dairy farming ~~of cows~~ or intensive winter grazing activities, ~~that cannot meet (a) will are~~ generally not granted where:
 - (i) the adverse effects, including cumulatively, on the quality of groundwater, or water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries and salt marshes cannot be avoided or mitigated; or
 - (ii) ~~it would occur in close proximity to Regionally Significant Wetlands and Sensitive Water bodies identified in Appendix A;~~
 - (iii) ~~it would occur in a existing water quality is already degraded catchment as identified in Appendix X - to the point of being overallocated;~~ or
 - (iv) water quality does not meet the Appendix E Water Quality Standards or bed sediments do not meet the Appendix C ANZECC sediment guidelines; and
 - (ba) ~~all farming activities in catchments with degraded water quality minimise the discharge of contaminants to water by the adoption of good management practices.~~

~~(c) — ensuring that, after the development of freshwater objectives under Freshwater Management Unit processes, applications to establish new, or further intensify existing, dairy farming of cows or intensive winter grazing activities:~~

~~(i) — will generally not be granted where freshwater objectives are not being met; and~~

~~(ii) — where freshwater objectives are being met, will generally not be granted unless the proposed activity (allowing for any offsetting effects) will maintain the overall quality of groundwater and water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries and salt marshes.~~

2. ~~(c) Requiring~~ all farming activities, including existing activities, ~~to~~:

~~(i)~~ implement a Farm Environmental Management Plan, as set out in Appendix N;

~~(ii)~~ actively manage sediment run-off risk from farming and hill country development by identifying critical source areas and implementing 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)~~ manage collected and diffuse run-off and leaching of nutrients, microbial contaminants and sediment through the identification and management of critical source areas within individual properties.

32. 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.

Policy 18 – Stock exclusion from waterbodies

Reduce sedimentation and microbial contamination of 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 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 and riparian ecosystems and habitats.

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
 - (~~23~~) conspicuous oil or grease films, scrums or foams, or floatable or suspended materials beyond 20 metres from the point of discharge;
 - (ii) the discharge does not render freshwater unsuitable for consumption by farm animals;
 - (iii) the discharge does not cause the flooding of any other landholding;
 - (iv) the discharge does not cause any scouring or erosion of any land or bed of a water body beyond the point of discharge;
 - (vi) the discharge does not cause any significant adverse effects on aquatic life;
 - (vii) the subsurface drainage system does not drain a natural wetland; and
 - (viii) for any known existing drains and for any new drains, the locations of the drain outlets are mapped and provided to the Southland Regional Council on request.
- (b) The discharge of land drainage water to water from an on-farm subsurface drainage system that does not comply with Rule 13(a) is a discretionary activity.

Rule 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, excluding 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;

- (3) cow numbers have not increased beyond the maximum number specified in the dairy effluent discharge permit that existed on 3 June 2016;
- (4) from 1 May 2019, a Farm Environmental Management Plan for the landholding is prepared and implemented in accordance with Appendix N;
- (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~~

(iv) for all other farming activities, from 1 May 2020 a Farm Environmental Management Plan is prepared and implemented in accordance with Appendix N.

~~(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.~~

~~(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) The use of land for a farming activity 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) of Rule 20(a) is a restricted discretionary activity, provided the following conditions are met:~~

- ~~(i) a Farm Environmental Management Plan is prepared and implemented 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 discharged from the landholding will be no greater than the risk of annual lawful contaminant discharge 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; and
 - measures to implement a 20m setback from Regionally Significant Wetlands and Sensitive Water bodies identified in Appendix A.~~~~

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(b)(ii) above takes into account reasonable and appropriate good management practices to minimise the losses of contaminants from the existing farming activity;
3. 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) The use of land for a farming activity ~~is not specified as a permitted, restricted discretionary or prohibited activity under~~ which is not a restricted discretionary activity under Rule 20(b) is a discretionary activity.

(d) The use of land for a farming activity that does not meet condition (ii) (7) of Rule 20(a) 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 a paddock that is used for intensive winter grazing must be 10 degrees or less; and

** Note that the metrics included in (i) and (ii) above reflect the current Intensive Winter Grazing provisions of the NES-F 2020. These are currently under review. Accordingly, these metrics may need to be revisited should the NES-F be updated before hearing.*

(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, estuary or the coastal marine area;

(2) 5 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;

(2) be protected from grazing; and

(3) not be cultivated during the period intensive winter grazing occurs;

(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;

(vi) from 1 May 2023, a Farm Environmental Management Plan for the landholding is prepared and implemented in accordance with Appendix N; 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)-(v) of Rule 20A is a restricted discretionary activity provided the following conditions are met:

(i) a Farm Environmental Management Plan is prepared and implemented 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 risk of nitrogen, phosphorus, sediment and microbiological contaminants discharged from the landholding on an annual basis will be no greater than the risk of annual lawful contaminant discharge-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 20A(b)(ii) above takes into account reasonable and appropriate good management practices to minimise the losses of contaminants from the existing farming activity;
3. 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 condition (vi) of Rule 20A (a) is a discretionary activity.

(d) The use of land for intensive winter grazing that does not meet condition (vii) of Rule 20A (a) is a prohibited activity.

Rule 35A – Feed pads/lots

(a) The use of land for a feed pad/lot is a permitted activity provided the following conditions are met:

- (i) if accommodating ~~cattle or~~ deer, each feed pad/lot services no more than ~~120 adult cattle,~~ ~~or~~ 250 adult deer, or equivalent numbers of young stock at any one time;
- (ii) animals do not remain on the feed pad/lot for longer than three continuous months;
- (iii) the feed pad/lot is not located:
 - (1) within 50 metres from the nearest sub-surface drain, lake, river (excluding ephemeral rivers), artificial watercourse, modified watercourse, natural wetland, or another feed pad/lot on the same landholding; or
 - (2) within a microbial health protection zone of a drinking water supply site identified in Appendix J, or where no such zone is identified, then within 250 metres of the abstraction point of a drinking water supply site identified in Appendix J; or

- (3) within 200 metres of a place of general assembly or dwelling not located on the same landholding, or
 - (4) within 20 metres of the boundary of any other landholding; or
 - (5) within a critical source area;
 - (iv) the feed pad/lot is constructed with:
 - (1) a sealed and impermeable base and any liquid animal effluent or stormwater containing animal effluent discharging from the feed pad/lot is collected in a sealed animal effluent storage system authorised under Rule 32B or Rule 32D; or
 - (2) a minimum depth of 500 millimetres of wood-based material (bark, sawdust or chip) across the base of the feed pad/lot; and
 - (v) any material scraped from the feed pad/lot, including solid animal effluent, is collected and if applied to land is applied in accordance with Rule 38; and
 - (vi) the overland flow of stormwater or surface runoff from surrounding land is prevented from entering the feed pad/lot.
- (b) The use of land for a feed pad/lot that does not meet one or more of the conditions of Rule 35A(a) is a discretionary activity.

Rule 70 - Stock exclusion from water bodies

Note, this rule applies in addition to the Resource Management (Stock Exclusion) Regulations 2020

- (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.
- (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) 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 or natural wetland, or use of the land that is a farm drainage channel, by cattle, deer or pigs is a permitted activity prior to the dates set out in Table 1 for the land having listed land slopes after which time it is respectively a discretionary activity on that land unless it is contrary to the Resource Management (Stock Exclusion) Regulations 2020 in which case it is prohibited.

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 and farm drainage channels 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 and farm drainage channels from 1 July 2022	All water bodies and farm drainage channels over 1 metre wide from 1 July 2022	All water bodies and farm drainage channels where break feeding occurs from 1 July 2022
Beef cattle and deer	All water bodies from 1 July 2025	All water bodies 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 and farm drainage channels where break feeding occurs from 1 July 2022		

Appendix N

Part A – Farm Environmental Management Plans

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

1. the material 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 material 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.

Part B – Farm Environmental Management Plan Content

1. A written FEMP that is:
 - (a) prepared and retained, identifying the matters set out in clauses 2 to 5 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.
 - (e) The type of farming enterprise(s) on the property, including, but not limited to: dairy, sheep/beef, dairy support, cattle, mixed cropping, horticulture (including root vegetable crops and bulbs), nursery, lifestyle.
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 intermittent rivers/streams), 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) all known subsurface drainage system(s) and the locations 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, intensively winter grazed and the land to be planted for winter grazing for the next period 1 May to 30 September; and
- (i) for land within a degraded catchment or land to be break-fed, cultivated or intensively winter grazed:
 - (i) critical source areas; and
 - (ii) intended setbacks from any lake, river (~~excluding ephemeral rivers~~), artificial watercourses, modified watercourse or natural wetland; and
 - (iii) the slope of the land including identification of land with a slope greater than 10 ~~20~~ degrees.

4. Nutrient Budget/nutrient loss risk assessment

For all landholdings over 20ha, the FEMP contains a nutrient budget (which includes nutrient losses to the environment) calculated, using 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 risk assessment tool approved by the Chief Executive of Southland Regional Council), and which is repeated:

- (a) 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
- (b) 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 risk assessment accurately reflects the farming system. A record of the input data review shall be kept by the landholding owner.

6. 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 source areas, particularly those associated with overland flow;
 - (ii) cultivation (including practices such as contour ploughing, strip cultivation or direct drilling);
 - (iii) the use of land for intensive winter grazing (~~including those practices specified 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; and
 - (v) minimising avoiding, where reasonably practicable, or otherwise mitigating, the discharge of contaminants to surface water or groundwater, with particular reference to the contaminant pathways and risks identified for the landholding and associated land use.

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

Part C – FEPs for farms in degraded catchments

In addition to the matters included in Parts A and B above, FEPs in degraded catchments shall include the following matters:

7. Catchment context

For all farms in a degraded catchment, a description of the catchment context which shall include:

- (a) The state of water quality and the attribute(s) that trigger the degraded status of the catchment
- (b) The position of the farm in relation to the drinking water zones listed in Appendix D
- (c) The presence of taonga species within water bodies on the farm (if known)

8. Risk assessment

In addition to the nutrient budget/nutrient loss risk assessment required under 4 above, an assessment of the non-nutrient contaminant loss risks associated with the farming activities on the property and how the identified risks will be managed, including: irrigation, effluent application, stock management, cultivation, and drainage maintenance.

9 Objectives

For all farms in a degraded catchment, 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;
- (c) **Nutrient and soil management:** To avoid where practicable, or otherwise mitigate, 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 waterways (including ephemeral or intermittent waterways), wetlands and their margins to avoid stock damage and avoid where practicable, or otherwise mitigate, inputs of nutrients, sediment, and faecal contaminants to ground and surface water to maintain or improve water quality; and
- (e) **Collected animal effluent management:** To manage the operation of animal effluent systems to avoid adverse effects on water quality; and
- (f) **Drainage maintenance:** To manage drainage maintenance activities to avoid significant adverse effects on water quality and aquatic habitat.

9. The Plan shall include for each objective in 8 above:

(a) defined measurable action(s) that achieve, or set a pathway and timeframe for achieving, the objective; and

(b) A description of the records to be kept for demonstrating achievement of the actions and objectives.

10. A **winter grazing plan** that describes the nature and extent of the winter grazing and the specific scale, location and timing of the practices and mitigations being taken to minimise the risks associated with pugging and overland flow of contaminants to surface water bodies.

Appendix X

[List/map catchments as agreed in water quality Joint Witness Statement]

Glossary

Terms if be added/amended as follows:

Degraded catchment

A catchment listed in Appendix X.

Ephemeral ~~rivers~~ flow paths

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

Critical source area

- (a) a landscape feature like a gully or ephemeral flow path swale or a depression 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) 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.