

MEETING ITEM: 7	SUBJECT MATTER: Recommendations for nutrient loss reporting and collective/ farm plan requirements for normal dryland farming.
AUTHOR: Lisa Jenkins	DATE OF MEETING: 21 May 2018

Action required

1. The Zone Committee considers additional information in relation to:
 - a. The Farm Portal information requirements and disclosure risks; and
 - b. The approach to the use of a schedule of farm practices in the Selwyn/Te Waihora Zone
2. The Zone Committee makes a recommendation in relation to catchment accounting and Farm Plan and collective requirements for permitted dryland farming.

The suggested recommendation is:

The Hurunui Waiau Zone Committee recommends that the Canterbury Regional Council pursues a targeted change to the Hurunui Waiau Rivers Regional Plan, to be notified in 2018. In addition to permitting dryland farming within previously specified limits¹, the plan change will address the current requirements for dryland farmers to be a part of a nutrient management collective and report nutrient losses by requiring that farmers undertaking a “normal dryland farming activity”:

- a. *report the area of their farm used for winter grazing of cattle on root vegetable or brassica crop through the Farm Portal and hold and implement a Management Plan for Farming Activities; or*
 - b. *are a member of a dryland farmers collective group that has the purpose of reporting winter grazing area and encouraging the adoption of Good Management Practices through farm management plans.*
2. The Zone Committee receives an update regarding the conversations taking place with irrigation groups to identify off-sets for the anticipated increase in nitrogen load from dryland farming.

Discussion: Collectives and catchment accounting

At the 26 March meeting of the Hurunui Waiau Zone Committee, the Committee received a paper outlining options for addressing catchment accounting and collective requirements. The committee provisionally agreed that a mechanism for catchment accounting was needed, and also that a mechanism for driving Good Management Practices was needed.

Ben Ensor suggested an option that gave farmers a choice of either meeting these requirements through a collective, or individually (reporting through the Farm Portal and holding and implementing a Farm Management Plan). There was general agreement that

¹ See recommendations made by the Zone Committee on 19 March 2018

this option achieved the nutrient management principles set out by the Zone Committee in August 2016 and that this option should be pursued.

At the Zone Committee meeting on 16 April, the Committee was asked to formalise their recommendations in relation to catchment accounting and collective requirements for dryland farmers. The Committee sought further information. Specifically, the Committee asked:

1. What information must farmers enter into the Farm Portal?
2. Can a third party, under the provisions of the Local Government Official Information and Meetings Act, require the Regional Council to disclose information about individual farms held in the Farm Portal?
3. Could the approach taken to implementing GMP in the Selwyn/Te Waihora Zone (i.e. specify appropriate farm practices to manage nutrient loss, sediment and bacterial contamination of water), work for dryland farms in the Hurunui Waiau Zone?
4. The Committee asked to see the requirements for a Farm Management Plan again.

In relation to the first question, Ian Brown will demonstrate the farm portal so the Committee can see what information is to be provided.

In relation to the second question, the information entered into the Farm Portal relating to permitted activities will not be discoverable to a third party. There have been some challenges raised with regard to audit information entered in relation to consented activities. However, for permitted activities the Canterbury Regional Council is clear this information will be collected for catchment accounting purposes only, and none of the information entered for permitted activities relates to individual farm compliance with rules. As such that information is not discoverable under Local Government Official Information and Meetings Act provision. A Council policy to this effect is being developed.

In relation Selwyn Te Waihora zone approach, it was suggested that the concept of specifying farm practices should be considered as an alternative to requiring farmers to hold an implement a Farm Environment Plan. See attachment 1 for a list of farm practices required for permitted farming activities in the Selwyn Te Waihora Zone.

This approach would provide a workable solution to addressing phosphorus, sediment and bacterial contaminant risks, if appropriate farm practices can be agreed. It is unlikely that those practices specified for Selwyn Te Waihora will be entirely relevant, and it may be appropriate that additional practices are identified for the Hurunui Waiau Zone.

It is noted however that these practices would only apply to dryland farms, and other farm types (irrigated farms and farms with more than 10% of their area in winter grazing) would not be subject to the same provisions.

It is also noted that this approach does not provide for flexibility to suit individual situations, or to take account of evolving farm practices and GMP – it would set minimum requirements rather than seek continuous improvement. However, this approach would provide certainty to dryland farmers as to minimum requirements and would remove the need for farm plans to be prepared or implemented.

In relation to the Committee's request to see the requirements of a Farm Management Plan, I have attached Schedule 7A of the Land and Water Plan. Note that Schedule 7A is considered to be a "light" farm plan, appropriate for permitted activities.

Discussion: Off-setting anticipated increases in nitrogen from permitted dryland farming

At the 16 April meeting, I updated the Zone Committee regarding discussions with irrigators around off-setting the additional N load from permitting dryland farming. That group met again on 8 May. AIC, HWP and NTFE have agreed in principle that 8tonnes of Nitrogen will be made available at the time the plan is notified.

Attachment 1: Land and Water Regional Plan Schedule 24

Note – some of these practices will not be relevant to dryland farming under the HWRRP

Schedule 24 Farm Practices

Definitions

In Schedule 24 the following definitions apply:

‘Cultivation’ means the preparation of land for growing pasture or a crop and the planting, tending and harvesting of that pasture or crop, but excludes:

- direct drilling of seed;
- no-tillage practices;
- re-contouring of land; and
- forestry.

‘Intensive winter grazing’ means grazing of stock between 1 May and 30 September on fodder crops or pasture where the grazing results in significant pugging or de-vegetation or the exposure of bare ground. This is usually associated with break feeding behind temporary fencing.

‘Soil moisture monitoring’ means methods of monitoring soil moisture that use either volumetric or tension based methodology.

(a) Nutrient Management:

- i. A nutrient budget based on soil tests has been prepared, using OVERSEER® in accordance with the latest version of the OVERSEER® Best Practice Data Input Standards, or an equivalent model approved by the Chief Executive of Environment Canterbury;
 - a. Where a material change in the land use associated with the farming activity occurs (being a change exceeding that resulting from normal crop rotations or variations in climatic or market conditions) the nutrient budget shall be prepared at the end of the year in which the change occurs, and also three years after the change occurs;
 - b. Where a material change in the land use associated with the farming activity does not occur, the nutrient budget shall be prepared once every three years;
 - c. An annual review of the input data used to prepare the nutrient budget shall be carried out by or on behalf of the landowner for the purposes of ensuring the nutrient budget accurately reflects the farming system. A record of the review shall be kept by the landowner.
- ii. Fertiliser is applied in accordance with the Code of Practice for Nutrient Management [2007]; and either:
 - a. the Spreadmark Code of Practice [Feb 2014]; or
 - b. With spreading equipment that is maintained and user-calibrated to Spreadmark Code of Practice [Feb 2014] standards.

- iii. Records of soil tests, nutrient budgets and fertiliser applications are kept and provided to the Canterbury Regional Council upon request.

(b) Irrigation management:

- i. All irrigation systems installed or replaced after 1 January 2014 meet the Irrigation New Zealand Piped Irrigation Systems Design Code of Practice [2013], Irrigation New Zealand Piped Irrigation Systems Design Standards [2013] and the Irrigation New Zealand Piped Irrigation Systems Installation Code of Practice [2013].
- ii. The irrigation system application depth and uniformity are self-checked annually in accordance with the relevant Irrigation NZ Pre-Season Checklist and IRRIG8Quick Irrigation Performance Quick Tests for any irrigation system operating on the property.
- iii. Irrigation applications are undertaken in accordance with property specific soil moisture monitoring, or a soil water budget, or an irrigation scheduling calculator.
- iv. Records of irrigation system application depth and uniformity checklists, irrigation applications, soil moisture monitoring or soil water budget or irrigation scheduling calculator results and rainfall are kept and provided to the Canterbury Regional Council upon request.

(c) Intensive winter grazing:

- i. For all intensive winter grazing adjacent to any river, lake, artificial watercourse (excluding irrigation canals or stock water races) or a wetland, a 5m vegetative strip (measured from the edge of the bed of the river, lake, artificial watercourse, or wetland) from which stock are excluded, is maintained around the water body.

(d) Cultivation:

- i. For all cultivation adjacent to any river, lake, artificial watercourse (excluding irrigation canals, stock water races or ephemeral drains) or a wetland, a 2m uncultivated vegetative strip (measured from the edge of the bed of the river, lake, artificial watercourse, or wetland) is maintained around the water body.

(e) Collected Animal Effluent:

- i. All collection, storage and treatment systems for animal effluent installed or replaced after 1 January 2014 meet the Dairy NZ Farm Dairy Effluent Design Standard and Code of Practice [2013].
- ii. The animal effluent disposal system application separation distances, depth, uniformity and intensity are self-checked annually in accordance with Section 4 'Land Application' in the Dairy NZ guideline 'A Farmer's Guide To Managing Farm Dairy Effluent – A Good Practice Guide For Land Application Systems, Version 1 – Feb 2013'.
- iii. Records of self-checked animal effluent disposal system application separation distances, depth, uniformity and intensity in accordance with Section 4 'Land Application' in the Dairy NZ Farm Dairy Effluent Design Standard [2013] are kept and provided to the Canterbury Regional Council upon request.

Attachment 2: LWRP Schedule 7A – Farm Management Plan requirements

Plan Change 5 to the Canterbury Land and Water Regional Plan

Schedule 7A Management Plan for Farming Activities

Part A – Management Plans

A Management Plan can be either:

1. A Plan prepared in accordance with the requirements of Part B below; or
2. A Plan prepared in accordance with an industry prepared Farm Environment Plan template that has been certified by the Chief Executive of Environment Canterbury as providing at least an equivalent amount of information and practice guidance contained in Part B below.¹⁷⁹

Part B – Management Plan Default Content¹⁸⁰

The Management Plan shall contain as a minimum:

1. Property details
 - (a) Physical address
 - (b) Description of the ownership and name of a contact person
 - (c) Legal description of the land and farm identifier
2. A map(s) or aerial photograph at a scale that clearly shows:
 - (a) The boundaries of the property.
 - (b) The boundaries of the main land management units on the property.
 - (c) The location of permanent or intermittent rivers, streams, lakes, drains, ponds or wetlands.
 - (d) The location of riparian vegetation and fences adjacent to water bodies.
 - (e) The location on all waterways where stock access or crossing occurs.
 - (f) The location of any areas within or adjoining the property that are identified in a District Plan as “significant indigenous biodiversity”.
 - (g) The location of any critical source areas for phosphorus loss ~~including for~~¹⁸¹ any part of the property within the High Runoff Risk Phosphorus Zone.
3. A description of:
 - (a) the on-farm actions that have been undertaken in the previous 01 July to 30 June period to implement the ~~applicable~~¹⁸² ~~Good~~ practices described in the table below; and
 - (b) the on-farm actions that will be undertaken over the next 01 July to 30 June period to implement the ~~applicable~~¹⁸³ ~~Good~~ practices described below
4. A copy of ~~this plan~~ the Farm Environment Plan or Management Plan¹⁸⁴ shall be retained by the landowner and updated at least once every 12 months as necessary, and provided to the Canterbury Regional Council on request.

Good Practice	On-farm actions undertaken to implement good practice¹⁸⁵ in the previous 12 months	On-farm actions to be undertaken in the next 12 months
<u>Water, effluent and fertiliser is applied at a rate that does not exceed the water holding capacity of the soil or the agronomic requirements of the crop.</u>		
<u>Irrigation systems, effluent application systems, fertigation systems and fertiliser or organic manure systems are assessed annually and maintained and operated to apply irrigation water, waste or nutrients efficiently calibrated by a suitably qualified person at least once every 12 months</u>		
<u>Silage pits, refuse pits and offal pits are sited, designed and managed to avoid the discharge of leachate into surface waterbodies</u>		
<u>Effluent storage systems comply with the regional council rules or the conditions of any resource consent granted. Effluent systems meet industry Codes of Practice or an equivalent standard.</u>		
<u>Fertiliser is stored a minimum of 20 metres from surface waterbodies</u>		
<u>Non irrigation water use is monitored and efficient.</u>		
<u>Stock are excluded from waterbodies in accordance with regional council rules or any granted resource consent.</u>		
<u>Vegetated buffer strips of at least 5 metres in width are maintained between areas of winter grazing and any river, lake, drain or wetland.</u>		
<u>Vegetated riparian margins of sufficient width are maintained to minimise nutrient, sediment and microbial pathogen losses to waterbodies.</u> ¹⁸⁶		