

## Technical Advice Note

### NES-F 2020 Synthetic Nitrogen Fertiliser Cap, stockholding areas (including feedlots) and intensive winter grazing

9 December 2020; updated 5 May 2022

**Disclaimer:** *This memo does not constitute legal advice and should not be relied on as such.*

#### Executive Summary

The Government's Essential Freshwater package aims to 'stop further degradation of freshwater' and 'improve water quality within five years'. To assist in this, the National Environmental Standard for Freshwater (NES-F) contains regulations controlling<sup>1</sup>:

- The use of land for holding cattle in a feedlot and the discharge of contaminants from that use of land,
- The use of land for holding cattle in a stockholding area and the discharge of contaminants from that use of land,
- The use of land for intensive winter grazing and the discharge of contaminants from that use of land, and
- The discharge of synthetic nitrogen fertiliser to land (where it may enter water) and to air.

These requirements apply in addition to any farming land use requirements under Environment Canterbury's plans or any other requirements in the NES-F (which will be addressed in a separate technical advisory notes).

#### Introduction

The Government's Essential Freshwater (Action for Healthy Waterways) package came into effect on 3 September 2020. The purpose of the package is to *stop further degradation of freshwater* and *improve water quality within five years*.<sup>2</sup> The package includes a new National Policy Statement for Freshwater Management (NPSFM 2020), new National Environmental Standards for Freshwater (NES-F) and Stock Exclusion Regulations.

This technical advisory note addresses the suite of controls related to stockholding areas (including feedlots), intensive winter grazing<sup>3</sup> and the discharge of synthetic nitrogen fertiliser. These provisions, and how they relate to Environment Canterbury's planning

---

<sup>1</sup> Definitions for the terms relevant to these NES-F provisions are provided in the Appendix to this technical advice note for convenience.

<sup>2</sup> MfE Factsheet - Essential Freshwater Overview.

<sup>3</sup> Increases in the area of Intensive Winter Grazing are addressed in the Technical Advisory Note (dated 27 November) dealing with the temporary intensification provisions in the NES-F.

framework (specifically the Canterbury Land and Water Regional Plan (LWRP) and Hurunui and Waiau River Regional Plan (HWRRP)) are summarised in Table 1 (next page) and discussed in more detail below.

### **Stockholding areas, including feedlots**

Both the NES-F and LWRP include rules to manage stockholding areas, however the term is defined differently in each instrument<sup>4</sup>. In practice there is significant overlap between the LWRP and NES-F definitions and as both the LWRP and NES-F seek to manage the same activity in different ways it is necessary to understand how the requirements interact.

The NES-F manages both the use of land for a stockholding area and the discharge of contaminants from that area, either by permitting both activities, or by requiring consent for both activities.

The LWRP takes a different approach. While the use of land for a stockholding area is managed under Rule 5.31 (permitted activity) or 5.32 (a consented activity), the discharge of animal effluent from those areas is managed via a resource consent under Rule 5.36(a).

Where resource consent for the use of land for a stock holding area and the associated discharge from that area has been obtained under rules in the LWRP (and this was done before 5 August 2020) these consents prevail over the NES-F<sup>5</sup>, and additional consents are unlikely to be required.

Where the use of land to contain stock meets the definition of a feedlot or stockholding area in the NES-F but either:

- does not meet the definition of a stockholding area in the LWRP<sup>6</sup>; or
- is permitted under Rule 5.31 of the LWRP;

then it is necessary to determine whether the activity complies with the permitted activity regulations in the NES-F (i.e. regulations 9 (feedlots), 12-13 (stockholding areas)). If the activity cannot comply with those regulations, then consent(s) will be required.

*When does an application for resource consent need to be made by?*

The regulations for feedlots came into effect on 3 September, and, assuming no change in the scale and intensity of the feedlot activity, applications for these activities are required to be lodged by 1 February 2021.

---

<sup>4</sup> See the Appendix for the relevant LWRP and NES-F definitions of stockholding areas.

<sup>5</sup> Section 43B(6) RMA.

<sup>6</sup> See Appendix: Definitions.

**Table 1: Comparison of the NES-F, LWRP and HWRRP and the interaction of the relevant provisions**

NES-F Regulation (r)	Date NES-F regulation in effect from	LWRP provisions	HWRRP provisions	Summary of relationship between provisions in the NES-F and Environment Canterbury's plans
Feedlots and Stockholding Areas				
- Feedlots (r9-11)	3 September 2020	LWRP. Rules 5.31 – 5.32 regulate the use of land for a stockholding area, and Rules 5.33 – 5.36 regulate the discharge of effluent from a stockholding area.	The HWRRP does not include provisions that relate to feedlots or stockholding areas. These activities are instead regulated by provisions in the LWRP.	The NES-F and the LWRP use different terms to define and regulate stockholding areas and feedlots. To determine if a resource consent is required for your stockholding area or feedlot, you will need to consider the definitions, rules and regulations in both the NES-F and the LWRP. The overall classification for the activity (e.g permitted, restricted discretionary etc) will be determined by the most stringent applicable rule
- Stockholding Areas other than Feedlots (r12-14)	1 July 2021			
Intensive Winter Grazing (r26-31)	1 November 2022	Region-wide rules in the LWRP permit the use of land for farming but include conditions on the area of land that may be used for 'winter grazing'.  The definitions for 'winter grazing' (LWRP) and 'intensive winter grazing' (NES-F) are similar, however the NES-F definition incorporates a broader range of livestock, including sheep. In contrast the LWRP definition only applies to winter grazing carried out by cattle. <sup>7</sup>	The rules in the HWRRP permit the use of land for farming (subject to conditions). This includes 'winter grazing' when under a certain area of land <sup>8</sup> (and subject to other conditions).  The definitions for 'winter grazing' (HWRRP) and 'intensive winter grazing' (NES-F) are similar, however the NES-F definition incorporates a broader range of livestock, including sheep. In contrast the HWRRP definition only applies to winter grazing carried out by cattle. <sup>9</sup>	Winter grazing is regulated by rules in the LWRP (including sub-region sections) and rules in the HWRRP. However, the rules in these plans only regulate one part of the activity (either the discharge or the land use).  Additional resource consents may be required for either the discharge of contaminants <sup>10</sup> , if the farmer already holds a s9 land use consent for farming <sup>11</sup> , or a land use consent <sup>12</sup> if the farmer's land use activity is already managed through a discharge permit held by an irrigation scheme.  Additional consents may also be required under the NES-F if the activity includes winter grazing by animals other than cattle.  Please refer to the body of this Note for more information.
Discharge of synthetic nitrogen fertiliser (r32-36)	1 July 2021	Rules 5.65-5.67 of the LWRP regulate the discharge of all fertilisers (both synthetic and non-synthetic).	The HWRRP does not include provisions to regulate the discharge of fertiliser. These activities are instead regulated by provisions in the LWRP.	Rules in the LWRP regulate the discharge of <b>all</b> fertilisers (both synthetic and non-synthetic). These rules apply alongside, and in addition to, the 'farming' rules in the LWRP and HWRRP. Farming land use consents and irrigation scheme discharge permits do not expressly authorise the discharge of fertiliser. Farmers will need to comply with the permitted activity rules in both the NES-F and the rules in the LWRP or obtain resource consent.

<sup>7</sup> This section refers to the regional LWRP rules. The threshold for farming land use consents varies by sub-region and may differ depending on where in Canterbury the activity occurs.

<sup>8</sup> See HWRRP Rule 10.1A and the associated definition of Low Intensity Dryland Farming in the HWRRP.

<sup>9</sup> This section refers to the regional LWRP rules. The threshold for farming land use consents varies by sub-region and may differ depending on where in Canterbury the activity occurs.

<sup>10</sup> Under s15 of the RMA.

<sup>11</sup> Or is managed under an irrigation scheme land use consent.

<sup>12</sup> Under s9 of the RMA.

For other stockholding areas that require consent under the NES-F, these applications must be lodged by 1 January 2022.

### **Intensive winter grazing (effective 1 November 2022)<sup>13</sup>**

Both the NES-F and Environment Canterbury's plans contain provisions that manage the effects of intensive winter grazing activities (although this activity is simply referred to as winter grazing in Environment Canterbury's plans. See the appendix to this note for the relevant definitions).

The NES-F either permits or requires consent for both the land use (s9 RMA) and the associated discharge of contaminants (s15 RMA) from intensive winter grazing activities. However, Environment Canterbury's plans implement a different approach, whereby rules in the plan for the use of land for farming restrict the area of winter grazing that can be carried out as a permitted activity. Where these area limits are exceeded a resource consent is required.

Where the LWRP or HWRRP requires a resource consent, only one aspect of the activity (e.g. the use of land for farming) is consented. Other, associated aspects of the farming activity (e.g. the resultant discharge of contaminants from farming) are authorised by permitted activity rules in the LWRP.

While a regional council resource consent prevails over the NES-F<sup>14</sup>, (so long as it regulates the same activity and was granted prior to 5 August when the NES-F was gazetted<sup>15</sup>), rules in the NES-F generally prevail over less stringent rules in Environment Canterbury's plans. This includes situations where a plan rule permits an activity and the NES-F requires consent<sup>16</sup>.

This means in situations where a farmer already holds a resource consent for farming (e.g. under the LWRP), or where the effects of the farming activity are managed under a discharge permit held by an irrigation scheme, a consent for intensive winter grazing under the NES-F may still be required. This is summarised in Table 2 (below).

***Table 2: Summary of interaction between intensive winter grazing rules in the NES-F and Environment Canterbury's relevant plans***

---

<sup>13</sup> The original effective date for these provisions has been amended, most recently as part the Resource Management (National Environmental Standards for Freshwater) Amendment Regulations 2022. These provisions now take effect on 1 November 2022.

<sup>14</sup> s43B(6) RMA.

<sup>15</sup> s42B(6A) RMA.

<sup>16</sup> s43B(1) and (2)(a) RMA

NES-F Intensive winter grazing requirements (after 1 November 2022)	Existing LWRP or HWRRP authorisation <sup>17</sup>	Type of consents required under NES-F <sup>18</sup>
Intensive winter grazing (this regulation takes effect from 1 November 2022)	Land use and discharge of contaminants both permitted activities under relevant plan	Section 9 land use consent <u>and</u> s15 discharge permit
	Land use is consented, and discharge of contaminants is permitted under relevant plan	s15 discharge permit
	Discharge of contaminants is consented, and land use is permitted under relevant plan	s9 land use consent

*When does an application for resource consent need to be made by?*

The regulations managing existing intensive winter grazing provisions do not take effect until 1 November 2022. After this date, farmers unable to comply with the permitted intensive winter grazing regulations in the NES-F will need to apply for resource consent. Existing intensive winter grazing activities may continue to operate after this date provided there is no increase in the scale or intensity of the activity, and an application for resource consent is lodged with the Council by 30 April 2023<sup>19</sup>.

Regulations managing increases in the area of land used for intensive winter grazing came into effect on 1 May 2021. Farmers who wish to increase<sup>20</sup> the area of land used for intensive winter grazing should refer to the Technical Advice Note dated 27 November 2020 before carrying out the activity. The Technical Advice Note also contains information relating to other restrictions that may be relevant to your activity (e.g. restrictions relating to agricultural intensification).

---

<sup>17</sup> i.e. the activity is permitted under Environment Canterbury's plans, or authorised under a resource consent from Environment Canterbury.

<sup>18</sup> This is on the basis that the farming activity is otherwise consented or permitted under Environment Canterbury plans. Where consents are required but not held, consents for both the land use and the discharge under the NES-F are required.

<sup>19</sup> Per s20A of the Resource Management Act 1991.

<sup>20</sup> Above the maximum area used for intensive winter grazing between 1 July 2014 and 30 June 2019).

## Synthetic Nitrogen Fertiliser Discharge (Effective 1 July 2021)

The LWRP has specific rules to manage the discharge of fertiliser (Rules 5.65-5.67). These rules apply alongside, and in addition to, rules in the plan or consents that regulate the use of land, or discharge of nutrients associated with farming. Farmers will need to comply with the relevant permitted activity rules in the LWRP or apply for a separate resource consent for the discharge of fertiliser.

The NES-F also contains regulations that limit the application of **synthetic nitrogen fertiliser**<sup>21</sup>. It does so by placing a limit (the **nitrogen cap**<sup>15</sup>) on applications of synthetic nitrogen fertiliser to **pastoral land**<sup>15</sup>. The cap restricts applications to a rate of no more than 190 kg/ha/year:

- (a) to all of that land, as averaged over that land; and
- (b) to each hectare of that land that is not used to grow annual forage crops.

Where this cap is exceeded, resource consent is required; however the circumstances under which resource consent may be granted are very limited.

*What can a resource consent provide?*

While the NES-F allows for applications for resource consent to be made to exceed the nitrogen cap, there is very limited scope within the NES-F to grant that application. There are two non-complying consent pathways available to applicants:

1. Demonstrate (via a report from a suitably qualified and experienced practitioner) that the application of synthetic nitrogen fertiliser is in accordance with good practice and will not result in the rate of nitrogen entering water exceeding the rate that would have occurred if applied at the level of the nitrogen cap (i.e. the **baseline rate**<sup>15</sup>) for each contiguous land holding. Any consent granted under this pathway has a maximum duration of 5-years; or
2. Provide, with the application for resource consent, a synthetic nitrogen reduction plan which demonstrates how use of synthetic nitrogen fertiliser (year by year) will be reduced, so that by 1 July 2023 applications do not exceed the nitrogen cap. Consent granted under this pathway must expire on 1 July 2023.

*When does an application for resource consent need to be made by?*

The synthetic nitrogen fertiliser provisions in the NES-F do not take effect until 1 July 2021. After this date, farmers who are unable to comply with the synthetic nitrogen fertiliser regulations in the NES-F will need to apply for resource consent. Farmers who require consent may continue to operate after this date, provided there is no increase in the scale or intensity of the activity and an application for resource consent is lodged with the Council by 1 January 2022.

---

<sup>21</sup> See Appendix for these definitions.

## **Conclusion**

This advisory note provides Environment Canterbury's interpretation as to how the provisions in the NES-F related to the synthetic nitrogen fertiliser cap, stockholding areas (including feedlots) and intensive winter grazing, and how they interact with Environment Canterbury's planning framework and existing resource consents.

This guidance does not constitute legal advice and should not be relied on as such.

## Appendix: Definitions

### Intensive winter grazing definitions

The NES-F refers to intensive winter grazing, while the LWRP and HWRRP both refer to winter grazing. These are similar definitions but contain important differences. These definitions are reproduced below.

#### HWRRP definition

*Winter grazing* means the grazing of cattle within the period 1 May to 30 September where the cattle are contained for break-feeding of in-situ brassica and root vegetable forage crops.

#### LWRP definition

*Winter grazing* means the grazing of cattle within the period 1 May to 30 September, where the cattle are contained for break-feeding of in-situ brassica and root vegetable forage crops or for consuming supplementary feed that has been brought on to the property.

#### NES-F definition

*Intensive winter grazing* means grazing livestock on an annual forage crop at any time in the period that begins on 1 May and ends with the close of 30 September of the same year.

### Feedlots and stockholding area definitions

What is considered a **stockholding area** is different in the LWRP and NES-F, although there is a clear overlap. For clarity, the relevant definitions are reproduced below:

#### LWRP definition:

*Stockholding area* means an area of land in which the construction of the holding area or stocking density precludes maintenance of pasture or vegetative groundcover, and is used for confining livestock for more than 30 days in any 12-month period or for more than 10 consecutive 24-hour days at any time. For the avoidance of doubt, this definition includes; milking platforms, feedpads, wintering pads, and farm raceways used for stockholding purposes during milking; but excludes sheep and cattle yards constructed on pasture or bare soil.

#### NES-F definitions (arranged in order of relevance):

*Feedlot* means a stockholding area where cattle:

- (a) are kept for at least 80 days in any 6-month period; and
- (b) are fed exclusively by hand or machine.

*Stockholding area*—

(a) means an area for holding cattle at a density that means pasture or other vegetative ground cover cannot be maintained (for example, feed pads, winter pads, standoff pads, and loafing pads); but

(b) does not include an area used for pastoral purposes that is in the nature of a stockyard, milking shed, wintering barn, or sacrifice paddock.

*Sacrifice paddock* means an area on which:

- (a) cattle are repeatedly, but temporarily, contained (typically during extended periods of wet weather); and
- (b) the resulting damage caused to the soil by pugging is so severe as to require resowing with pasture species.

### **Synthetic Nitrogen Fertiliser Cap Definitions**

These NES-F provisions rely on the following definitions:

*Baseline rate* means the rate at which nitrogen may enter water if—

- (a) nitrogen, as a component of the synthetic nitrogen fertiliser, applied to the land in pastoral land use in a contiguous landholding at the highest rate that does not exceed the nitrogen cap; and
- (b) the synthetic nitrogen fertiliser applied to the land in pastoral land use in the contiguous landholding using the good practices set out in the practitioner's report.

*Contiguous landholding* means each area of 1 or more contiguous parcels of land within a farm.

*Example:*

A farm is managed as a single operation on 50 ha of land, comprising 2 parts: 20 ha of contiguous parcels and a separate 30 ha of contiguous parcels. Each of those parts is a contiguous landholding.

*Nitrogen cap*, for the land in pastoral land use in a contiguous landholding, means the application of nitrogen at a rate of no more than 190 kg/ha/year:

- (a) to all of that land, as averaged over that land; and
- (b) to each hectare of that land that is not used to grow annual forage crops.

*Pastoral land use* does not include the use of land for the grazing of livestock on the stubble of a crop that has been harvested after arable land use.

*Synthetic nitrogen fertiliser:*

- (a) means any substance (whether solid or liquid) that:
  - (i) is more than 5% nitrogen by weight; and
  - (ii) is applied to any plant or soil as a source of nitrogen nutrition for plants; and
- (b) includes any manufactured urea, diammonium phosphate, or sulphate of ammonia to which paragraph (a) applies; but
- (c) does not include a compost, soil treatment, or fertiliser that—
  - (i) is derived from plant or animal waste or residue; and
  - (ii) is minimally processed (for example, by being composted, mixed, dried, and pelleted).