

FACTSHEET: NITROGEN REPORTING

The National Environmental Standards for Freshwater Regulations 2020 (NES-FW) introduced a synthetic nitrogen cap (effective from 01 July 2021) ensuring that nitrogen application on pastoral land does not exceed 190kg/ha synthetic nitrogen for the proceeding 12-month period. This is an absolute hectare limit, not a paddock average. It is possible to apply for a short duration non-complying consent if you need to exceed this limit, but this would be challenging to obtain.

Synthetic nitrogen fertiliser is classed as any substance (solid or liquid) that is more than 5% nitrogen by weight and is applied to any plant or soil to aid plant growth. It does not include natural compost, manure or plant/animal derived material that has beneficial fertiliser properties, such as dairy effluent or composting bedding material from pigs or chicken manure. However, if you mix manufactured and biological fertilisers, and the combined nitrogen content reaches more than 5% of the dry weight, this is considered synthetic fertiliser and forms part of your 190kg total.

The cap relates to all property owned and operated in the same farming operation which is contiguous in nature (e.g., this would include a dairy support and an adjoining dairy platform) and applies to all grazed pastoral land. Only dairy farms are required to report data annually to Environment Canterbury (ECan). The cap does not apply to non-grazing land or land less than 20 hectares.

Grazed land refers to 'pastoral use land' used for grazing of livestock, including pasture, annual forage crops and any other grazed lands. Pastoral use commences when you start preparation for crop or pasture and ends when grazing ceases. Nitrogen use is not capped between the end of grazing and the harvest.

Examples of Contiguous Landholdings

The **yellow** farm has one continuous block of land. Although it is crossed by roads and streams, its paddocks adjoin both sides of those roads and streams and so form one contiguous landholding (labelled A).

The **blue** farm has two contiguous land holdings (A and B) separated by land not belonging to the farm. Each comprises a block of adjoining paddocks, some of which straddle roads.

The **red** farm has four contiguous landholdings - three small ones (A, C and D) and one large one (B) with multiple adjoining paddocks straddling roads.

If you apply more than 190kg on forage crops on a block of land this needs to be offset against a pastoral block. For example, if you apply 200kg/N/ha to a forage crop, then 180kg/N/ha can be applied to a pastoral block.

You need to know how much land is covered by each land use:

- grazing for pasture
- annual forage crops
- other pastoral uses (crop stubble, harvested for silage, baleage or other feeds)

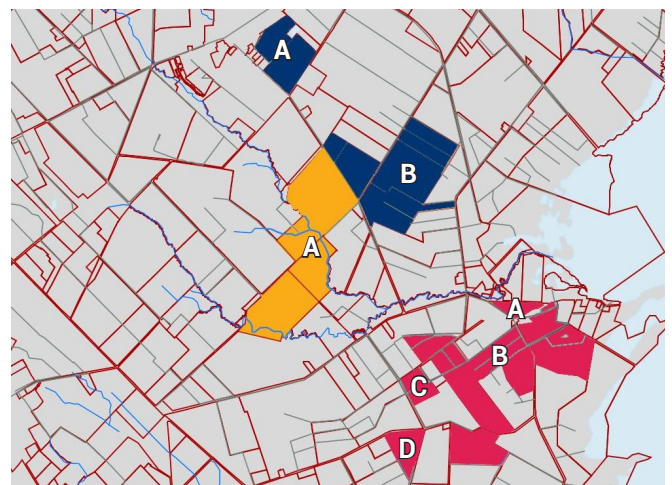
You also need to know how much nitrogen fertiliser is spread to each land use, and a breakdown of the fertiliser's nitrogen content. If you mix multiple nitrogen fertilisers, then you will need to break this down for each product and then combine to get the application rate per hectare.

Other pastoral land use is considered any land where some grazing of livestock occurs during the year even if it's not the primary land use.

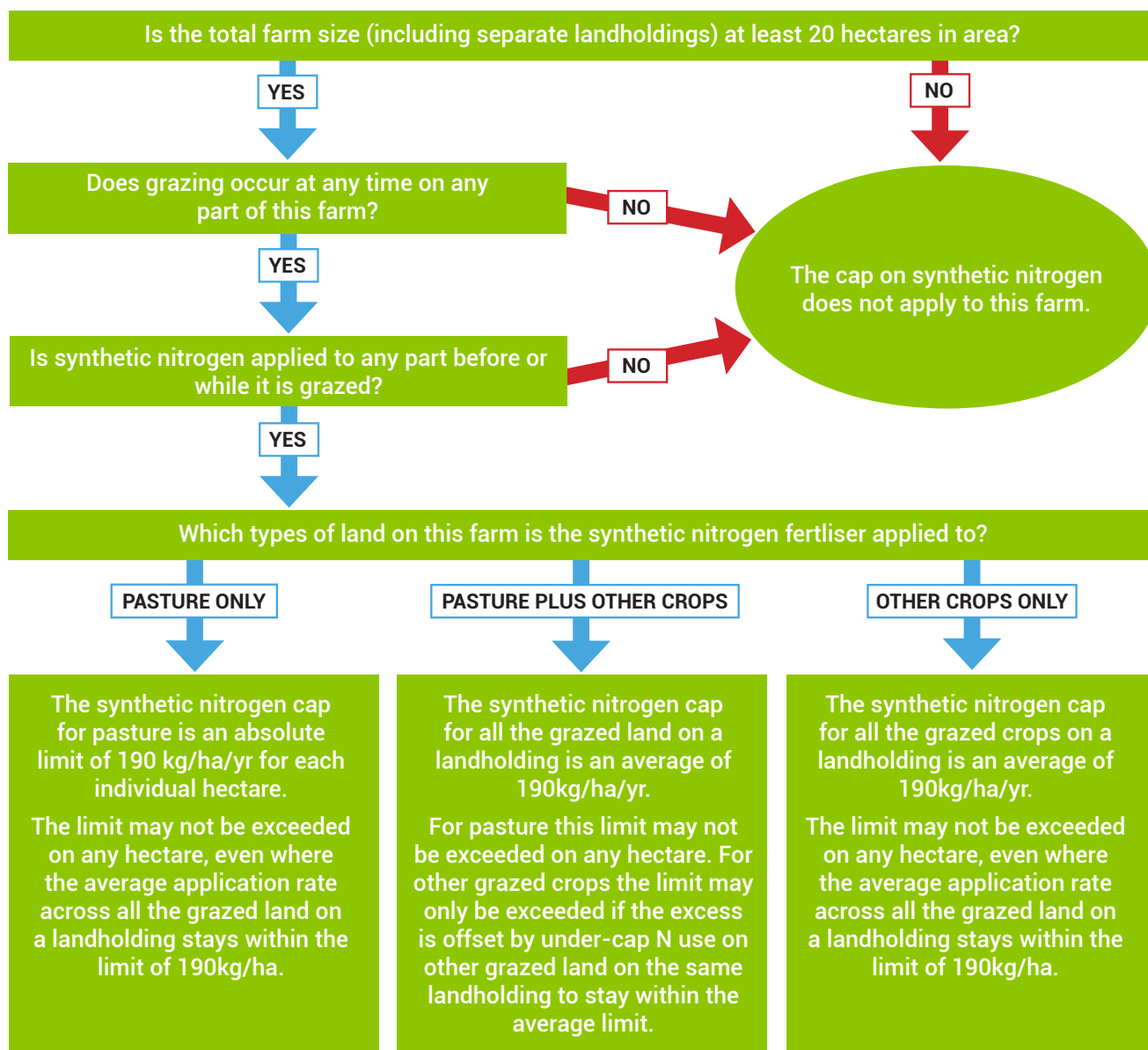
If you spread your own nitrogen fertiliser then you will need to accurately calibrate your equipment and be able to provide proof of placement for reporting (annually, or if requested). It is likely you will need GPS technology in the spreader and tractor to show compliance.

Sloped land where nitrogen use is close to the 190kg cap needs to be monitored carefully to ensure you do not exceed the cap.

If you grow annual forage crops but lift or remove these from where it is grown, then the N cap does not apply unless you have livestock on this land at any period during the 12-month period.



HOW DOES THE NITROGEN CAP APPLY TO DIFFERENT FARMING OPERATIONS?



REPORTING TO ECAN (DAIRY FARMS)

The landowner is responsible for reporting unless it is delegated to land managers (i.e., in a lease or employment agreement).

Reporting must be submitted to Ecan by 31 July annually for all dairy farms, for the period 01 July to 30 June. The following evidence will be required for each farming operation:

- Total area (in hectares) of farming operation, separated into:
 - > area used for pasture
 - > area used for annual forage crops
 - > area used for any other land use.

- Receipts for synthetic nitrogen fertiliser purchased.
- Synthetic nitrogen applied and for each type of product, the percentage N component by weight.
- The percentage weights of nitrogen fertiliser applied to the three land uses (pasture, forage crops and other land use).
- Application dates for the nitrogen fertiliser.