



Ministry for the  
**Environment**  
*Manatū Mō Te Taiao*

Ministry for Primary Industries  
Manatū Ahu Matua



# Intensive Winter Grazing Module – Template

November 2022



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# Appendices

## Appendix 1: Intensive winter grazing template

**Note:** The plan you develop using this template needs to be bespoke, locally and regionally adaptable to your farm so that you can manage your specific risks and ensure your focus is directed at freshwater health and animal welfare, rather than just regulation adherence.

You should fill out this template using the guidance in the Intensive Winter Grazing Module (the Module). The Module includes links and further resources to help you identify the risks associated with your winter grazing and the appropriate mitigations.

Regional councils and industry groups will also have IWG plan templates which may be more specific to your region or sector.

**Purpose:** To support you as a farmer to undertake winter grazing activities. This completed plan should provide sufficient detail and content to manage your winter grazing activity. It is important you check you relevant regional rules to ensure you can comply and make sure these are built into your plan. The national NES IWG rules (Regulation 26(6)) requires anyone operating under the Permitted Activity requirements of Regulation 26 to provide “any information reasonably required by a regional council enforcement officer for the purpose of monitoring compliance with this regulation”. This plan will be helpful in demonstrating to an enforcement officer that you have met the requirements of the regulations.

**How to use this:** This document is not a tick box exercise and will require you to think through why and how you will be doing what you plan to do. The result should be fewer environmental impacts, better animal health and increased soil health. Note that this will be a starting point and further detail will be required depending on the location, form, and extent of your winter grazing. **If you intend to expand your winter grazing activities, you will need a consent under the National Environmental Standard for Freshwater interim intensification rules.** It is recommended you talk to your regional council if you think you may need a consent.

**Context:** You need to identify what effects are likely to come from your winter grazing activities. This will depend on the land you are farming as well as your management of it. The plan you create using this template will provide you, and any others who may require a copy (for example your regional council), with assurance that you are doing a good job managing the risks that are present in your specific situation.

**Process:** This should be a ‘living’ document and adjusted overtime as needed. There are four important steps that this document takes you through:

**Step 1: PLAN** – This is where you gather information, assess what risks are present and possible, and make a plan to manage the risks you identified. In this document, this is Step 1.

**Step 2: DO** – This is where you implement your management actions and weather plan. Make sure you are also monitoring your impacts. In this document, this is Step 2.

**Step 3: CHECK** – This is where you check up on the implementation of your management plan and your progress against your plan. In this document this is Step 3.

**Step 4: REFLECT AND REVIEW** – This is where you review and adjust the plan as needed. You can then you start the steps again in preparation for the next winter season.

## Step 1: Farm and Cropping Winter Management Plan

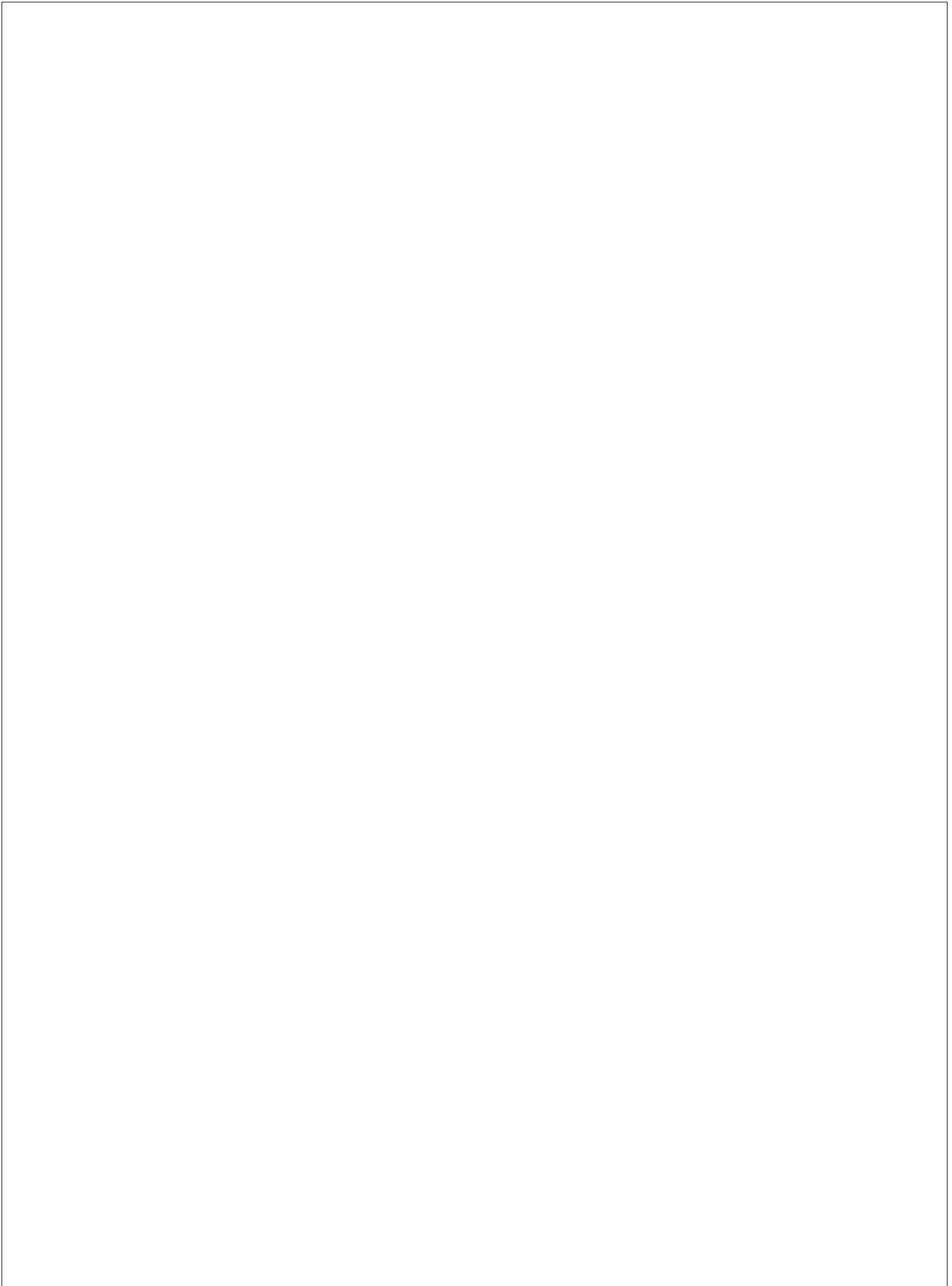
### Background Information

Actual years covered by this plan:	
Farm name:	Water management zone (if applicable):
Owner (if applicable):	Water management sub zone (if applicable):
Manager:	Ground water management zone (if applicable):
Contact details – phone:	Email:
Mailing address:	
Location of property (a different management plan is expected to be completed per property):	
Legal description and agribase number:	
Total farm area (hectares):	
Maximum area used for IWG every year:	
Greatest area (hectares) used for IWG between 1 July 2014 – 30 June 2019:	

Note this is the reference period for the interim intensification rules in the NES-F for winter grazing. Under the new rules the area of the farm that is used for intensive winter grazing must be no greater than the maximum area of the farm that was used during the reference period. Any additional intensive winter grazing will require a consent.

## Farm Mapping and Paddock Selection

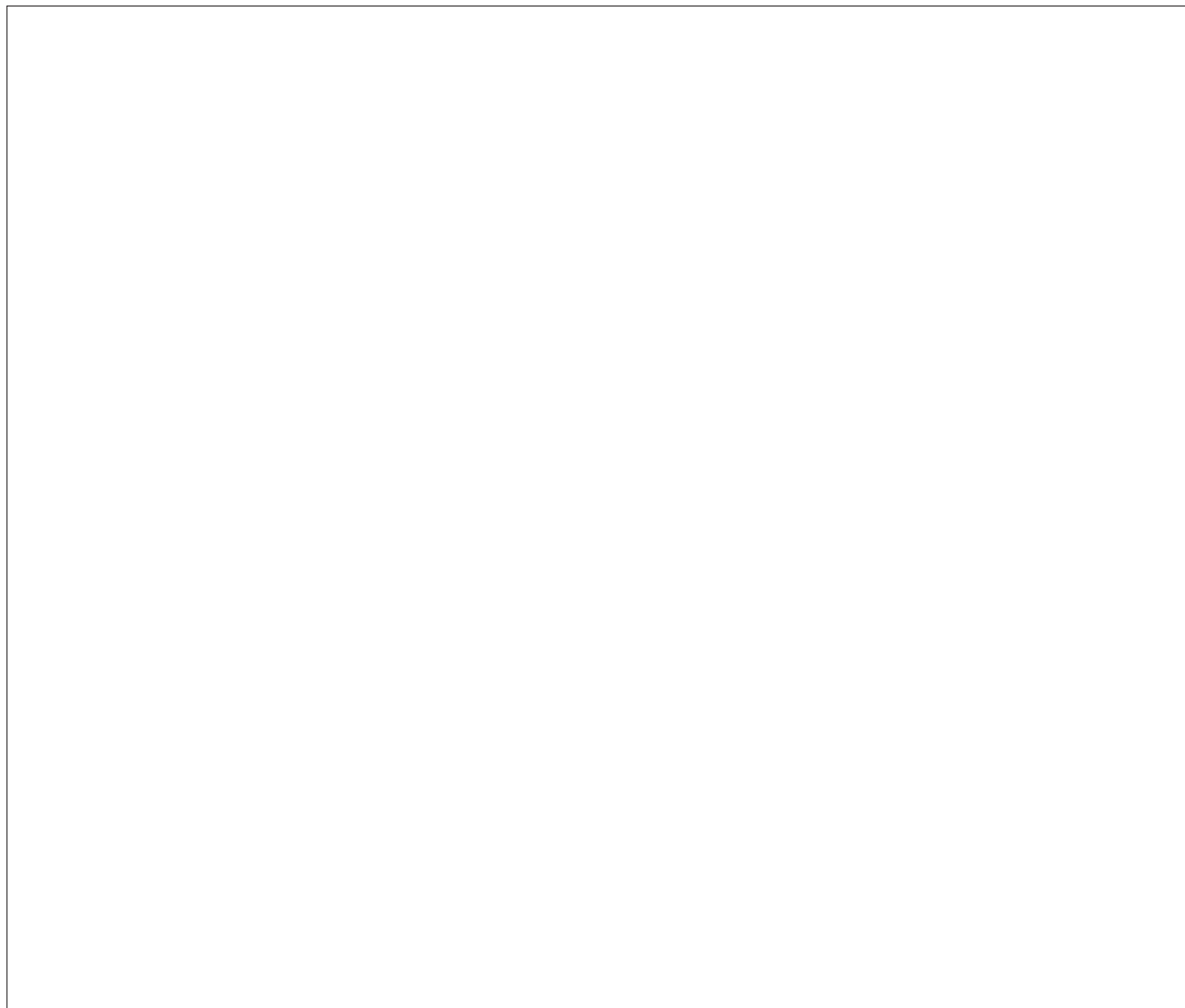
All areas proposed to be winter cropped and grazed on the farm need to be identified on a map. Use this section to include a farm map showing paddocks to be used for wintering. Please include key features like paddock boundaries, and waterways, CSAs, wetlands, bores, and drains.

A large, empty rectangular box with a thin black border, intended for the user to draw a farm map showing paddocks, waterways, CSAs, wetlands, bores, and drains.

## Catchment values and risk identification

You should consider your catchment's values. These may include mahinga kai, swimming, fishing and drinking water sources. Your local regional plan is a good place to start to identify the values relevant to your waterway. Your regional council may also be able to help you identify sensitive sites like the closest drinking water abstraction point.

### Catchment values



Next you should identify what risks your winter grazing activity may pose and what the impacts may be.

You can identify risk at a paddock or land management unit scale. A land management unit is an area of land that can be farmed or managed in a similar way because of underlying physical similarities. For winter grazing activities, you can group together paddocks that have similar slope or soil characteristics.

Further information to help you identify risks can be found at the following links:

- [beeflambnz.com/wintergrazing](https://beeflambnz.com/wintergrazing)
- [www.dairynz.co.nz/feed/crops/wintering-cows-on-crops/](https://www.dairynz.co.nz/feed/crops/wintering-cows-on-crops/)
- <https://www.deernz.org/deer-hub/farm-and-environment/wintering-feed-systems/>

You should do a separate risk identification for each paddock you are considering for winter grazing. You will likely find that some paddocks have less risks than others and therefore the mitigations you will need to put in place are likely to be less onerous.

In the next section, you will describe how you will be managing the risks associated with your planned winter grazing activities.

## Appendix 2: Intensive Winter Grazing – Risk Assessment Table

This table provides an overview of some of the key risk areas and shows the relative risk (lower or higher) for each factor. This is only intended to provide a guide on where you may need to consider additional or more extensive mitigations. In some cases, a combination of very high-risk factors may suggest that you may want to think about not using that paddock, and an alternative location or winter feed option may need to be utilised.

Before and during IWG, all factors will need to be considered together, on a case by case, catchment and regional basis. Please seek advice from your regional council or an industry professional on how these factors interact and their cumulative environmental risk for your farming situation.

Factor	Lower risk*	High risk
<b>Contaminant source risk</b> (a reflection of pugging risk)		
<b>Slope</b> of IWG catchment for the CSA (as well as slope of area directly adjacent to CSA)	Flat	Risks increase with higher slopes. (Slopes over ten degrees have higher risks, but any slope will increase mobilisation risk)
<b>Rainfall</b>	Low	High
<b>Soil type</b>	Free draining (noting that this relates to contaminant risks other than nitrogen for which this would still be high)	Heavy e.g., with high clay content
<b>Area</b> of IWG in your farm (more potential to overwhelm from shear volume)	Small	Large
<b>Intensity</b> of IWG (e.g., stocking density, duration of grazing, type of stock etc.)	Low intensity	High intensity
<b>Type</b> of crop	Roots will be left intact	Full plant will be removed with bare soil
<b>Ability to resow</b> new crop after IWG to reduce bare ground exposure	Likely	Not likely
<b>Critical Source Area and transport pathway risk</b> (a reflection of connectivity between CSAs, waterbodies to contaminant area)		
CSAs	Few CSAs	Lots of CSAs
Connectivity risk (This risk should consider rainfall events)	Waterbodies and CSAs are likely to remain dis-connected from IWG paddocks	IWG paddocks and CSAs will be connected to connected waterbodies
<b>Receiving environment risk</b> (a reflection of risk to downstream environments)		
Proximity	Distant to sensitive downstream environments	Near or adjacent to
Do you know if there are sensitive ecosystems in nearby waterbodies?	Less sensitive	Highly sensitive e.g., connected to waterbodies with poorer flushing ability such as estuaries

\* Note that lower risk is meant in the context of IWG and all intensively grazed areas in winter carry a high risk.

## Risk Assessment

Consider the above risk factors and any others relevant to your farm.

**Contaminant source risk**  
(a reflection of pugging risk)

**Critical Source Area and transport pathway risk**  
(a reflection of connectivity between CSAs, waterbodies to contaminant area)

**Receiving environment risk**  
(a reflection of risk to downstream environments)



## Risk mitigations and management

### Adverse weather plan

Remember to refer to the stock holding area regulations in the NES-F. If you are unsure, please speak with your regional council. More information on stock holding areas can be found here: [Stockholding-definition-guidance-v2.pdf \(environment.govt.nz\)](#)

*Example: when heavy rain is forecast, I will prepare laneways and grassed paddocks to take stock as needed. If soils are becoming too saturated or stock health is at risk due to flooding or excess water I will shift my stock to a grassed paddock.*

## Appendix 3: Key soil, weather and operational factors contributing to decisions on whether resowing is practicable

Variable	
<b>Soil conditions</b>	Dry, capped, compacted, wet and/or pugged soils. Depending on the state of the soil surface, differing approaches to cultivating and/or sowing might be required. Some ground conditions might be suitable to direct drilling immediately, while others require a period of drying before preparation for sowing can commence.
<b>Weather conditions</b>	Recent heavy rainfall, wet soil conditions and/or extreme weather events can significantly delay operational attempts to re-establish ground cover. Attempting to establish ground cover under such conditions can markedly increase the risk of soil compaction from wheel traffic and various forms of soil cultivation.
<b>Region/climate</b>	Regions with high winter rainfall may require differing approaches to cultivation and the species used. Colder and/or wetter regions will likely be more difficult to establish covers during the winter or early spring period.
<b>Soil type</b>	Heavy-textured soils may require a longer period of fine weather for conditions to be suitable for cultivation and/or sowing. In addition, more intensive cultivation may be required to successfully establish a crop or new pasture, given heavy soils are more susceptible to a greater degree of pugging from livestock treading.
<b>Stock class and winter forage species</b>	Heavier livestock (eg, cattle cf. sheep) can result in more severe pugging, making it more challenging to sow early after IWG. In addition, some winter forage crops achieve higher yields resulting in higher stocking densities and a greater degree of pugging.
<b>Paddock contour and aspect</b>	Increasing steepness of a paddock will incrementally become more challenging to establish vegetation as ground cover, requiring a differing set of soil and weather conditions for sowing to be achieved. Maintaining vegetated buffer strips in critical source areas can help to reduce the run-off risk in sloped paddocks.  South facing slopes are likely to dry out slower, potentially delaying when ground covers might be able to be established.
<b>Availability of appropriate machinery</b>	A shortage of local contractors and/or the necessary equipment to re-establish ground cover may make ground cover establishment impractical, even where the soil and environmental conditions are suitable.
<b>Availability of appropriate seed/cultivars</b>	Not all species are suitable for sowing in winter months, and depending on the season and the demand for seed, sourcing the appropriate seed could be a barrier to sowing when conditions allow. Purchase of seed early in the season can help to mitigate this risk.
<b>Implications to the crop rotation</b>	In dryland systems and/or in dry winters where soil moisture is not fully replenished, establishing vegetation too early can deplete valuable soil moisture for establishment of the next spring or early summer high value crop, and in turn compromise the overall performance of the crop rotation.



