**Essential Freshwater 2022 Amendments** 

# Report and recommendations on intensive winter grazing amendments

Within the Resource Management (National Environmental Standards for Freshwater) Regulations 2020







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# Introduction

# Intensive winter grazing practices

Intensive winter grazing (IWG) is a farming practice where livestock (cattle, sheep, deer) are confined over winter to outdoor feeding areas planted with annual forage crops (eg, swedes, kale and fodder beet).

Annual forage crops are a part of some pastoral farm production systems. They provide feed when there is no or low pasture growth and contribute to pasture renewal rotations for improved production. However, it is widely acknowledged that, if done poorly or too extensively, IWG can have serious negative effects on both animal welfare and the environment, particularly freshwater and estuary health.

Due to the intensive nature of this grazing practice, which strips the protective vegetative cover from the land, it results in the increased discharge of nutrients, sediments and microbial pathogens into surface water and groundwater. In some locations and with good practice these impacts can be reduced. Carried out too extensively, on heavy soils and steep slopes with poor practices, more extreme impacts occur.

# Introduction and deferral of the intensive winter grazing regulations

The *Essential Freshwater* regulatory package introduced the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-F), which are directed at making early changes to high-risk activities such as IWG. The NES-F was made under the Resource Management Act 1991 (RMA).

The NES-F introduced, among other things, regulations to manage the risk of adverse environmental effects from IWG. These regulations were due to come into effect on 1 May 2021.

Since the NES-F was created, the Ministry for the Environment (MfE) and the Ministry for Primary Industries (MPI) have received feedback from various stakeholders that aspects of the IWG regulations in the NES-F may require modification to support effective implementation and achieve improved environmental outcomes. The Southland Intensive Winter Grazing NES Advisory Group (SAG) was set up to provide recommendations to the Government on addressing implementation issues with the IWG regulations. It produced a report in December 2020 identifying practical implementation issues and providing recommendations.

As a result of that feedback on the practical challenges of meeting, implementing and enforcing the new requirements, commencement of the IWG regulations was deferred for one year (to 1 May 2022). That deferral gave time for further improvement in IWG practices, increased monitoring and compliance, and consideration of changes to address the implementation issues.

# How the intensive winter grazing regulations work

The IWG regulations prevent expansion of IWG, while providing three pathways for farmers to undertake the activity.

#### These three pathways are:

- Pathway 1: IWG activities are permitted if a farmer complies with the default conditions set out in the NES-F.
- Pathway 2: IWG activities are permitted if a farmer obtains a certified freshwater farm plan (FW-FP). (Under this pathway, the certified FW-FP must demonstrate that any adverse effects in relation to the IWG are no greater than those allowed for by the default conditions).
- Pathway 3: if neither Pathway 1 nor Pathway 2 can be met, a farmer needs to obtain a resource consent for IWG activities.

National environmental standards cannot permit an activity that has significant adverse effects on the environment. The default conditions that currently form the basis of Pathway 1 and Pathway 2 therefore set out minimum requirements that must be met (or an equivalent management of effects through a certified FW-FP) for the IWG practice to be permitted and not have any significant adverse effects on the environment. If those conditions cannot be met, a resource consent can be applied for, under which any adverse effects can be managed in a site-specific manner.

In addition to the above, the IWG regulations include interim restrictions on expansion (ending 1 January 2025). These require the area of land used for IWG on a farm be no greater than the area used on that farm for IWG during the reference period (1 July 2014 to 30 June 2019). These restrictions on expansion came into force on 1 May 2021 and continued to apply throughout the deferral of the IWG regulations.

# Consultation on proposed changes

The Government proposed a number of amendments to the NES-F to address the implementation issues. Those proposed amendments were publicly notified on 26 August 2021 through a consultation document Managing intensive winter grazing: A discussion document on proposed changes to intensive winter grazing regulations (the discussion document). Submissions were sought by 7 October 2021.

The scope of these amendments was focused on how to make permitted activity default conditions more practical to comply with while still managing the environmental effects of IWG. It did not consider wider changes to the NES-F or its structure (eg, the use of a permitted activity pathway), or changes to regulations restricting expansion of area. These aspects of the NES-F were the subject of previous public consultation and a significant amount of analysis and advice before being agreed by Cabinet in late 2020. They are not examined any further in this report.

<sup>&</sup>lt;sup>1</sup> Resource Management Act 1991, s 43A(3).

#### **Submissions**

The consultation ran from 26 August 2021 to 7 October 2021. The Ministry received a total of 85 unique submissions, from iwi/Māori, the primary sector, district and regional councils, ENGOs and individuals.

We provide detailed information on the submissions received, including a breakdown by sector group, location, and issues, in a separate summary of submissions. We will make the submissions publicly available.

# **Report and recommendations**

This report provides recommendations to the Minister for the Environment and Minister of Agriculture on proposed amendments to the regulations managing IWG within the NES-F. The proposals outlined in this document were informed by submissions on the discussion document.

Each section of the report provides:

- background on the topic
- the proposed amendment(s), as set out in the discussion document
- a summary and analysis of submissions
- recommendations to the Minister for the Environment and Minister of Agriculture.

Additional analysis of the issues and submissions covered in this report will also be available in the summary of submissions, regulatory impact statement and the evaluation report prepared in accordance with section 32 of the RMA, which will all be published on the MfE website once available. This report should be read alongside those documents for full context.

# **Summary of recommendations**

Following analysis of the submissions, some amendments to the NES-F are recommended in relation to the regulations managing IWG.

Taken together, we consider the cumulative impact of the proposed amendments meets the intent of the regulations to manage the adverse environmental impacts of IWG while supporting effective implementation of the regulations. We consider the proposed amendments address stakeholders' concerns about the workability of the conditions (eg, resow and pugging) and that the proposed technical amendments (eg, definition of annual forage crop) improve clarity around where the regulations apply. For example, clarifying that the slope is calculated over the area of land being used for IWG, as opposed to across the whole paddock, manages IWG activity specifically while improving the ability of farmers to calculate slope. The amended conditions, along with the new condition requiring protection of critical source areas, will still collectively manage environmental effects of IWG activity.

Below is a summary of the main recommendations for ministers to consider in this report. The recommendations or options are analysed further in the following chapters. Note the recommendations relate to underlying policy, and not the specific drafting that will be used to achieve these policies.

Table 1: Summary of recommendations – amendments to the default conditions in the IWG regulations

Default condition	Pocommondations
Default condition	Recommendations
Area (reg 26(4)(a))	Make no change: retain the area limit as 50 hectares or 10 per cent of the farm, whichever is greater. (Preferred)
(see 'Area' below)	Preferred option because:
	managing extent is an important tool for managing adverse effects
	of the ability to increase the area beyond the area limit, subject to a resource consent or FW-FP conditions
	it will be clarified that the area to be calculated is only the area in IWG.
	AND
	Develop clear guidance material to clarify how the total area is calculated (ie, the total area used for IWG (cultivated and grazed) in that year).
Slope (reg 26(4)(b)) (see 'Slope' below)	Amend to measure slope as a <i>maximum</i> threshold (rather than measuring as <i>mean slope</i> at the paddock scale), and clarify that this slope threshold only applies to the area of land being used for IWG (ie, cultivated and grazed).
(See Stope Below)	AND
	Specify that slope is measured as the slope across any 20-metre distance.
	AND
	Retain the slope threshold of 10 degrees.
Pugging (reg 26(4)(c)) (see 'Pugging' below)	Remove the pugging condition prescribing set restrictions on depth and area, and instead manage pugging through a stand-alone duty that requires farmers to take all reasonably practicable steps to minimise the effects on freshwater of any pugging that occurs on that land; and make any consequential amendments required to ensure this works together with the FW-FP pathway.
	AND  Develop clear guidance material with relevant stakeholders to ensure effective implementation of the pugging stand-alone duty and ensure farmers and councils have a shared understanding of what practicable steps are.
Buffer zones and subsurface drains	Amend the definition of 'drains' to exclude subsurface drains in relation to the IWG regulations.
(reg 26(4)(d))	AND
(see 'Buffer zones' below)	Note that we also recommend excluding subsurface drains from the definition of 'critical source areas'. (See Critical source areas.)
Resow (reg 26(4)(e))	Remove the resow condition requiring farmers to resow by a prescribed date, and instead manage replanting through a stand-alone duty that requires farmers to ensure vegetation
(see 'Resow' below)	is established as ground cover over the whole area of that land (used for IWG) as soon as practicable after livestock have finished grazing the land; and make any consequential amendments required to ensure this works together with the FW-FP pathway.
	AND
	Develop clear guidance material with relevant stakeholders to ensure the effective implementation of this stand-alone duty and to give more clarity as to what steps could demonstrate that farmers are resowing as soon as practicable.
Critical course	Include a new condition requiring that CSAs must be protected (uncultivated and
Critical source areas (CSAs) (new condition) (see 'CSAs' below)	ungrazed) during the period that IWG can take place (only) (ie, 1 May to 30 September each year), and that ground cover (other than annual forage crops) be maintained throughout that period.
areas (CSAs) (new condition)	each year), and that ground cover (other than annual forage crops) be maintained

Default condition	Recommendations
	<ul><li>includes a connection to a waterbody</li><li>excludes subsurface drains.</li></ul>
Definitions (see 'Definitions' below)	Amend the definition of 'annual forage crop' to avoid capturing crops that are not intended to be included.
Deferral (see 'Deferral' below)	Defer the regulations, to come into effect on 1 November 2022 instead of 1 May 2022.  AND  Clarify the relationship between IWG and temporary existing use rights, by amending the definition of 'intensive winter grazing' to clarify that it is a continuous, year-round activity with sowing, growing and grazing phases, while making any consequential changes necessary to avoid imposing additional controls on the non-grazing phases of the activity.

# Regulation 26(4)(a) - Area

# **Background**

Regulation 26(4)(a) of the NES-F currently sets a condition that:

"at all times, the area of the farm that is used for intensive winter grazing must be no greater than 50 ha or 10% of the area of the farm, whichever is greater".

The SAG raised concerns about the area condition and considered that it may drive the wrong behaviours. For example, it may encourage farmers to undertake IWG more intensively to comply with the condition which may also have adverse animal welfare impacts. It may also discourage farmers from changing to lower yielding or mixed crops that may provide better environmental outcomes.

The SAG recommended no change, as long as the FW-FP pathway exists.

# **Proposed amendments**

We did not propose any amendment to this condition in the discussion document. To meet the objectives of the *Essential Freshwater* regulatory package, we consider that a control on the extent of IWG is an important tool (in conjunction with the temporary expansion restrictions)<sup>2</sup> to ensure the total extent of this high-risk activity is managed effectively.

This default condition must be met to comply with the permitted activity pathway based on the default conditions. However, the other two pathways remain open to farmers wishing to use a larger area: either through compliance with a certified FW-FP (once available) that demonstrates no greater adverse effects than under the default conditions, or through a resource consent.

### **Submissions**

### Changes to the area limit

Key themes:

Submissions were divided on this point: some (including a number of regional councils) supported retaining the area limits, while others (also including a number of regional councils) were concerned these area limits risk driving the wrong behaviours. Those behaviours could have adverse environmental effects as well as negative impacts on animal welfare, as noted by the SAG (for example, the intensification of the area to

Regulations 28-31 make it a discretionary activity to expand IWG activity beyond the total area used on that farm for IWG during the reference period (1 July 2014 to 30 June 2019). These restrictions do not apply if the relevant regional council has notified amendments to relevant planning documents giving effect to the National Policy Statement for Freshwater Management 2020 (NPS-FM). These restrictions are temporary and will be revoked on 1 January 2025, by which time regional councils should have given effect to the NPS-FM.

- achieve higher yield crops, higher stocking density, and risk of feed shortage as farmers move away from IWG or reduce the area used).
- Some councils provided an indication of the number of consents they expect with these
  area limits being retained, and this information will be included in the regulatory impact
  statement. For example, Environment Canterbury expects 1,000 to 1,500 resource consents,
  while Taranaki Regional Council notes most existing IWG will fall within the threshold.
- A small number of these submitters (including regional councils) suggested the temporary expansion restrictions (which prevent expansion of IWG beyond the total land used on that farm for IWG during the reference period) are sufficient and more effective than having this set area limit (of 50 hectares or 10 per cent of the farm, whichever is greater). However, they also noted there may be some difficulties with having sufficient data of the land used for IWG during the reference period and compliance would rely on farmers self-identifying areas used.
- Several submitters suggested the condition should set a higher area limit, such as 100
  hectares, to allow the sowing of less intensive crops such as kale. They suggest a larger
  area would provide more space for livestock to disperse across which may benefit both
  environmental and animal welfare outcomes.
- Several submitters were concerned these area limits would result in many resource
  consents being required, until certified FW-FPs are available, but others noted these limits
  are sufficient for the majority of IWG in their area, or that they 'can live with' these limits.
- Some submitters noted there is no clear reason given as to why no change was proposed for the area limit when the SAG had expressed concerns with this condition.
- A small number of submitters expressed support for retaining the area limits as they considered the expansion of IWG should be limited to prevent adverse impacts.
- A large number of submissions were entirely silent on the area limit condition.

#### Calculation of area

A few submitters suggested the area calculation should only relate to the land directly used for IWG (ie, cultivated and grazed), and not the whole of a paddock containing IWG in some parts of it.

# **Analysis**

#### Changes to the area limit

We do not propose making changes to the area limit condition given the intent of the regulations to manage the extent of IWG as a high-risk activity. National environmental standards cannot permit an activity that has significant adverse effects on the environment. We consider a control on the total extent of IWG through this area limit (together with the temporary expansion restrictions) is an important tool in managing adverse effects of IWG. We note that while the SAG highlighted the potential for perverse outcomes from the area limit as raised in submissions, it did not recommend changing the condition so long as the activity could be undertaken through the FW-FP pathway.

It is still possible for a farmer to use a larger area if the activity is managed through a certified FW-FP (once available) or a resource consent. The certified FW-FP and resource consent pathways are the appropriate mechanisms to manage this, as they have the flexibility to recognise and require appropriate mitigation options to be used if undertaking IWG across a larger area.

Some submitters suggested retaining this condition but increasing it to 100 hectares. This may address some of the concerns about these limits inadvertently encouraging intensification, and allow space for better and less intensive practices across a larger area. However, allowing a larger area as a permitted activity condition would not provide a guarantee that the larger area would in fact be used less intensively.

In principle, it would be possible to allow a larger area if the NES-F specified a control that would ensure this larger area would be used less intensively. For example, the control could vary the area limits based on crop yield and/or dry matter per hectare, that is, allow a larger area provided it produces the same amount of dry matter or has the same crop yield per hectare. This might restrict the larger area to a less intensive crop, and therefore support the same number or fewer stock. However, it could result in larger areas of bare ground and of pugging as these depend on other factors (such as weather conditions, and break feeding and back fencing practices). For these reasons we do not recommend this option.

We also note that trying to discriminate between crop types, dry matter and/or crop yield per hectare or similar could lead to additional implementation issues. Certified FW-FPs or resource consents remain the best way to assess this and ensure that suitable mitigations are in place, and monitored and enforced.

A number of submitters (including regional councils) recommended the area condition be removed entirely, to rely solely on the temporary expansion restrictions to manage the extent of IWG³ (ie, remove the set area limits and rely instead on restricting the area to that previously used for IWG on that farm during the reference period). These submitters considered those expansion restrictions are sufficient to manage the risks associated with the total extent of land used for IWG. However, as some of these submitters acknowledged, the expansion restrictions rely on having reliable and accurate data of the area previously used for IWG during the reference period. There may be uncertainties with that data, which would mean relying on farmers self-identifying the total area used during that time. The quality and availability of data from the reference period is a limitation of the expansion restrictions. The set area limit sits alongside these restrictions to provide a clear and enforceable limit on the total extent of IWG activity being permitted under the NES-F.

Animal welfare considerations are addressed below under 'Other analysis'.

As noted above, these restrictions are not within the framework of permitted activity conditions in regulation 26(4), but rather are an additional restriction in regulations 28–31 which sit alongside that permitted activity framework. These restrictions make it a *discretionary activity* to expand IWG activity beyond the total area used on that farm for IWG during the reference period (1 July 2014 to 30 June 2019) (ie, if a farmer wants to increase the area being used for IWG, or if the farmer had no area being used for IWG). If a farmer does meet these restrictions (ie, undertakes IWG on an area less than that used during the reference period), regulations 26–27 will manage the activity, either through meeting the default conditions, obtaining a certified FW-FP, or obtaining a resource consent (as a restricted discretionary activity).

#### Calculation of area

Some submitters suggested that calculating area should only include the land used for IWG (ie, cultivated and grazed) and not the whole of any paddock which contains annual forage crops in some parts of it.

The intent of the area limit is to restrict the total area of land being used for IWG, drive behaviour change and reduce the environmental and animal welfare impacts of IWG. The area limit was only ever intended to apply to land being used for IWG. It was not intended to include the whole paddock just because it contained IWG in some areas.

This is especially important with the proposed change to the slope condition, which would no longer be measured at a paddock scale. It is helpful to have this feedback on the confusion around this point. We therefore consider that clarity is required to confirm that, when calculating the area of land for the purposes of this condition, it only applies to land that is used for IWG (ie, cultivated and grazed), and is the total of all land used for IWG during that calendar year.

#### Recommendation

Make no change (ie, retain the area limit as 50 hectares or 10 per cent of the farm, whichever is greater). (Preferred)

Preferred option because:

- managing extent is an important tool for managing adverse effects
- of the ability to increase the area beyond the area limit, subject to a resource consent or FW-FP conditions
- it will be clarified that the area to be calculated is only the area in IWG.

Agree/Disagree

#### AND

Develop clear guidance material to clarify how the total area is calculated (ie, the total area used for IWG (cultivated and grazed) in that year).

Agree/Disagree

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# Regulation 26(4)(b) - Slope

# **Background**

Regulation 26(4)(b) of the NES-F currently sets a condition that:

"the mean slope of a paddock that is used for intensive winter grazing must be 10 degrees or less".

Following the introduction of the IWG regulations, primary sector and regional council stakeholders had concerns that:

- it would be difficult to accurately measure the mean slope across a paddock
- many resource consents would be required to comply with the slope condition.

The SAG recommended the slope condition should refer to a *maximum* slope threshold, and increase it to 15 degrees, to enable compliance with this condition and avoid perverse outcomes from measuring as a *mean across a paddock*.

# **Proposed amendments**

In the discussion document, we proposed:

"Amend to measure the slope threshold as maximum allowable slope instead of mean slope of a paddock (while keeping the existing threshold of 10 degrees)." 4

We did not propose adjusting the slope threshold to a maximum of 15 degrees because the modelled sediment loss from slopes greater than 10 degrees increases significantly, as explained below. As previously noted, the NES-F cannot permit an activity that has significant adverse environmental effects.

### **Submissions**

#### Measure as a maximum slope

Key themes:

- A majority of submissions expressed support for moving to measure slope as a *maximum* instead of a *mean across a paddock*. These submissions also requested that the method for measuring 'maximum' (ie, an example methodology) be clarified to ensure a consistent approach to measuring slope and prevent uncertainty.
- Some submitters suggested the slope threshold should only apply to the land used for IWG (ie, cultivated and grazed), and not the whole of a paddock that contains IWG.

Measuring the maximum slope could be based on the proposed Southland Water and Land Plan, which measures slope as the average slope across any 20-metre distance. See Rule 25 in the proposed Southland Water and Land Plan (note this is subject to appeal).

#### Slope threshold

- Submissions were divided on this point; some supported retaining the 10-degree
  threshold, while others sought a 15-degree threshold in line with the SAG
  recommendation, and a small number sought up to 20 degrees. Some also queried the
  evidentiary basis for the 10-degree threshold but did not provide evidence for a higher
  threshold (other than implying more consents would be required without a higher
  threshold).
- One submission cited research that indicates other factors (eg, grazing management)
  can also play a significant role in reducing sediment and nutrient loss. And a number of
  submissions suggested a higher slope threshold (ie, higher than 10 degrees) is appropriate
  if other measurements are in place, such as: buffer zones requiring that CSAs be protected
  and uncultivated, and strategic grazing.
- A small number of submitters were concerned the 10-degree threshold would still be impractical to comply with and therefore many consents might still be required until certified FW-FPs are available.

# **Analysis**

#### Measure as a maximum slope

As acknowledged by the SAG and a large number of submissions, the proposed change to a *maximum slope* will be easier to measure, comply with, monitor and enforce. This will ensure the intent of the regulation is met, that is, to minimise the adverse environmental effects associated with sediment loss from steeper slopes due to IWG.

Several submitters expressed concern that if the condition applies to an entire paddock, the number of resource consents required may increase. It was not the intent of the proposed amendment to require farmers to measure slope across areas that are not used for IWG. While the previous method of measurement was mean slope across a paddock, the proposed new method would measure the maximum slope, with reference to a shorter distance and only applying to the area that is used for IWG (ie, the area that is cultivated and grazed). This is one benefit of the move from mean to maximum slope, that it addresses the practical difficulties of measuring at a paddock scale and avoids the unintended and potentially perverse consequences of applying this condition at a paddock scale.

Submissions highlight it was not well understood that the slope threshold would only apply to the land being used for IWG. The proposed amendment would be drafted to ensure only the areas used for IWG would be subject to the slope condition, that is, any areas of land (irrespective of paddock boundaries) that are below the maximum slope threshold could be used for IWG.

#### Methodology for measuring maximum slope

The shift to measure maximum slope would require a methodology to indicate how the slope would be measured. Slope would no longer be measured across the whole paddock, but still would need to be calculated by reference to the angle between two points.

In the discussion document, we proposed measuring slope as 'the average slope across any 20-metre distance'. That is the methodology used in the proposed Southland Water and

Land Plan (note that the plan is subject to appeal) for measuring slope. We consider this methodology would allow a clear calculation of the maximum slope, and from there any areas below the threshold could be used for IWG.

Submissions were largely silent on this proposed methodology and its merits, though some commented more generally that the methodology should be set out clearly in the NES-F. We agree and recommend the method for measuring maximum slope also be set out in the NES-F, as being measured as the average slope across any 20-metre distance.

#### **Slope threshold**

Submitters had a mixed response to the slope threshold, with some supporting the retention of a 10-degree threshold while others recommended it should be 15 or even 20 degrees. Those in support of a higher slope threshold noted that a large number of farmers might be unable to comply with a 10-degree threshold and would therefore need a resource consent. They also noted the risk to freshwater from IWG activity is not determined only by slope, and other factors could provide mitigation, for example, soil type, proximity to waterbodies and use of CSAs.

We acknowledge these views that the slope threshold could be higher. However, it is evident that sediment loss increases significantly when IWG is undertaken on steeper slopes. Modelling used to inform the current regulations shows that an increase in slope from 10 to 15 degrees would double the sediment loss, and an increase to 20 degrees would triple it.<sup>5</sup> Although various factors besides slope contribute to sediment loss, permitted activity conditions have limited ability to provide flexibility in managing multiple factors, and the NES-F cannot permit an activity with significant adverse effects on the environment. Slope is a key factor in contributing to sediment loss and it is an appropriate proxy to identify land with an increased risk of sediment loss (as slope increases) due to IWG. This enables a permitted activity pathway that provides protection against environmental effects, without being as prescriptive about the various mitigating factors as to make it unworkable.

Therefore, taking into account both practicality and expected environmental outcomes, we consider 10 degrees to be an appropriate maximum threshold for a permitted activity condition and recommend retaining that threshold.

We acknowledge it may well be appropriate in some circumstances to undertake IWG on slopes above that threshold, with appropriate mitigations in place. Farmers who do not want to, or cannot, meet this permitted activity condition, and who want to undertake IWG on a steeper slope will be able to choose from two pathways: certified FW-FPs (once available) and resource consents. These pathways are more appropriate as they have the flexibility to take account of the mitigations (such as wider buffer zones, distance from waterbodies, landscape features, soil type, CSAs or other practices) that could make it appropriate to undertake IWG on a steeper slope.

With this proposal to retain the threshold of 10 degrees and measure *maximum slope* rather than the *mean slope across a paddock*, we expect a reduction in steeper land available for IWG as a permitted activity.<sup>6</sup> This is a small portion of the total area used for IWG nationally.

<sup>&</sup>lt;sup>5</sup> See further explanation in the discussion document.

Based on land used for winter grazing in 2018, officials estimate that about 3,250 ha of that land would not meet the amended default condition of grazing to a maximum slope of 10 degrees. We note this is a

Note that feedback through the exposure draft process highlighted some issues with using the words 'maximum' and 'average' in the drafting itself, and drafting has been revised accordingly. (This is why language that was consulted on may differ from actual drafting: it is not reflective of a change in policy.)

#### Recommendation

Amend to measure slope as a maximum threshold (rather than measuring as mean slope at the paddock scale), and clarify that this slope threshold only applies to the area of land being used for IWG (ie, cultivated and grazed).

Agree/Disagree

**AND** 

Specify that slope is measured as the slope across any 20-metre distance.

Agree/Disagree

**AND** 

Retain the slope threshold of 10 degrees.

Agree/Disagree

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small proportion of the total area used for intensive winter grazing nationally. It is estimated that in 2018 approximately 240,000 hectares was used for winter grazing on all slopes across New Zealand (based on brassica crops).

# Regulation 26(4)(c) - Pugging

# **Background**

Regulation 26(4)(c) of the NES-F currently sets a condition that:

"on a paddock that is used for intensive winter grazing, —

- (i) pugging at any one point must not be deeper than 20 cm, other than in an area that is within 10 m of an entrance gate or a fixed water trough; and
- (ii) pugging of any depth must not cover more than 50% of the paddock".

and "pugging" is defined as:

"pugging means the penetration of soil to a depth of 5 cm or more by the hooves of grazing livestock".

Feedback received from stakeholders indicated the requirement to measure the depth and scale of pugged soil across a paddock would be difficult to measure in a defensible and practical manner, and that farmers' ability to comply with the pugging condition would be largely weather dependent. Stakeholders also considered that pugged soil does not necessarily result in poor freshwater outcomes and that other factors — such as slope, soil type, proximity to CSAs and hydrology — are better predictors of sediment loss.

The SAG recommended deleting the pugging condition, and including a new condition to restrict grazing and cultivating CSAs to achieve improving environmental outcomes.

# **Proposed amendments**

The proposal in the discussion document sought to address stakeholders' concerns while recognising that sediment loss from pugged soil could pose a risk to freshwater quality and ecosystem health.

Specifically, the change proposed in the discussion document was to:

"Amend so that farmers have to take reasonably practicable steps to manage the effects on freshwater from pugging (in areas that are used for intensive winter grazing). Officials will develop guidance to ensure that farmers and councils have a shared understanding of what reasonable and practicable steps are."

### **Submissions**

#### Requirement to manage pugging

Key themes:

- Many submitters indicated they support the proposed change to the pugging condition to remove the pugging depth requirements, although both farmers and councils were a bit uncertain how exactly this would work or be enforced.
- Several submitters considered the proposed change to the pugging condition would improve the ability of farmers to comply with the condition in a defensible way compared

to the existing condition. They noted it would be more effective to remove the requirement to measure specific depths and scale, and allow a consideration of other factors such as soil type and soil moisture, as farmers select suitable paddocks and management options to 'manage the effects of pugging'. However, as noted above, this support is contingent on clear guidance material explaining the meaning of reasonable and practicable steps.

- Some wanted the pugging condition removed entirely, citing no clear environmental impact; others wanted it either left as it is currently to ensure sufficient protection, or enhanced to require "all practicable steps" be taken.
- Submissions included a range of comments about animal welfare considerations including: animal welfare restrictions already discourage pugging; pugging also has animal welfare issues and should be regulated against; and ensuring that pugging mitigation measures do not have negative impacts on animal welfare (for example, back fencing to prevent the scale of pugging would reduce the space available for animals to exhibit normal behaviours).

#### Guidance

Several submitters noted it would be important to see the guidance material officials indicated they would develop, expressing concerns about the workability and enforceability of the pugging condition. Stakeholders (including regional councils, primary sector and iwi/Māori) said they want to be involved in developing the guidance material. Some submissions noted the ambiguity of the proposed change to the pugging rule would make it difficult to enforce without appropriate guidance material.

# **Analysis**

### Requirement to manage pugging

Including the pugging condition in the NES-F is to minimise soil loss as a result of soil disturbance due to grazing livestock. The main issue stakeholders identified with the existing pugging condition is they consider there is no defensible and accurate method to measure and enforce the total pugged depth and area across land used for IWG. While the SAG recommended deleting the pugging condition if a CSA condition was added to the regulations, pugged soil outside CSAs can lead to sediment loss which increases the risk to freshwater ecosystems. The proposed change allows farmers to consider several factors when selecting land and appropriate management tools to undertake IWG, while acknowledging the risks to freshwater due to soil disturbance.

Most submitters considered that the proposed change to the pugging condition would be more practical to comply with, without the set pugging depths and scale across a paddock which they consider difficult to measure. However, some submitters noted it is difficult to comment on whether they support the proposed change without having an opportunity to assess the guidance material. They noted the proposed change might introduce ambiguity with an element of subjectivity as farmers try to determine if they are compliant. They also noted it would be difficult for regional councils to monitor and enforce compliance in a consistent way. They recommended the Government works with the primary sector and regional councils when developing guidance material, to ensure the objectives of the proposed change are achieved.

Several submitters suggested removing the pugging condition entirely due to a poor direct connection between pugged soil and sediment loss to freshwater. They considered the new condition would be difficult to implement from a compliance, monitoring and enforcement perspective and would not achieve the objectives of the *Essential Freshwater* regulatory package. Further, that it would increase the financial burden and resource consenting requirements for farmers and regional councils. They considered sediment loss would be better mitigated through the proposed new condition to manage CSAs.

We do not propose removing the pugging requirement completely, due to the known increase in sediment loss resulting from pugged soil. Sediment loss from grazed paddocks is multifaceted. Pugging exposes the soil and adversely impacts various soil properties by breaking down soil cohesion, which in turn increases the likelihood of sediment mobilisation. National environmental standards cannot permit an activity that has significant adverse effects on the environment. We consider pugging is a suitable proxy to assess risk to freshwater due to IWG.

#### Revisions to drafting of the pugging requirement

In response to submissions, we recommend two revisions to the drafting of the proposed pugging requirement:

- require farmers to take '<u>all</u> reasonably practicable steps'. The addition of the word 'all'
  emphasises that a farmer must ensure they have explored and deployed all available and
  relevant management options suited to their grazing practice and risk and in the context
  of their unique farm system.
- require farmers to take all reasonably practicable steps to 'minimise' adverse effects on
  freshwater from any pugging that occurs on that land. We note this differs to what was
  proposed in the discussion document, which referred to a requirement to 'manage'
  adverse effects on freshwater from pugging. This revision addresses submitters' concerns
  that a condition that simply requires farmers to 'manage' effects is unclear, and that
  'minimise' more clearly communicates policy intent.

### Enforceability and a shift to a stand-alone duty

We also note submitters' concerns about the enforceability of the pugging condition, given its inherent flexibility. In practice, enforcement would need an enforcement officer to determine what is practicable on a case-by-case basis. Given the national diversity of farming practices and natural conditions, we have a limited ability to mitigate this through more specific permitted activity conditions. This inherent tension is what we are trying to address through these changes, as the current conditions were drafted to be specific and enforceable but that led to the issues with those conditions not being practical to implement. This could be mitigated to some extent through guidance, including technical guidance.

What is practicable with both pugging and resowing will be case-by-case, not prescribed (as is, for example, the 'slope' condition). This means it will only be possible to assess whether a farmer should have obtained a resource consent after the grazing is well underway — or, in the case of the resow requirement, after the grazing has finished. At this point, it would likely be too late for a farmer to get a consent, leaving enforcement as the only option.

We note that expressing the pugging requirements as a permitted activity condition may not be optimal even with the proposed changes. The premise of a permitted activity condition is that doing the activity is contingent on complying with the condition. If it is clear this won't be possible, a consent will be required. Given the many factors that must be considered when

determining suitable mitigations for pugging (eg, soil type and climate), there would be some variation in what 'reasonably practicable steps' must be taken to ensure compliance. This may reduce the certainty as to whether a resource consent is required.

Recognising this, we recommend the pugging requirement (of minimising adverse effects of pugging on freshwater) be expressed as a stand-alone duty for persons undertaking IWG without a consent, <sup>7</sup> rather than as a permitted activity condition. The default condition on pugging would be removed, and a new stand-alone duty inserted. This addresses submitters' concerns about determining compliance with an ambiguous condition, while ensuring the risks to freshwater ecosystems from pugged soil are mitigated.

We consider managing pugging as a stand-alone duty would remove the uncertainty about whether a resource consent is required. It will improve the ability of famers and regional councils to determine appropriate management and mitigation options, and retaining the requirement in this different form will ensure there is still management of the adverse effects of pugging related to IWG.

Failing to meet this duty would still allow councils to issue an abatement notice or enforcement order, or prosecute for non-compliance with regulations. This lets regional councils enforce whether a farmer has taken all reasonably practicable steps to minimise the effects of pugging on freshwater. Once FW-FPs are available, monitoring and enforcement of the stand-alone duty would be supported by audits of certified FW-FPs where farmers have undertaken mitigations on-farm to "minimise the effects on freshwater of any pugging" in accordance with their certified FW-FP.

Where activities are managed through a resource consent, the associated cost sits with the applicant. The cost of compliance, monitoring and enforcement generally falls on councils, but there may be a risk in relation to cost recovery where these requirements are included as stand-alone duties rather than permitted activity conditions. Although councils can recover costs through a range of charges (including for the monitoring of permitted activities), councils cannot recover costs in the same way for stand-alone duties. While this may mean additional costs are borne by regional councils, it should be seen in the context of the IWG permitted activity conditions and consenting requirements that do allow for cost recovery – these can indirectly assist with the costs of compliance, monitoring and enforcement of stand-alone duties. For example, councils can recover costs for the monitoring of total area used for IWG. This can generate information on the location and extent of the activity, and where additional compliance, monitoring and enforcement could be focused.

Most feedback received through the exposure draft process expressed support for managing pugging and resow through standalone duties, consistent with the reasons set out above.

Small consequential changes may be required to the drafting to ensure the stand-alone duty works together with the FW-FP pathway.

Report and recommendations on intensive winter grazing amendments

<sup>&</sup>lt;sup>7</sup> Sections 43 and 43A of the RMA describe what national environmental standards can contain. This could be in the form of rules and consenting pathways (as used in the current IWG regulations), or simply as requirements within the regulations, which must be complied with and against which enforcement action can be taken if they are not complied with.

#### Guidance

Although many submitters supported the proposed change to the pugging condition, they noted they were unable to comment fully without the guidance material being available during consultation.

With the proposed shift from managing pugging through a permitted activity condition, to being expressed as a stand-alone duty, guidance will still be important in steering implementation. Guidance would include examples of factors to consider when determining what are 'reasonably practicable steps' such as weather conditions, the cost and availability of mitigations, and risks to animal welfare. This will guide farmers and regional councils in implementation, compliance, monitoring and enforcement.

We acknowledge submitters' concerns about the importance of clear guidance material to ensure the proposed changes can be effectively complied with. We will work with farmers, industry bodies, farm advisors, regional councils, ENGOs and Māori/iwi to develop the guidance material to ensure farmers and councils have a clear understanding of how to 'take all reasonably practicable steps to minimise the effects on freshwater of any pugging that occurs on land'.

While animal welfare has been, and will continue to be, considered during the development of these regulations and associated guidance, the NES-F is an RMA regulation and, as such, focuses on managing the environmental effects of an activity on freshwater.

Animal welfare concerns are addressed through animal welfare legislation, codes of animal welfare and guidance documents,<sup>8</sup> and MPI is responsible for managing animal welfare policy and guidelines. This is discussed further in the 'Other analysis' section below.

#### Recommendation

Remove the pugging condition prescribing set restrictions on depth and area, and instead manage pugging through a stand-alone duty, which requires farmers to take all reasonably practicable steps to minimise the effects on freshwater of any pugging that occurs on that land; and make any consequential amendments required to ensure this works together with the FW-FP pathway.

Agree/Disagree

#### **AND**

Develop clear guidance material with relevant stakeholders to ensure effective implementation of the pugging stand-alone duty and ensure farmers and councils have a shared understanding of what reasonably practicable steps are.

Agree/Disagree

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<sup>&</sup>lt;sup>8</sup> Further information is available on the MPI website.

# Regulation 26(4)(d) – Buffer zones and subsurface drains

# **Background**

Regulation 26(4)(d) of the NES-F currently sets a condition that:

"livestock must be kept at least 5 m away from the bed of any river, lake, wetland, or drain (regardless of whether there is any water in it at the time)".

In the NES-F, 'drain' is defined as:

"drain has the meaning given by the National Planning Standards 2019".

In the National Planning Standards 2019, 'drain' is defined as:

"drain means any artificial watercourse designed, constructed, or used for the drainage of surface or subsurface water, but excludes artificial watercourses used for the conveyance of water for electricity generation, irrigation, or water supply purposes."

To summarise, the definition of 'drain' currently includes subsurface drains as well as surface drains, and this condition requires that stock be kept at least 5 m from the bed of any drain. Feedback received from stakeholders (eg, primary sector and regional councils) indicated that for subsurface drains this condition is impractical, and, in some cases, impossible to implement, monitor and enforce. This is because extensive networks of subsurface drains have not been mapped or cannot practically be mapped, and it is not possible or practical to exclude stock from a subsurface drain without knowing its location.

# **Proposed amendments**

The discussion document proposed the following amendment:

"Amend the definition of 'drains' to exclude subsurface drains (as originally intended). Manage subsurface drains (where known to exist) through critical source areas (see proposed new condition below<sup>9</sup>)."

We note that subsurface drains were not originally intended to be included within the definition of 'drains' used for this regulation (as there was no intention to require stock to be kept at least 5 m from subsurface drains). However, subsurface drains can act as a pathway for contaminants, even with good overland practice management and mitigation. We considered whether management of subsurface drains was therefore still required within the NES-F, although not through this condition. We proposed managing them as CSAs, and sought feedback and more information on this proposal through the consultation and discussion document.

The proposed new condition regarding critical source areas as referred to here is discussed in more detail below under 'Proposed new condition – critical source areas'.

#### **Submissions**

#### **Excluding subsurface drains from the buffer condition**

Key themes:

- The majority of submissions supported the exclusion of subsurface drains from the definition of 'drains' (and therefore, from the buffer requirements of this condition) due to impracticality.
- A small number of submissions did not support excluding subsurface drains from this buffer condition. They submitted that subsurface drains are one of the three main pathways transporting contaminants from land to water and therefore need to be specifically protected.

#### Managing subsurface drains as CSAs

Key themes:

- The majority of submissions expressed concern about subsurface drains being managed as CSAs. They noted this would lead to similar issues to those arising from subsurface drains being included in the definition of 'drains' the very issues that the proposed amendment was aiming to address. (These issues are that many subsurface drains are unmapped and/or unknown, and where they are known, it would be impractical to manage them as CSAs just as it would have been impractical to exclude stock from them). Many resource consents would therefore be required due to farmers not being able to comply with this condition.
- A small number of submissions commented that the point at which subsurface drains discharge into a waterbody would already be managed as a point source discharge.
- A small number of submissions supported managing subsurface drains as CSAs through the CSA condition, noting that subsurface drains are a pathway for contaminants. Within these submissions, there was support for subsurface drains to be specifically identified and then managed, rather than only managing those subsurface drains 'where known to exist' as proposed. It was also noted there would be compliance and enforcement issues with reference to 'where known to exist'.
- Another small group of submissions supported managing subsurface drains through other controls, for example through FW-FPs or limit-setting in regional plans.

# **Analysis**

#### **Excluding subsurface drains from the buffer condition**

Subsurface drains were not intended to be included in this condition; their inclusion in the definition of 'drains' only occurred due to a drafting error. An amendment to exclude subsurface drains from the definition of 'drains' would correct this error, as proposed.

The majority of submissions agreed with the initial feedback and the SAG report, that it would be impractical to meet this condition if subsurface drains were included. This supports the proposed amendment to exclude them. If this amendment is not made, a large number of farmers would be unable to meet this permitted activity condition. A large number of resource consents would therefore be required, until FW-FPs are available to manage this.

Even where there is support for subsurface drains being managed, it is proposed that be done through CSAs, FW-FPs or other regional rules, rather than through this buffer condition.

#### Managing subsurface drains as CSAs

Subsurface drains can act as a pathway for contaminants, even with good overland practice management and mitigation. Managing subsurface drains as CSAs could be used to address this risk. However, this must be balanced with the practicality of implementation and compliance, to produce workable regulations. It should also be seen in the context of the wider *Essential Freshwater* regulatory package, and the range of policies aimed at managing nutrients.<sup>10</sup>

A permitted activity condition requiring subsurface drains to be managed as CSAs (ie, to be uncultivated and ungrazed) would make the permitted activity pathway unviable for many farmers, especially in Southland where the soil type means there are extensive networks of subsurface drains.

Subsurface drains acting as a pathway for contaminants from surrounding land use is clearly an environmental risk which needs to be addressed.

As noted by submitters, the point at which subsurface drains discharge into a waterbody can be managed as a source of contaminants. While the IWG regulations are not designed to do this, the National Policy Statement for Freshwater Management 2020 already directs regional councils to set limits on resource uses to achieve desired outcomes. For example, where councils need to reduce nutrient concentrations (eg, to achieve national bottom lines and desired outcomes) and where discharges from subsurface drains are contributing to the problem, councils can control the activity.<sup>11</sup>

We consider this is an appropriate way to manage the risk of subsurface drains being a pathway for contaminants. It can factor in local circumstances, the prevalence of drainage and its relative contribution to catchment issues, as well as alternative and/or additional controls. Longer term, FW-FPs will provide an additional method for managing this risk at the farm scale.

For these reasons, as well as the issues of practicality of implementation and compliance, we do not recommend managing subsurface drains as CSAs.

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<sup>&</sup>lt;sup>10</sup> For example, the Government has directed councils to limit resource use to achieve desired outcomes for nutrient levels, such as dissolved inorganic nitrogen. Where necessary, those limits set by councils can be more stringent than the NES-F (NES-F, regulation 6(1)).

<sup>&</sup>lt;sup>11</sup> Under regulation 6(1) of the NES-F, a district rule, regional rule, or resource consent may be more stringent than the NES-F.

#### **Recommendations**

Amend the definition of 'drains' to exclude subsurface drains in relation to the IWG regulations.

Agree/Disagree

#### **AND**

Note that we also recommend excluding subsurface drains from the definition of 'critical source areas'. (See further below under 'Proposed new condition – critical source areas'.)

Agree/Disagree

Minister's comment	
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# Regulation 26(4)(e) – Resow

# **Background**

Regulation 26(4)(e) of the NES-F currently sets a condition that:

"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 (but no later than 1 October of the same year)".

and also provides in regulations 26(7) and 26(8) that:

"Temporary extension for replanting on farms in Otago and Southland

- (7) If the farm is in the region of the Otago Regional Council or the Southland Regional Council, the latest date by which the land must be replanted under subclause (4)(e) is 1 November of the same year (rather than 1 October).
- (8) This subclause, subclause (7), and the heading above subclause (7) are revoked on 1 May 2024."

Feedback received from the primary sector, regional councils and the SAG, indicates this condition is impractical to meet (or to be certain in advance that it will be met) due to the unpredictable and varied impacts of weather, and farmers still grazing annual forage crops up to 30 September and, in some cases, into early October.

It is not practical to have a set, nationwide date: for the date to work in all instances, it would have to be overly permissive, for example, setting the date to 1 December. The current regulations may also restrict farmers' ability to use good management practices, such as companion planting. This is due to the requirement being specifically to resow rather than reference to the outcome of ensuring ground cover is established and/or re-established. (A system that uses companion planting does not require resowing after grazing because cover is maintained throughout the grazing during winter and beyond into spring/summer).

# **Proposed amendments**

In the discussion document, we proposed:

"Remove the requirement to resow by 1 October (1 November in Otago and Southland) and, instead, require farmers to resow 'as soon as practicable', ie, in order to minimise the amount of time that bare ground is exposed to the weather, and clarify that other methods of establishing ground cover (eg, companion planting) are included. Officials will develop guidance to provide more clarity for farmers and councils as to what steps could demonstrate that farmers were resowing as soon as practicable."

### **Submissions**

#### Requirement to resow by set date

A majority of submissions supported removing the fixed resow date, and appreciated that the proposed requirement of 'as soon as practicable' would take account of variations in region, climate and farms, although both farmers and councils showed some uncertainty about how exactly this would work or be enforced.

# Other methods of establishing ground cover, and summer fallow

Submitters proposed a number of new definitions and commented on what the definition should cover. One proposed definition included reference to replanting at a time when weather and soil conditions are suitable, while other definitions focused on the need to make it clear the aim is to minimise the amount of time that bare ground is exposed to weather. That would clarify that replanting could include any crop that met the aim of establishing ground cover as well as making use of research and potential innovations that might have environmental benefits.

Several submissions noted a concern that catch crops, cover crops and summer fallow are not sufficiently provided for through this permitted activity condition.

#### Guidance

A majority of submissions also noted it is important to see what the guidance would look like, to address their concerns about workability and enforceability. A number of stakeholders (including regional councils, primary sector and iwi/Māori) have indicated they want to be involved in developing this guidance material.

# **Analysis**

#### Requirement to resow by set date

This condition aims to minimise the amount of time bare ground (ie, ground left bare after IWG) is exposed to weather as bare ground has an increased risk of sediment and/or contaminant loss.

There was general support for a requirement to resow 'as soon as practicable', rather than having a set date by which to resow, although there was some uncertainty from both farmers and regional councils about how exactly this will work.

The proposed change would address the practicality issues identified, while still managing the risk posed by bare ground being exposed to the weather. Removing the set date would allow flexibility to take account of matters beyond the farmer's control, for example weather conditions, which could delay resowing and make it unviable for farmers to be confident in meeting the condition.

# Other methods of establishing ground cover, and summer fallow

We also wish to address the submitters' concern that other methods of establishing ground cover, such as companion planting, are not recognised through the current condition. We agree companion planting should be recognised – the aim is to minimise the time bare ground is exposed and focus is on that outcome, not the specific method(s) used to achieve that. For example, the outcome could be achieved through resowing *after* IWG, or through companion planting that is sown earlier in the year and already providing ground cover at the end of IWG. The proposed amendment would recognise this.

We consider this could be achieved by requiring that 'vegetation is established as ground cover over the area used for IWG as soon as practicable after livestock have finished grazing the land', rather than referring specifically to 'replanting' as soon as practicable after IWG.

A small number of submissions discuss summer fallow, noting a requirement to resow or to re-establish ground cover does not allow for summer fallow. This is where ground is left bare for a period after IWG to allow the soil to accumulate moisture for autumn/winter. It is a specific method used in summer dry farming areas. We recognise the proposed amendment would not allow for this practice.

The IWG regulations must focus on setting minimum requirements that will avoid adverse environmental effects. Due to the nature of the NES-F at a national level, those requirements must be aimed at the more common practices and land types and their related environmental risks. The negative impacts of bare ground are of such high risk they need to be regulated, with other practices (like summer fallow) managed under the more flexible FW-FP/consenting processes.

Summer fallow could still be carried out through a resource consent or FW-FP, which would allow consideration to be given to the specific mitigations and conditions of climate, region or farm type that would make it an appropriate farm management tool and manage the relative risks of adverse environmental effects from bare ground in those circumstances. We are therefore not proposing any change that would allow for summer fallow through the stand-alone duty.

#### Enforceability and a shift to a stand-alone duty

We also note submitters' concerns about the enforceability of the resow condition, given its inherent flexibility. In practice, enforcement would need an enforcement officer to determine what is practicable on a case-by-case basis. Given the national diversity of farming practices and natural conditions, we have a limited ability to mitigate this through more specific permitted activity conditions. This inherent tension is what we are trying to address through these changes, as the current conditions were drafted to be specific and enforceable but that led to the issues with those conditions not being practical to implement. This could be mitigated to some extent through guidance, including technical guidance.

What is practicable with both resowing and pugging will be case-by-case, not prescribed (as is, for example, the 'slope' condition). This means it will only be possible to assess whether a farmer should have obtained a resource consent after the grazing is well underway – or, in the case of the resow requirement, after the grazing has finished. At this point, it will likely be too late for a farmer to get a consent, leaving enforcement as the only option.

We note that expressing the resow requirements as a permitted activity condition may not be optimal even with the proposed changes. The premise of a permitted activity condition is that doing the activity is contingent on complying with the condition. If it is clear this will not be possible, a consent will be required. Given the many factors that must be considered when determining when or how to resow (eg, variable climate nationally, different optimal growing conditions for crop species, alternative methods of ground cover), 'as soon as practicable' will vary across farm systems and geographic regions. This may reduce the certainty as to whether a resource consent is required.

Recognising this, we recommend the resow requirement (of establishing vegetation as ground cover as soon as practicable after grazing) be expressed as a stand-alone duty for persons undertaking IWG without a consent, rather than as a permitted activity condition. The default condition on resow would be removed, and a new stand-alone duty inserted. This addresses submitters' concerns about determining compliance with an ambiguous condition, while ensuring the risks to freshwater ecosystems from bare ground are mitigated.

We consider managing resow as a stand-alone duty would remove the uncertainty about whether a resource consent is required. It will improve the ability of famers and regional councils to determine appropriate management and mitigation options, and retaining the requirement in this different form will ensure there is still management of the adverse effects of bare ground related to IWG.

Failing to meet this duty would still allow councils to issue an abatement notice or enforcement order, or prosecute for non-compliance with regulations. This lets regional councils enforce whether a farmer has established vegetation as ground cover as soon as practicable. Once FW-FPs are available, monitoring and enforcement of the stand-alone duty would be supported by audits of certified FW-FPs where farmers have undertaken to establish ground cover "as soon as practicable" in accordance with their certified FW-FP.

Where activities are managed through a resource consent, the associated cost sits with the applicant. The cost of compliance, monitoring and enforcement generally falls on councils, but there may be a risk in relation to cost recovery where these requirements are included as stand-alone duties rather than permitted activity conditions. Although councils can recover costs through a range of charges (including for the monitoring of permitted activities), councils cannot recover costs in the same way for stand-alone duties. While this may mean additional costs are borne by regional councils, it should be seen in the context of the IWG permitted activity conditions and consenting requirements that do allow for cost recovery – these can indirectly assist with the costs of compliance, monitoring and enforcement of stand-alone duties. For example, councils can recover costs for the monitoring of total area used for IWG. This can generate information on the location and extent of the activity, and where additional compliance, monitoring and enforcement could be focused.

Most feedback received through the exposure draft process expressed support for managing pugging and resow through standalone duties, consistent with the reasons set out above.

Small consequential changes may be required to the drafting to ensure the stand-alone duty works together with the FW-FP pathway.

#### Guidance

Although many submitters supported the proposed change to the resow condition, they noted they were unable to comment fully without the guidance material being available during consultation.

With the proposed shift from managing resow through a permitted activity condition, to being expressed as a stand-alone duty, guidance will still be important in steering implementation.

We agree that guidance is integral to the stand-alone duty being implemented, monitored and enforced, and we will work with stakeholders to develop guidance on what 'as soon as practicable' would look like, as well as clarity that this stand-alone duty is about achieving the

intended outcome of minimising the time bare ground is exposed to the weather, rather than prescribing a set action of how to achieve that.

#### Recommendation

Remove the resow condition requiring farmers to resow by a prescribed date, and instead manage replanting through a stand-alone duty, which requires farmers to ensure that vegetation is established as ground cover over the whole area of that land (used for IWG) as soon as practicable after livestock have finished grazing the land; and make any consequential amendments required to ensure this works together with the FW-FP pathway.

Agree/Disagree

#### **AND**

Develop clear guidance material with relevant stakeholders to ensure the effective implementation of this stand-alone duty and provide more clarity as to what steps could demonstrate that farmers are resowing as soon as practicable.

Agree/Disagree

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# Proposed new condition – Critical source areas

### **Background**

The NES-F does not currently include the management of critical source areas (CSAs).

The SAG recommended including a new condition requiring CSAs to be identified and protected (ie, to remain uncultivated and ungrazed), noting<sup>12</sup>:

"...substantial evidence shows that the practices addressing CSA's [sic] and the avoidance, or interception of, overland flow result in the reduction of multiple contaminants associated with IWG activities (phosphorus, sediment and faecal microbe losses). Studies looking at CSA management during grazing of a winter forage crop by dairy cows in South Otago found that sediment losses could be reduced by c.80% and phosphorus by c.60-70%.

...

The strengthened management of CSAs will provide improved freshwater health outcomes, be more practical for implementation and enforcement, have wider benefits beyond IWG, and contribute significantly, towards addressing the effects which the pugging and re-sowing date and slope conditions intend to manage."

The SAG proposed the definition of CSAs from the proposed Southland Water and Land Plan, <sup>13</sup> which is:

"Critical source area:

- (a) a landscape feature like a gully, 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."

# **Proposed amendments**

In the discussion document, we proposed:

"Include a new condition requiring that critical source areas must be protected (uncultivated and ungrazed). See the proposed definition of critical source areas in table 1. Officials will develop guidance to ensure that farmers and councils have a shared understanding of how critical source areas will be identified and protected."

<sup>&</sup>lt;sup>12</sup> Southland Intensive Winter Grazing NES Advisory Group Report, 10 December 2020.

<sup>&</sup>lt;sup>13</sup> The proposed Southland Water and Land Plan (note this is subject to appeal).

In table 1 of the discussion document, it was proposed that the definition of CSAs could be based on the definition within:

- the proposed Southland Water and Land Plan, in line with recommendations from the SAG (but noting the plan is subject to appeal), or
- the proposed FW-FP regulations.<sup>14</sup>

#### **Submissions**

#### Key themes:

- The majority of submissions supported a condition requiring CSAs to be identified and protected, and agreed they are a key tool for managing adverse environmental effects of IWG.
- A large number of submissions also stated that because managing CSAs has such a large impact on reducing sediment and/or contaminant loss from IWG activity, adding this condition would mean certain other conditions are not required (as outlined in the other sections of this report).
- One submission supported going further and making the cultivation and grazing of CSAs prohibited (at all times), due to the adverse environmental impacts.
- A small number of submissions noted concern with the enforceability of this condition, given its inherent flexibility.

Alongside the general support for managing CSAs, a large number of submissions also:

- highlighted the definition of CSAs should require these to have a direct link to a waterbody (so as not to include every hollow, and only apply where there is a connection to a waterbody and therefore a potential impact on freshwater).
- raised a concern about the scope of the definition and/or condition, that is, would it
  include a set buffer zone and how would the exact edge of the CSA be identified. These
  submitters suggested this issue could be addressed through guidance on recommended
  management of CSAs.
- noted it is important to see what the guidance would look like (noting concerns about workability and enforceability). Stakeholders (including regional councils, primary sector and iwi/Māori) have indicated they want to be involved in developing this guidance material.

A number of submissions also expressed concerns about whether this new condition would prevent grazing CSAs in summer. They suggested this restriction be limited to the period when IWG can take place (ie, 1 May to 30 September each year). This would allow cultivation and/or grazing outside of that period (ie, returning it to permanent pasture when the rest of the paddock is, to manage pest plants, as part of fire hazard management etc, but noting this could be limited to when soil conditions allow).

Some submitters are also concerned there is no provision for mana whenua input into identifying CSAs within their takiwā.

<sup>&</sup>lt;sup>14</sup> Information about the proposed FW-FP regulations is available on the MfE website.

The topic of subsurface drains being managed as CSAs is addressed above under 'Buffer zones and subsurface drains'.

# **Analysis**

#### **CSA** management

Management of CSAs is a key tool for managing adverse environmental effects of IWG, as CSAs are a pathway for contaminants.<sup>15</sup>

Some submissions suggested including this new condition would mean other conditions (eg, those managing pugging, resowing and area) could be removed. We do not agree that this condition on its own is sufficient to manage the potential adverse effects of IWG, to the extent required to provide a permitted activity pathway. The other conditions address different risk factors and different adverse effects. However, we acknowledge this condition does provide increased confidence in avoiding adverse effects generally. Although we do not agree that this enables removing the other conditions entirely, it does allow changes to those other conditions to make them more practical to comply with. The combination of this new condition, along with the amendments to other conditions, will ensure that the potential adverse effects of IWG activity are being managed holistically, while still providing a practical permitted activity pathway.

We acknowledge there is broad support for this condition from a wide range of stakeholders (and the SAG), who acknowledge the significant environmental protection CSA management would provide.

We also note submitters' concerns about the enforceability of this condition. In practice, it would need enforcement to be focused on individual situations, which is not an uncommon requirement in compliance and enforcement. Given the national diversity of farming practices and natural conditions, we have a limited ability to mitigate this through more specific permitted activity conditions. This inherent tension is what we are trying to address through these changes, as the current conditions were drafted to be specific and enforceable, but that led to issues with the conditions not being practical to implement. We recommend mitigating this as far as possible through guidance, including technical guidance.

#### **Timing of CSA management restrictions**

Some submissions raised the question of whether the protection of CSAs (ie, being uncultivated and ungrazed) would apply:

- all year round and require the CSA to be fenced off, or
- only from 1 May to 30 September each year, with the ability to manage those areas the
  rest of the year in other ways at the farmer's discretion (for example, returning the CSAs
  to permanent pasture along with the area used for IWG, managing soil and/or pasture,
  pest plants and fire hazards).

As referenced by the SAG, evidence has shown that CSA management during IWG has a significant impact on reducing sediment and contaminant loss. See the SAG report for further details.

The aim of keeping CSAs ungrazed and uncultivated is to manage them in a way that minimises the risk of these areas being pathways for contaminants from surrounding areas where IWG is occurring. It is also important to protect CSAs to minimise their contribution to sediment loss when livestock graze within a CSA. IWG results in pugging, bare ground and an increased risk of overland loss of sediment and contaminants to freshwater.

The requirement would be to keep those areas 'uncultivated and ungrazed'. How a farmer achieves this is a matter for farmers to determine, there would not be a requirement to fence those areas. This condition is focused on the outcome (ie, CSAs being uncultivated and ungrazed) rather than the method used to achieve that. Further, given that CSAs could be managed in other ways outside of the 1 May to 30 September timeframe, it would be unfair to require fencing of these areas as it would restrict farmers' ability to manage CSAs outside that period.

We are only recommending applying restrictions (being uncultivated and ungrazed, as suggested by the SAG) during the period when IWG can take place (ie, 1 May to 30 September); we are not proposing restrictions on CSAs the rest of the year.

Guidance may provide additional information about best practice management of CSAs year-round.

The condition would also note the CSA must have ground cover (although, not annual forage crop) during that period (1 May to 30 September). This would provide sufficient clarity for the permitted activity condition for the purposes of implementation, compliance and enforcement. It would also ensure CSAs fulfil their role in minimising sediment, nutrient and contaminant loss into waterways. (Other detailed matters and good practice management will be covered in the guidance.)

Some submissions express concern about the management and/or protection of CSAs, but that concern was about these being excluded from grazing outside 1 May to 30 September each year, which we have addressed.

#### **Definition of CSAs and guidance**

Submissions provided helpful feedback on the proposed definition of CSAs, and, in particular, recommended it should require a CSA to have a direct connection to a water body. This is appropriate as the purpose of managing CSAs is to reduce sediment and contaminant loss to waterways, and those benefits would not be so well achieved by protecting areas that do not have a connection to a waterway.

We have addressed the topic of whether subsurface drains should be managed as CSAs above (in the section 'Buffer zones and subsurface drains'). Our proposal to not manage them as CSAs means the definition of CSAs should exclude subsurface drains.

We therefore propose to include a new condition requiring that CSAs must be protected (ie, uncultivated and ungrazed) during the period that IWG can take place (only) (ie, 1 May to 30 September each year), with ground cover maintained throughout that period. We recommend a definition similar to the following:

**critical source area** means a landscape feature such as a gully, swale, or depression that accumulates runoff from adjacent land and delivers contaminants to surface water bodies such as rivers, lakes, wetlands and artificial watercourses (excluding subsurface drains, and artificial watercourses (eg, ponds) that do not connect to natural water bodies).

We consider this proposed condition and definition address the main concerns raised in submissions, that is:

- clarifying that grazing is only prevented during the period that IWG can take place (1 May to 30 September each year)
- expressly excluding subsurface drains
- requiring a link to a waterbody so that the condition is focused on potential impacts on freshwater and will ensure that every hollow in 'humped and hollowed' land does not get inadvertently included in the definition.

While still based on the definition in the proposed Southland Water and Land Plan, minor changes to specific drafting were made as a result of exposure draft feedback.

We will work with stakeholders to develop guidance to ensure that farmers and councils have a shared understanding of how CSAs will be identified and protected (ie, appropriate buffer zones around CSAs, and best practice for year-round management of CSAs).

We acknowledge the concern raised by Te Rūnanga o Ngāi Tahu about a lack of provision for mana whenua input into identifying CSAs within their takiwā. We propose to seek input from mana whenua when developing guidance material for CSAs, which will include guidance on how to identify them. This would be a more efficient and meaningful way to engage on this issue than regarding the identification of each individual CSA.

#### Recommendation

Include a new condition requiring that CSAs must be protected (uncultivated and ungrazed) during the period that IWG can take place only (ie, 1 May to 30 September each year), and that ground cover (other than annual forage crop) be maintained throughout that period.

Agree/Disagree

#### **AND**

Define CSAs, using a definition which:

- includes a connection to a waterbody
- excludes subsurface drains.

Agree/Disagree

#### Minister's comment:

# **Definitions**

# **Background**

Regulation 3 of the NES-F contains the following defined terms:

'annual forage crop' is defined as:

"annual forage crop means a crop, other than pasture, that is grazed in the place where it is grown";

and 'intensive winter grazing' is defined as:

"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".

Note the definition of 'drain' is discussed above under 'buffer zones and subsurface drains'.

The SAG did not consider the definition for annual forage crop or intensive winter grazing required amendment.

# **Proposed amendments**

No changes were proposed in the discussion document.

#### **Submissions**

Key themes:

- A number of submissions expressed concerns about the definition of 'annual forage crop' including:
  - asking that short-term forage crops (ie, arable grain or seed that is planted from February to May and grazed in the winter months) be exempt from IWG rules
  - asking that light grazing of arable seed crops or vegetable crop residue be excluded, suggesting the definition: 'annual forage crop means a crop, other than pasture, arable or horticultural crops, that is grazed in the place where it is grown'
  - noting there is confusion about whether short rotation grass species and cereal crops are captured by the definition, and suggesting the definition is amended to specifically include or exclude them.
- Concerns about the definition of 'intensive winter grazing' included:
  - suggesting a new definition that includes grass, baleage and other supplementary feed, and that measures intensity by stocking density rather than feed type
  - suggesting a new definition that would include pasture if it is grazed intensively (ie, in a manner that results in exposure of soil and/or pugging of the soil).

# **Analysis**

Specific comments sought inclusion of arable seed crops and vegetable residue<sup>16</sup> within the definition of 'annual forage crop', when such inclusion is not consistent with the intent of the regulations. The following definition was suggested as an alternative to the current definition:

**annual forage crop** means a crop, other than pasture, <u>arable or horticultural crops</u>, that is grazed in the place where it is grown.

We accept there may be changes required to the definition of annual forage crop to ensure it only captures those practices that were intended, and agree with the amended definition proposed. It is inconsistent with the intent of the IWG regulations to discourage grazing of arable or horticultural crops.

Other submissions sought amendments to the definition of 'intensive winter grazing' to include 'pasture', and then use stocking density to determine whether the activity was sufficiently intensive to be 'intensive winter grazing'. This seeks to address negative environmental impacts caused by the grazing of pasture at high stocking density over winter, by managing it under the IWG regulations. However, the IWG regulations have a narrow focus on the practice of winter grazing of intensive annual forage crops such as swedes, kale, fodder beet and not general grazing of pasture. A change to extend these regulations to manage pasture grazing would represent a significant shift in policy from the current IWG regulations, and is beyond the scope of the changes proposed for consultation.

#### Recommendation

Amend the definition of 'annual forage crop' to avoid capturing crops that are not intended to be included.

Agree/Disagree

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<sup>&</sup>lt;sup>16</sup> For example, discarded vegetables and/or fruit, where the crop is not being grown for the animals but they are grazing on the by-product, that is not being harvested, to avoid waste.

# **Deferral of regulations**

# **Background**

The NES-F was gazetted in August 2020, and the IWG regulations within the NES-F were originally set to commence on 1 May 2021.

Regional councils (especially Environment Southland) and the primary sector identified challenges for successfully implementing the permitted activity default conditions, and noted that the FW-FP pathway was not yet available. This meant a significant number of farmers wanting to undertake IWG would require a resource consent when the regulations came into effect.

The SAG was established to provide practical recommendations for improving implementation of the IWG regulations. The SAG released its report in December 2020 and made several recommendations to adjust the IWG default conditions, particularly those that are weather dependent, such as pugging and resowing. The SAG report also included a primary recommendation that, until the certified FW-FP system is established, IWG be managed in the interim as a permitted activity using a farm-specific 'IWG Module'. It noted an interim regime would reduce the expected consenting burden on farmers and regional councils. If the primary recommendation for an interim module was not implemented, it recommended the regulations be deferred until the certified FW-FP system is in place.

In response to the SAG's recommendations, in April 2021 Cabinet agreed to a temporary deferral (12 months) to the IWG regulations commencing, so they are now due to come into effect on 1 May 2022.<sup>17</sup>

The deferral was intended to allow time for us to consider the SAG's recommendations and potential changes to the default conditions in the regulations. It was also intended to:

- enable the primary sector, regional councils and central government officials to focus
  efforts on the development of an IWG module (that was launched publicly in April 2021)
  for inclusion within FW-FPs. (Until FW-FPs are available, the module is non-regulatory
  guidance and not part of another permitted activity pathway as proposed by the SAG.)
- encourage the primary sector to demonstrate real practice change for the 2021 winter grazing season, including for animal welfare purposes, while any changes to the NES-F were considered
- allow for regional councils to undertake increased monitoring and reporting to ensure measurable improvements in IWG practices by 30 April 2022, with a first quarterly progress report by regional councils being provided to us on 1 August 2021.

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This did not affect the restrictions on further expansion in regs 28–30, which came into effect on 1 May 2021.

# **Proposed amendments**

In the discussion document, we proposed:

"...a further deferral to the commencement of the intensive winter grazing regulations for six months (so the regulations would begin on 1 November 2022). That should provide time for farmers to adjust their practices, cultivation and planting choices in preparation for the 2023 winter grazing season."

This further deferral was proposed in recognition that farmers begin making on-farm decisions well in advance of the winter grazing season beginning in May each year, and require certainty in advance as to what regulations will apply for the season. We recognised that proposed changes to the IWG regulations permitted activity conditions would not be finalised before those on-farm decisions needed to be made for the 2022 winter grazing season. The proposed deferral would provide time for farmers to adjust their practices, cultivation and planting choices in preparation for the 2023 winter grazing season.

#### **Submissions**

#### Key themes:

- A majority of submissions supported FW-FPs being the most appropriate way to manage IWG, although some disagreed and submitted that strong permitted activity conditions are the most appropriate way to manage the adverse environmental effects of IWG.
- A large number of submissions supported the deferral. They appreciated that the proposal recognises that farmers would not be able to comply with regulations beginning in May 2022 as they have already begun planning and cultivation for the 2022 IWG season.
   However, not all of that support is unconditional. Feedback can be roughly grouped as:
  - do not support deferral beyond May 2022
  - support deferral to November 2022 but no further
  - support deferral to November 2022 and no further, but suggest an interim IWG module be used until FW-FPs are available
  - should not come into effect until FW-FPs are available.
- The main concern of submitters appears to be that FW-FPs will not be available early enough, and that the changes to the permitted activity conditions will not go far enough to address the practicality issues. There is a concern, therefore, that many farmers who would not be able to comply with the conditions and who intend to manage IWG through FW-FPs, would need a resource consent in the short term until FW-FPs are available. This would require considerable time and cost for both the primary sector and regional councils.

Some regional council submissions also requested that clear guidance be provided on existing use rights.

# **Analysis**

#### Deferral beyond 1 May 2022

The IWG regulations in the NES-F are intended to manage the risks of adverse environmental effects. We consider FW-FPs are ultimately the more appropriate way to manage IWG, and the

majority (though not all) of submissions agree with that. However, the FW-FP system is currently being developed through a separate work programme and although we expect the roll out of FW-FPs to begin by the end of 2022, it may be some time before they are available nationwide.

Given the significance of the potential adverse effects, it is not desirable to wait for FW-FPs to be available. There is a clear need to manage this activity now, and wide acknowledgement there needs to be changes in how IWG activity is undertaken to address potential environmental impacts.

We agree with submitters that, while there are non-regulatory measures in place (such as the IWG module providing guidance on best practice and driving behaviour change, and increased monitoring and reporting by councils), these are not a substitute for regulatory oversight.

However, it is also true regulations must be capable of being complied with and able to be enforced, and the intention is not for a consent to be required by every single farmer currently undertaking IWG, where a permitted activity pathway is appropriate to manage the activity. We acknowledge there are practical issues with complying with the permitted activity conditions as they are currently drafted, which is why we have reviewed the regulations and proposed changes.

The regulations are currently due to come into effect on 1 May 2022. We are aiming to make amendments to the regulations before then, and propose to include a further deferral to 1 November 2022, advising farmers of the intended changes in advance once the amendments are confirmed. That should provide time for farmers to adjust their practices, cultivation and planting choices in preparation for the 2023 winter grazing season, and for officials to work with the relevant stakeholders to develop the guidance material.

We acknowledge there may still be a period of time where the regulations are in effect, but FW-FPs are not yet available. Making the default conditions more practical to comply with should mean the permitted activity pathway based on default conditions is available to a larger number of farmers and result in fewer applications for resource consent. However, we appreciate there may be some farmers who may still be unable to comply with the conditions (even once amended), who intend to get a certified FW-FP, but who will need a resource consent in the short term until FW-FPs are available.

The alternative to IWG regulations in the NES-F would be to allow IWG without any effective controls being in place (except perhaps some regional rules where they are in regional plans) until FW-FP provisions become available. This would create a hiatus of uncertain duration and the adverse environmental effects of IWG would continue.

# Clarity sought on interactions between IWG definition and temporary existing use rights

When a permitted activity under a regional plan becomes subject to a new resource consent requirement, s20A of the RMA provides a temporary right to continue the activity provided it is a continuation of an ongoing activity, was lawfully established, has the same or similar effects as before, and the person doing it applies for a resource consent within six months.

Some confusion has arisen because the NES-F defines IWG as an activity occurring between 1 May and 30 September – a period of less than six months. That is, the activity is defined as having ceased before s20A's six-month deadline expires. Some have interpreted this as

meaning a consent for IWG is redundant by the time a person needs to apply for it. Others have even questioned whether this implies the temporary right to continue IWG under s20A 'resets' at the end of each grazing season. Still others have questioned whether the temporary existing use right applies to IWG at all given that it is defined as a seasonal activity, not a continuation of an ongoing activity as required by s20A.

In reality, IWG is a year-round activity, of which the actual grazing forms only part. It also includes selecting, preparing, and sowing land with forage crops, and growing those crops throughout the year. We consider that recognising this in the definition of 'intensive winter grazing' would remove the regulations' potential ambiguities in relation to temporary existing use rights as described above. It would also make it clear that consents for IWG could cover the year-round cycle of winter grazing activity.

We do not propose extending the actual controls in the regulations to address the effects of the preparing, sowing and growing phases (other than through the re-sow requirement); the rules will remain focused on the effects of the grazing phase. Some technical, consequential changes to the rules may be needed to ensure this works properly. We note councils will still be able to make rules (and issue consents) that address the effects of the other phases of IWG due to the stringency provisions in the NES-F and the RMA itself.

#### Recommendation

Defer the regulations, to come into effect on 1 November 2022 instead of 1 May 2022.

Agree/Disagree

#### AND

Clarify the relationship between IWG and temporary existing use rights, by amending the definition of 'intensive winter grazing' to clarify that it is a continuous, year-round activity with sowing, growing and grazing phases, while making any consequential changes necessary to avoid imposing additional controls on the non-grazing phases of the activity.

Agree/Disagree

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# Other analysis

Submitters commented on a number of other areas, not directly related to the proposals on changes to the IWG regulations in the NES-F. These submissions dealt with sacrifice paddocks, the definition of landholding, and animal welfare.

We note these concerns and provide further comment on animal welfare below. However, these concerns are outside the scope of the current consultation, and we do not recommend any changes.

#### **Animal welfare**

Submitters also commented on animal welfare considerations, particularly in the context of the permitted activity conditions that manage area limits and pugging. As noted above, a number of submissions highlight concerns that the area limits risk driving the wrong behaviours from farmers which, as well as causing adverse environmental effects, could have negative impacts on animal welfare (eg, moving to higher yield crops, higher stocking density, and risk of feed shortages as farmers transition away from IWG or reduce the area used).

Pugging can result in poor animal welfare outcomes under certain conditions and some submitters feel it should be regulated against. Welfare science shows that dairy cattle find wet surfaces aversive, and if there is surface water pooling present on IWG paddocks it will result in a significant reduction in lying times. Lying deprivation is associated with acute and chronic stress and possible immunosuppression in dairy cattle (there is little welfare science available for other species). The ability for animals to express normal behaviours such as lying is already protected under the Animal Welfare Act 1999. Submitters also comment that any mitigation measures aimed at minimising the impacts of pugging on freshwater must not have negative impacts on animal welfare (eg, back fencing to prevent pugging would reduce space available for animals).

It is acknowledged that IWG can have serious negative effects on animal welfare. While animal welfare has been, and will continue to be, considered during the development of these regulations and associated guidance, the NES-F's primary focus is avoiding, remedying or mitigating the environmental effects of activities on freshwater. Animal welfare concerns are addressed with greater specificity through codes of animal welfare and guidance documents, and MPI is responsible for managing animal welfare policy and guidelines. MPI responds to all animal welfare complaints and can prosecute where animal welfare breaches occur.

In addition to the existing work MPI is doing to monitor and enforce animal welfare complaints, the Winter Grazing Action Group (WGAG) was established in 2020, <sup>19</sup> and tasked with implementing recommendations to improve animal welfare in winter grazing systems.

<sup>&</sup>lt;sup>18</sup> Further information is available on the MPI website.

<sup>&</sup>lt;sup>19</sup> Made up of 16 representatives from industry organisations, government, vets, farmers and other rural professionals.

This work by MPI and the WGAG on animal welfare sits alongside the environmental regulations in the NES-F, and although beneficial outcomes overlap, this is not the NES-F's primary focus. There may at times be a tension between the policies required to achieve these two outcomes, and it is ultimately the farmer's responsibility to ensure their winter grazing practices comply with both environmental and animal welfare requirements.

Notwithstanding the primary purpose of the NES-F, in developing guidance material there may be consequential benefits relating to animal welfare issues. By being aware of animal welfare issues, we can develop guidance which drives practices that will benefit both environmental outcomes and animal welfare, to avoid a situation where farmers are unable to comply with both sets of regulation.