Regulatory Impact Statement: Intensive Winter Grazing

Coversheet

Purpose of Document	
Decision sought:	This document discusses options for changes to the intensive winter grazing regulations and sets out a recommendation for Cabinet consideration and decision.
Advising agencies:	Ministry for the Environment, Ministry for Primary Industries
Proposing Ministers:	Minister for the Environment, Minister of Agriculture
Date finalised:	31 March 2022

Problem Definition

Intensive winter grazing (IWG) is a farming practice where large numbers of stock (cattle, sheep, deer) are confined over winter to small outdoor feeding areas planted with annual forage crops (eg, swedes, kale and fodder beet). The practice provides feed when there is no or low pasture growth during winter, as well as contributing to pasture renewal rotations for improved production, and providing weed and pest control.

If done poorly or too extensively, IWG can have serious negative effects on both animal welfare and the environment, particularly freshwater and estuary health. It can increase the discharge of nutrients, sediments and microbial pathogens into surface water and groundwater, by stripping the land of its vegetative cover.

The Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-F) sought to address the negative environmental effects of IWG with specific provisions. This consists of three pathway options for undertaking IWG:

- **Pathway 1**: IWG activities are permitted if a farmer complies with the default conditions set out in the NES-F, or
- **Pathway 2**: IWG activities are permitted if a farmer obtains a certified freshwater farm plan (FW-FP) (under which any adverse effects in relation to the IWG are no greater than would be allowed for by the default conditions set out in Pathway 1), or
- **Pathway 3**: Otherwise, a farmer needs to obtain a resource consent (restricted discretionary) for IWG activities.

The provisions were due to come into effect on 1 May 2021. This was deferred by a year (to 1 May 2022) to consider amendments to ensure the regulations work as intended and can be practically complied with, after stakeholders identified a number of concerns with the IWG provisions in the NES-F.

These concerns relate to the default conditions which are weather-dependent (resow and pugging) and those that are difficult to comply with practically and to enforce (subsurface drains, mean slope definition, and pugging). Where farmers cannot comply with the default conditions or cannot be certain in advance that they are going to be able to comply with the conditions, they must seek a resource consent (they cannot yet obtain a certified FW-FP because that pathway is not yet available – the FW-FP regime is still being developed.) This is likely to result in a significant number of resource consents, at a cost to both farmers and regional councils. FW-FPs would resolve the implementation issues with the default conditions, by providing an acceptable alternative permitted activity pathway, but FW-FPs are not available. The problem, therefore, only relates to addressing the implementation issues with the default conditions in the interim *while FW-FPs are unavailable*.

Executive Summary

The NES-F sets out the requirements for carrying out certain activities that pose high risks for freshwater and its ecosystems. It is part of the Government's commitment to improving freshwater health and management through the *Essential Freshwater – Healthy Water, Fairly Allocated* work programme. This work programme, which includes the National Policy Statement for Freshwater Management 2020 (NPS-FM), is now being implemented.

The Ministry for the Environment (MfE) and Ministry for Primary Industries (MPI) (which we refer to together as 'the Ministries' in this document) are engaging with stakeholders to identify issues as they arise, and to ensure they have the support needed to effectively implement and/or comply with the new requirements.

Regional councils (especially Environment Southland) and the primary sector identified challenges for successfully implementing the NES-F's IWG regulations. In September 2020, the Minister for the Environment and the Minister of Agriculture asked Environment Southland and primary sector representatives to look at the regulations and provide recommendations for improving implementation and IWG practice.

The Southland Intensive Winter Grazing NES Advisory Group (SAG) was established, with membership drawn from farmers, primary sector representatives, Environment Southland and Fish & Game along with observers from iwi and central government. The SAG's December 2020 report recommended either, an alternative permitted activity pathway in the form of an IWG module (similar to the certified FW-FP pathway not yet available), or a deferral in applying the regulations until the FW-FP pathway is available. The report also set out recommendations for alterations to the default conditions, to improve practical implementation and enforcement.

An IWG module as proposed was not considered feasible as an alternative regulatory pathway. For it to meet the legal standards required for a permitted activity standard, it would have needed to essentially be the same as certified FW-FPs, and could not have been developed before the FW-FPs are rolled out. A module could, however, set out best practice and ultimately form part of FW-FPs (once they are available).

The regulations were instead deferred, to allow officials time to consider SAG's recommendations and potential amendments to the default conditions to address the implementation issues. IWG regulations 28-31 that restrict expansion of the area used for IWG came into effect on 1 May 2021. IWG regulations 26 and 27 that set the permitted activity and restricted discretionary activity pathways were deferred to 1 May 2022.

The deferral period was used to develop the *2021/22 Intensive Winter Grazing Module* (the Module), a non-regulatory document to serve as guidance in the short term, and to form part of FW-FPs once available. This module was publicly launched in April 2021.

The Minister for the Environment and the Minister of Agriculture also asked that this deferral period be used by the farming sector to demonstrate improved practice (in terms of both environmental effects and animal welfare), and by councils to undertake increased monitoring and provide quarterly reports on IWG practice (to ensure there are measurable improvements by 30 April 2022).

The Ministries considered the below options, alongside the status quo.

Option 1: amend the default conditions. This would mean:

- Retain all three pathways for undertaking IWG
- Amend the default conditions to address implementation issues
- Defer commencement of regulations by a further 6 months to 1 November 2022 to allow farmers time to adjust their farm practices to comply with the amended regulations

Option 2: remove the permitted activity pathway based on default conditions (Pathway 1) and manage IWG through FW-FPs (Pathway 2). Key elements are:

- Remove Pathway 1, the permitted activity based on default conditions
- Manage IWG through Pathway 2, certified FW-FPs and Pathway 3
- Default conditions (amended as in Option 1) become a set of requirements that a FW-FP must address
- Defer implementation of the regulations until FW-FPs are available

Transitional Approach: This approach combines Options 1 and 2 – implementing Option 1 on a transitional basis until Option 2 can be implemented (ie, when FW-FPs are available). This would mean:

- Amend the default conditions as outlined in Option 1.
- Then, remove the permitted activity pathway based on default conditions (Pathway 1) once the FW-FP regime is in place and FW-FPs (Pathway 2) become available.

After considering these options, and in response to the issues raised by stakeholders, the Ministries consulted on Option 1, noting that the Transitional Approach remains an option for the future.

Option 1 is the preferred option. It is likely to best address the implementation issues, while maintaining the intent of the IWG regulations to manage the environmental effects

of IWG on freshwater. Some enforceability issues remain (particularly regarding pugging and resow). These will be mitigated to an extent through guidance.

Option 2 is not considered to be an effective option. It risks worse environmental impacts in the short-term, as the IWG regulations would be deferred until FW-FPs are available – and while roll out of FW-FPs is expected to begin by the end of 2022, it may still be several years before FW-FPs are available nationwide. While the FW-FP pathway would resolve the implementation issues with the default conditions (by providing an alternative permitted activity pathway that allows for bespoke mitigation measures), that cannot occur until FW-FPs are available. Option 2 would not address the issues in the short term, in a way that still managed the environmental effects of IWG. We cannot be certain that non-regulatory options would ensure the environmental effects of IWG are managed in the interim.

The Transitional Approach has the same benefits of Option 1 in the short term, of ensuring regulatory protection in the immediate term while FW-FPs are unavailable (with the amendments to resolve the implementation issues). It then has the benefits of Option 2 in the long term, once FW-FPs are available – it would remove implementation or enforcement issues that may arise with Pathway 1, and incentivise uptake of FW-FPs, which will facilitate farm-specific management of IWG activity.

The Ministries prepared a consultation document *Managing intensive winter grazing: A discussion document on proposed changes to intensive winter grazing regulations* (the Discussion Document) which was released on 26 August 2021. Submissions closed on 7 October 2021. The Discussion Document proposed a number of amendments to the default conditions to address the implementation issues (Option 1). It also noted that longer-term, once FW-FPs are available, the Ministries will look at phasing out Pathway 1 (the permitted activity pathway based on default conditions) altogether (the Transitional Approach). It noted that it is too early to consult on that, but the Transitional Approach is not mutually exclusive with Option 1 and remains an option in the future. The proposed amendments focus on implementation issues in the short term before FW-FPs are available.

The Discussion Document set out the following proposal regarding the IWG regulations:

- Retain three pathways for undertaking IWG
- Amend the default conditions as follows:
  - Limit of area used for IWG (50 ha or 10 per cent of area of farm) is unchanged
  - Slope threshold amended from a ‘mean slope across a paddock’ to a ‘maximum slope’ measurement, while keeping the threshold of 10 degrees
  - Pugging condition removed and replaced with a new requirement to take reasonably practicable steps to manage the effects of pugging on freshwater
  - Definition of ‘drain’ amended to exclude subsurface drains
  - Resowing deadline of 1 October (1 November in Otago and Southland) amended to ‘as soon as practicable’
  - New condition requiring protection of critical source areas
- Defer the commencement of the regulations by a further 6 months to 1 November 2022, to allow farmers time to adjust their farm practices to comply with the amended regulations.

After public consultation, officials analysed feedback and refined the proposed amendments, before recommending amendments to Ministers. This enabled drafting to begin, and that was tested through a targeted exposure draft process with key stakeholders, seeking to ensure the drafting achieved the intended outcomes and that there were no unintended consequences.

Feedback received through that exposure draft process enabled final refinement of the proposed amendments. This includes expressing pugging and resow requirements as stand-alone duties, so they sit outside the permitted activity pathways. This is expected to make it easier for farmers to determine compliance with the permitted activity conditions, and make compliance, monitoring and enforcement easier for councils. The certainty of compliance and reduction in consents expected from the proposed amendments is expected to be further enhanced with the pugging and resow conditions expressed as stand-alone duties.

Final recommendations on the drafting of the proposed amendments are set out in the final Report and Recommendations on intensive winter grazing amendments.

Limitations and Constraints on Analysis

The options analysis is based on the feedback received from local authorities, iwi/Māori and stakeholders.

The scope of this work was focussed on ways to make permitted activity default conditions more practical to comply with while still managing the adverse 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 public consultation, and a significant body of analysis and advice before being agreed by Cabinet in late 2020 – they are not examined any further in this document.

Only the preferred option (Option 1), and the possibility of the Transitional Approach in the future, was presented for public consultation purposes. The Transitional Approach and Option 1 are not mutually exclusive (the Transitional Approach requires Option 1 as the first step). While the Transitional Approach remains an option, Ministers did not propose to make this decision now.

Following consultation and targeted exposure draft testing, MfE and MPI officials prepared a final Report and Recommendations on intensive winter grazing amendments outlining recommended changes to the IWG regulations and now seek agreement from Cabinet to amend the NES-F accordingly.

Responsible Manager(s) (completed by relevant manager)
Nik Andic *Manager, Land and Water Systems* *Ministry for the Environment*  *31.03.2022* *Olivia Sullivan* *Manager, Water Policy* *Ministry for Primary Industries*  *31.03.2022*

Quality Assurance (completed by QA panel)	
Reviewing Agency:	Ministry for the Environment
Panel Assessment & Comment:	A Regulatory Impact Assessment Panel from the Ministry for the Environment has reviewed the Regulatory Impact Statement "Intensive Winter Grazing". The Panel confirms that the level of information provided meets the quality assessment criteria.

How to read this document

To assist the reader in navigating this document:

1. **Introduction and context** including problem statement and objectives, are covered in Section 1 and sections 2.1 to 2.3.

2. **Detailed analysis** of options and their impacts is covered in Sections 2.4 to2.7, and Section 3.

Contents

Section 1: Diagnosing the policy problem

1.1 What is the context behind the policy problem and how is the status quo expected to develop?

1.1.1 Current state

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

2. Winter forage crops are an important part of some pastoral farm production systems. They provide feed when there is no or low pasture growth, contribute to pasture renewal rotations for improved production, and provide weed and pest control.

3. 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. It can increase the discharge of nutrients, sediments and microbial pathogens into surface water and groundwater, by stripping the land of its vegetative cover.

4. For example, Environment Southland modelling suggests winter forage cropping has almost doubled across four catchments in the region, from 270 km^2 in 2014 to 512 km^2 in 2017. And despite the relatively small area of land (about 2.6% of 19,509 km^2), modelling estimates the activity increases total sediment loads by <4% across the catchments (higher in the Aparima catchment).[1]

5. There is limited information on the extent of intensive winter grazing nationally, but data from the Agricultural Production Survey run by Stats NZ suggests that, in 2018, approximately 240,000 hectares was used to grow forage brassicas. In 2019, approximately 9 million hectares of land was used for pastoral activity.[2] The activity is most prevalent in the South Island, which accounts for more than three quarters of that area.

6. In August 2020, the *Essential Freshwater* regulatory package was gazetted. As well as the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-F) – directed at making early change to high-risk activities including IWG – the package comprised the National Policy Statement for Freshwater Management 2020 (NPS-FM) directed at embedding long-term change, and stock exclusion and water metering regulations.

7. Further background detail and analysis relating to the development of the NES-F (including the IWG regulations), and the wider *Essential Freshwater* programme can be found on the Ministry for the Environment (MfE) website. In particular, the

[1] Refer to Modelling baseline suspended sediment loads and load reductions required to achieve Draft Freshwater Objectives for Southland.

[2] Refer to Agricultural and horticultural land use.

regulatory impact assessment and the section 32 evaluation report that accompanied the NPS-FM 2020 and NES-F, prepared as part of that work programme, set out detail about the environmental impacts that the IWG regulations were developed to address.

8. The package is now being implemented. MfE and the Ministry for Primary Industries (MPI) (which we refer to together as 'the Ministries' in this document) have been engaging with external stakeholders to identify issues as they arise, and to ensure they have the support needed to effectively implement the package. This has included: partnering with regional councils and the farming sector on key areas of work; establishing a cross-sectoral Freshwater Implementation Group; and appointing Freshwater Commissioners to facilitate the preparation of freshwater planning instruments by regional councils.

9. Feedback has been received that some specific parts of the NES-F may require modification to address unintended consequences and improve implementation. With regard to the IWG regulations, these concerns relate to the default conditions which are weather-dependent (resow and pugging) and those that are difficult to comply with practically and to enforce (subsurface drains, mean slope definition, and pugging). These concerns are set out in more detail in section 1.2. The level of concern is greatest in Southland and Otago but is shared in other regions to varying degrees.

10. As well as the environmental impacts, it is acknowledged that IWG can have serious negative effects on animal welfare. The Government has addressed both freshwater health concerns (through the NES-F), and animal welfare concerns (through animal welfare guidelines). MPI is responsible for managing animal welfare policy, guidelines and compliance. Regional councils are responsible for compliance with the NES-F and their regional plans more broadly.

1.1.2 Key features and objectives of the IWG regulations

11. The NES-F sets requirements for carrying out certain activities that pose high risks for freshwater and freshwater ecosystems. Subpart 3 (Intensive Winter Grazing) of Part 2 (Standards for farming activities) of the NES-F contains the regulations for undertaking IWG (including permitted activities). Individual farmers must comply with these regulations, with responsibility for compliance, monitoring and enforcement resting with regional councils.

12. The IWG regulations prevent further expansion of IWG and seek to improve practice by providing three pathways for the activity to occur. The compliance pathways in the NES-F for IWG activities are:

- **Pathway 1**: As a permitted activity, comply with default conditions set out in the regulations relating to area, slope, pugging, buffer zones, and resow (detail of these conditions is set out below); or

- **Pathway 2**: Also as a permitted activity, obtain and comply with a certified freshwater farm plan (FW-FP) under which any adverse effects in relation to

IWG are no greater than would be allowed for by the default conditions set out in Pathway 1; or

- **Pathway 3**: Apply for a resource consent (restricted discretionary) if unable to meet the default conditions or obtain a certified FW-FP.

13. Pathway 1 is set out in Regulation 26, under which the use of land for IWG (and consequential discharges into or onto land) is a permitted activity if the default conditions in Regulation 26(4) are met. Those default conditions are:

- The area of the farm used for IWG is no greater than 50 ha or 10 per cent of the farm area, whichever is greater; and
- The mean slope of a paddock used for IWG is 10 degrees or less; and
- On a paddock used for IWG, pugging at any one point is not deeper than 20cm, other than within 10m of a gate or fixed water trough, and pugging of any depth does not cover more than 50 per cent of the paddock; and
- Livestock are kept at least 5m away from the bed of any river, lake, wetland, or drain (noting the definition of 'drain' in the NES-F includes subsurface drains); and
- The land used for IWG must be replanted as soon as practicable after livestock have grazed the annual forage crop, but no later than 1 October (or 1 November for farms in the Otago or Southland regions).

14. Pathway 2 is also set out in Regulation 26, which provides that IWG is permitted if the farm has a certified FW-FP that applies to the IWG, and a certifier has certified that any adverse effects allowed for by the FW-FP in relation to the IWG are no greater than those allowed for by the default conditions in Regulation 26(4) (set out above).

15. Pathway 3 is set out in Regulation 27, under which IWG is classified as a restricted discretionary activity. The discretion of consent authorities is restricted to the following matters:

- Adverse effects on ecosystems, freshwater, and water bodies;
- Adverse effects on the water that affect the ability of people to come into contact with the water safely;
- Adverse effects on Māori cultural values;
- Susceptibility of the land to erosion, and extent to which loss of sediment and other contaminants to water is exacerbated or accelerated; and
- Timing and appropriateness of any methods proposed to avoid, remedy, or mitigate the loss of contaminants to water.

16. Alongside these 3 pathways set out in Regulations 26 and 27, the IWG regulations prevent further expansion of IWG.

17. Regulation 29 seeks to ensure that IWG is only undertaken:

    a. on farms where IWG has previously occurred within the reference period, and

    b. if the area used for IWG is no greater than the maximum area previously used on that farm within the reference period.

    The reference period is defined as the period between 1 July 2014 and 30 June 2019.

18. If these two conditions cannot be met, then the IWG activity is a discretionary activity and a resource consent is required under Regulation 30.

19. Regulation 30 also sets a discretionary activity standard for direct discharges into water. A resource consent for the discretionary activity may only be granted if the consent authority is satisfied that granting the consent will not result in an increase in:

    a. contaminant loads in the catchment as compared to loads as at 2 September 2020, or

    b. concentrations of contaminants in freshwater or other receiving environments as compared with the concentrations as at 2 September 2020.

20. A resource consent granted under Regulation 30 for a discretionary activity is limited to a term that ends before 1 January 2031.

21. Regulations 28 to 31 are intended to provide a temporary control over the intensification of IWG activities until each regional council has a freshwater planning instrument in place (ie, a regional plan or regional policy statement or a change or variation to an existing plan or policy statement) that gives effect to the NPS-FM 2020. Under section 80A of the RMA, regional councils must notify the freshwater planning instrument by 31 December 2024 (December 2023 for Otago Regional Council). As regulations 29 and 30 will be superseded by the new freshwater planning instruments, they are temporary and expire on 1 January 2025.

1.1.3 How is the status quo expected to develop if no action is taken?

22. Through engagement with Southland's farming and regional sectors, including the Southland Intensive Winter Grazing NES Advisory Group (SAG), officials heard that there are implementation and enforcement issues with the IWG regulations (more detail on the SAG is set out in section 1.2). Stakeholders said that they could not be sure before commencing IWG that their activity would meet the default conditions that are weather-dependent (resow and pugging), and those that are difficult to comply with practically and to enforce (subsurface drains, mean slope and pugging). This means Pathway 1 is not a viable permitted activity pathway (and will not be viable unless amendments are made to the default conditions).

23. The FW-FP regime is still being developed, so FW-FPs are not currently available. Although the roll-out is expected to begin by the end of 2022, it is likely to take several years before FW-FPs are available to all farmers nationwide. This means that Pathway 2 is not an available permitted activity pathway (and will not be until FW-FPs are available).

24. If Pathway 1 is not viable, and Pathway 2 is not yet available, the only remaining pathway for undertaking IWG activity is Pathway 3: obtain a resource consent.

25. Stakeholders indicated that on this basis, all farms undertaking IWG would require a resource consent, to pre-empt non-compliance with the default conditions. Officials were advised that, if the permitted activity standards remain as they are (with the implementation difficulties with the default conditions in Pathway 1, and in lieu of FW-FPs being in place for Pathway 2), the resource consent pathway would be the only or predominantly used pathway.

26. This is estimated to result in as many as 10,000 resource consent applications required to be lodged and processed (including 1,500 in Southland, 2,000 in Otago, and 3,000 in Canterbury) to authorise IWG activities. This is a significant consenting pressure and cost, borne by both farmers (the applicants) and regional councils.

27. Where farmers are unwilling or unable to obtain a resource consent in the short term, it may reduce the extent of IWG – this could have animal welfare implications if the farm system has not adapted to address the potential shortage in feed. In addition, there is no one right option for every farm: every option has trade-offs (for example, wintering barns can have other negative animal welfare and environmental implications if not managed appropriately).

1.1.4 Relevant prior government decisions, legislation and Regulatory Impact Statements

28. The NES-F was developed as part of the *Essential Freshwater* programme. Further background detail and analysis relating to the development of the IWG regulations within the NES-F can be found on the MfE website. In particular, the regulatory impact assessment and the section 32 evaluation report prepared as part of that wider programme set out detail about the environmental impacts that IWG regulations were developed to address, and analysis of options at that time.

29. The IWG regulations were due to come into effect on 1 May 2021. However, in March 2021, and in response to feedback received from stakeholders,[3] the Minister for the Environment deferred commencement of some IWG regulations in the NES-F for a period of one year (from 1 May 2021 until 1 May 2022).

[3] The nature of feedback received is described in more detail at section 1.2.2. See also the report of the Southland Intensive Winter Grazing NES Advisory Group, 10 December 2020, for a summary of stakeholder feedback relating to implementation issues.

30. The deferral applied to the permitted activity and restricted discretionary activity pathways (regulations 26 and 27). The regulations restricting expansion of area (regulations 28 to 31) were not delayed (and came into effect 1 May 2021).

31. The deferral provided time for central government officials to progress, and consult stakeholders on, proposed amendments to the permitted activity default conditions and address the implementation issues identified by stakeholders. The scope of this work was focussed on ways to make permitted activity default conditions more practical to comply with while still managing the 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 public consultation, and a significant body of analysis and advice before being agreed by Cabinet in late 2020 – they are not examined any further in this document.

32. The Minister for the Environment and Minister of Agriculture also accepted a commitment from regional councils and the farming sector to improve IWG practice during this deferral period in several ways.

33. The first was by rapidly developing, testing and deploying an IWG module. It would be a prototype for use in the FW-FP regime (which is currently under development and due for introduction in 2022). The *2021/22 Intensive Winter Grazing Module* (the Module) was prepared, and made publicly available in April 2021. This also allowed for further focus on how the module will fit within the FW-FP regime and how that can be operated in practice.

34. The Minister for the Environment and the Minister of Agriculture also asked that this deferral period be used:

    a. by the farming sector to demonstrate improved practice (in terms of both environmental effects and animal welfare), and

    b. by councils to undertake increased monitoring and provide quarterly reports on IWG practice to ensure there are measurable improvements by 30 April 2022 and beyond.

1.1.5 Other government work programmes with interdependencies and linkages

35. Certified FW-FPs are a key tool in implementing the *Essential Freshwater* programme. On 14 July 2021 MfE released a discussion document seeking feedback on the development of FW-FPs under part 9A of the Resource Management Act 1991 (the RMA). Public submissions were accepted from 26 July until 7 October 2021.

36. The FW-FP discussion document acknowledges that a challenge with FW-FPs is that they cannot be rolled out across the country all at once. Therefore, a phased introduction of FW-FPs is proposed, starting by the end of 2022. The first tranche of FW-FPs that are certified would use the best local information and catchment context available at the time. This entails a capacity building exercise to support the primary sector across the country, including the certification, auditing, quality assurance

systems, as well as enforcement and review. This approach means that it could be several years before FW-FPs are available nationwide.

37. A further timing challenge with the roll out of the FW-FP regime is ensuring alignment with the development of freshwater planning instruments (ie, regional plans or regional policy statements). Regional councils are required under section 80A of the RMA to develop freshwater planning instruments that implement the NPS-FM and give effect to Te Mana o te Wai – the central concept for freshwater management. These need to be publicly notified by December 2024 (December 2023 for Otago Regional Council).

38. There will be an overlap in these freshwater planning instruments being developed, and the primary sector developing FW-FPs. Once the new freshwater planning instruments are operative, certified FW-FPs will need to be reviewed and, if required, updated to reflect the new catchment visions, values, limits and rules set in the new instruments. This may also occur for resource consents for the take and use of water, or for discharges to land and water.

39. Other work to implement the *Essential Freshwater* programme includes consultation on and consideration of potential amendments to the natural wetland provisions in the NPS-FM and NES-F, and amendments to the Resource Management (Stock Exclusion) Regulations 2020. Proposed changes are still being formulated and will be the subject of future regulatory impact statements and Cabinet decisions.

40. Any amendments to the IWG regulations within the NES-F may impact other parts of the NES-F, such as stockholding areas, and this will be considered during the drafting of any amendments. For example, the definition of ‘drain’ in regulation 3 that the IWG regulations rely on also applies to the regulations managing stockholding areas.

41. As noted earlier, MPI is responsible for managing animal welfare policy and guidelines. Regional councils are responsible for compliance with the NES-F and their regional plans more broadly.

1.2 What is the policy problem or opportunity?

1.2.1 Nature, scale and scope of the problem

42. Following the NES-F’s Gazettal in late 2020, officials from the Ministries have continued to engage with stakeholders to identify issues as they arise, and to ensure they have the support needed to effectively implement the package. Initial feedback indicated that the IWG regulations may require modification to address unintended consequences and improve implementation.

43. In particular, feedback indicated that the default conditions are difficult to comply with, as they are weather-dependent (eg, resowing timeframes and pugging), or lack sufficient clarity and certainty (eg, mean slope definition, subsurface drains, and pugging). (These implementation issues are set out in more detail in section 1.2.6.) This means farmers are unable to know in advance, with certainty, whether their IWG activity will comply with the regulations. Further, the FW-FP regime is not yet in place.

This means neither Pathway 1 (compliance with the default conditions) nor Pathway 2 (compliance with a certified FW-FP) are currently available.

44. For the IWG regulations to function as intended, the permitted activity pathways for IWG need to be implementable. Where farmers cannot comply with the default conditions (or cannot be certain in advance that they will be able to comply with the conditions), and cannot obtain a certified FW-FP, they must seek a resource consent under Pathway 3. Stakeholders indicated that on this basis, the resource consent pathway would be the only or predominantly used pathway, with farms undertaking IWG requiring a resource consent to pre-empt non-compliance with the default conditions. That would in turn frustrate farm planning for a time.

45. This is estimated to result in as many as 10,000 resource consent applications required to be lodged and processed (including 1,500 in Southland, 2,000 in Otago, and 3,000 in Canterbury) to authorise IWG activities. This is a significant consenting pressure and cost, borne by both farmers (the applicants) and regional councils.

1.2.2 Stakeholders and effect on stakeholders

46. In September 2020, the Minister for the Environment and the Minister of Agriculture asked Environment Southland and primary sector representatives to review the IWG regulations in the NES-F and provide practical recommendations for improving implementation and IWG practice.

47. In response, the Southland Intensive Winter Grazing NES Advisory Group (SAG) was established. Primary sector representatives include Beef + Lamb, DairyNZ, Federated Farmers, along with Fish & Game, and in these discussions regarding the Southland region, Ngāi Tahu has been represented by Te Ao Marama Incorporated.

48. SAG released its report and recommendations in December 2020 (the SAG Report). The SAG Report's primary recommendation is for an alternative permitted activity pathway to be included in the regulations in the form of an IWG module. The SAG recommended that if this alternative pathway is not created, the application of the regulations be deferred until a FW-FP pathway became available. The SAG also recommended changes to the permitted activity default conditions, particularly those that are weather-dependent such as resowing and pugging.

49. There is considerable public interest in IWG, as reflected in the SAG Report which says:

> *"During the 2019 IWG season (May-September) Environment Southland undertook compliance flights to monitor farmers' implementation of required good management practices. They found there was widespread evidence of poor practice and this was reinforced by members of the public and the media. On the ground inspections and enforcement action where necessary followed on from the flights."*

50. The SAG Report went on to state that since 2019, regional councils, central government and industry groups have worked with the farming sector to help lift

standards of IWG practice, through providing advice and making information available. According to the SAG Report, inspections in 2020 (albeit a dry year) showed considerable improvement in the adoption of good management practices since the year before.

51. The main challenge for stakeholders is that the permitted activity conditions are difficult to comply with (due to being weather-dependent or lacking sufficient clarity), and it is difficult to be certain in advance whether they will be met, thereby potentially leading to a significant number of resource consent applications. The effect on stakeholders is principally the significant resource, cost and time associated with implementing or administering such regulations. These effects fall on both the primary sector and regional councils in their respective roles as applicant and regulatory authority. The volume of consents will also pose a resourcing issue for iwi/hapū as they are unlikely to have the capacity to participate in consultation, particularly in the most-impacted regions requiring thousands of consents (ie, Otago and Southland).

1.2.3 Timing issues

52. A central element of the implementation issues raised by stakeholders is timing, specifically, the timing of the IWG regulations coming into effect, in relation to the timing of FW-FPs being available.

53. As set out above in section 1.1.4, the IWG regulations were deferred by one year, to enable consideration of amendments to address the implementation issues. That delay by itself will not resolve the implementation issues, and the high number of estimated resource consent applications remains, until either there are amendments to the default conditions, or FW-FPs are available.

54. When the IWG regulations come into force on 1 May 2022, IWG will be a permitted activity if the default conditions are met or if there is a certified FW-FP.

55. However, given FW-FPs are not yet available, in practical terms the only permitted activity pathway available will be compliance with the default conditions (Pathway 1). If those conditions cannot be met, a resource consent would be required (Pathway 3). For all 3 pathways to be available, the IWG regulations would need to be further deferred until the FW-FP regime is available nationwide.

56. After FW-FP regulations come into force (if agreed by Ministers), FW-FPs would be gradually rolled out across New Zealand. The exact date farmers require certified FW-FPs is expected to vary across the country, with roll-out to be staged. Even with roll-out expected to commence by the end of 2022, the FW-FP pathway will not be available for all farmers undertaking IWG for several years.

57. Under the FW-FP regime, all farms will eventually need to have a FW-FP. Permitted activity default conditions which cannot be implemented for IWG activity would drive some consent applications that would not otherwise be made if FW-FPs were available. Consent applicants in these circumstances potentially face a double up of costs, ie, for a consent for the interim period and then for development of a FW-FP.

58. Resource consents for discharges to land or water can be granted for a term of up to 35 years (note this is relevant to consents for restricted discretionary activities under regulation 27, but not to consents for discretionary activities (expanding existing IWG) under regulations 28-31). During the period of the resource consent, meeting its conditions would supersede any requirements relating to IWG set out in a certified FW-FP. Farmers operating under a consent for a fixed period will not be required to adjust their farm practice to reflect emerging good and best practice. This will reduce the ability of FW-FPs to drive continuous improvement in IWG practice.

1.2.4 Existing use rights

59. Under sections 20A and 43B(9) of the RMA, existing use rights may apply to IWG activity for a limited time period.

60. Section 20A enables an activity to continue if:

    a. the activity was previously lawful without a consent,

    b. the character, intensity and scale of effects do not change, and

    c. a resource consent application is lodged within six months of the new regulations coming into force.

61. For IWG, this could enable existing activities to continue, on the proviso a resource consent was lodged by 1 November 2022 (ie, within six months of the regulations coming into effect on 1 May 2022). The activity can continue until a decision on the consent application has been made and all appeals are resolved. Alternatively, a farmer could ensure their practice complied with the permitted activity requirements in the IWG regulations before the six-month period under section 20A is up. The implications for the primary sector are that any amendments to the NES-F would have limited practical effect before the winter of 2023. This means that a further delay of six months as suggested for Option 1 would have no different environmental impact than the status quo.

62. Existing use rights require a high degree of knowledge of the operation (eg, determining character, intensity and scale of the existing activity). In any case, existing use rights are intended to provide a temporary holding position to ensure activities can adjust their operations to comply with new regulations, or if unable to comply, ensure a continuance of the activities by obtaining a resource consent.

1.2.5 Further deferral

63. Farmers begin making on-farm decisions regarding IWG well in advance of grazing beginning in May each year.

64. To ensure their effective implementation, any of the options being considered to amend the IWG regulations would require an additional deferral beyond 1 May 2022. Depending on the option, that time would allow farmers to adjust their practices, cultivation and planting choices, obtain a resource consent, or obtain a certified FW-FP.

65. There could also be animal welfare implications if there is insufficient time for farmers to adapt the farm system to address any potential shortage in feed.

66. Therefore, a decision to extend the current deferral period is required. This is discussed further in the options analysis below as the length of the additional deferral period differs between the options considered.

1.2.6 Implementation issues

67. Table 1 below describes the implementation issues with the current default conditions (which relate to both practical issues for farmers, and compliance, monitoring and enforcement issues for councils), and notes the recommendations made by SAG.

Table 1: Implementation issues

Default condition in the IWG regulations		**Implementation issues and recommendations as set out in the SAG Report**
Reg 26(4)(a)	**Total area**: The area of the farm that is used for IWG must be no greater than 50 ha or 10% of the area of the farm, whichever is greater.	The SAG raised concerns that this condition could drive the wrong behaviours (such as operating IWG more intensively, or discouraging a change to lower yielding crops which could provide better environmental outcomes). However, **the SAG recommended** no change as long as the FW-FP pathway exists.
Reg 26(4)(b)	**Slope threshold**: IWG is restricted to paddocks where the mean slope is 10 degrees or less.	The SAG noted measuring the slope as a 'mean across a paddock' is difficult to calculate (for both farming and consenting purposes). It would result in areas at a slope greater than the 10 degrees threshold being cultivated and grazed where they are a small area of the paddock. **The SAG recommended:** - measuring slope as a maximum slope (noting that maximum slope can be easily measured eg, using an app), instead of 'mean slope across a paddock', and - amending the slope threshold to 15 degrees, and - managing critical source areas (CSAs) to strengthen the requirement to mitigate risks of IWG on slopes (the proposed new condition managing CSAs is set out further below).
Reg 26(4)(c)	**Pugging**: Pugging must not cover more than 50% of the paddock and must not be deeper than 20cm at any one	The SAG noted this is impractical to implement, monitor and enforce. The implementation challenges relate to both farming and enforcement, ie, measuring the depth of hoofprints, and the scale of pugging across a paddock. It

Default condition in the IWG regulations		Implementation issues and recommendations as set out in the SAG Report
	point (except near fixed water troughs or entrance gates).	also noted the ability to comply with this condition is weather dependent. This condition is aiming to manage the effects of bare soil being left for long periods, by minimising overland flow and sediment run off. Of concern is the connection of IWG areas and run-off from these areas reaching waterbodies through CSAs and direct run-off into drains and waterways. Also of concern is soil structure damage, the effects of which can be better managed via other means, such as through critical source area (CSA) identification and measures to break the connection to these, along with other practical steps to address the effects of pugging on freshwater. For both environmental and animal welfare benefits it is best practice to use portable water troughs (to keep stock off previously grazed areas). The SAG noted that Regulation 26(4)(c)(i) discourages this practice, as it only provides an exception for fixed water troughs. **The SAG recommended:** - deleting the pugging condition, and - managing CSAs to strengthen the requirement to mitigate risks of sediment run-off from IWG (the proposed new condition managing CSAs is set out further below).
Reg 26(4)(d)	**Buffer zone from waterways**: Livestock must be kept at least 5m away from the bed of any river, lake, wetland, or drain.	The SAG noted that the definition of 'drain' currently includes *subsurface drains* as well as surface drains. This is impractical to implement, monitor and enforce, as there are extensive networks of subsurface drains that have not been mapped, or cannot practically be mapped. The SAG noted it understood from officials that the inclusion of subsurface drains was an unintended result of drafting. The SAG noted no other issues with buffer zone itself, recognising that ungrazed buffers are an accepted and well understood good management practice. **The SAG recommended** clarifying that the definition of 'drains' does not include subsurface drains.

Default condition in the IWG regulations		Implementation issues and recommendations as set out in the SAG Report
Reg 26(4)(e)	**Re-sowing**: Land used for IWG must be replanted as soon as practicable after livestock have grazed the crop, but no later than 1 October (1 November in Otago and Southland).	The SAG noted this is impractical to meet (or, to be certain in advance that it will be met) due to unpredictable weather, and farmers still grazing up to 30 September and in some cases into early October. Monitoring and enforcement would also be very difficult. There is potential for perverse outcomes, eg, use of heavy machinery on paddocks when soil conditions are not appropriate, leading to soil damage, crop failure and additional weed spraying. The requirement to replant may also restrict the ability of farmers to utilise good management practices such as companion planting due to the requirement to replant (a system that uses companion planting does not require replanting because cover is maintained through winter and beyond, and the focus is to minimise the amount of time bare ground is exposed to weather). **The SAG recommended** deleting the resow condition, and replacing it with a requirement to manage CSAs.
New reg	**Critical Source Areas (CSAs)**: No default conditions currently	The SAG noted that CSAs are not included in the regulations. But, substantial evidence shows that practices managing CSAs and avoiding overland flow result in the reduction of multiple contaminants related to IWG activities. The SAG provided an example definition, noting the importance that the CSAs are connected to waterways. Good management practice of CSAs supports these areas remaining uncultivated, and left in pasture to protect soil structure and reduce surface run off. **The SAG recommended** the inclusion of an additional condition, requiring CSAs within IWG areas to be protected, ie, uncultivated and ungrazed.

1.2.7 Overall regulatory burden

68. There is an overall regulatory burden to consider relating to implementation of any changes to the IWG regulations:

    a. Transition times, ie, for farmers to transition away from current IWG practices that may be generating significant adverse environmental effects; and

b. Cumulative effects, ie, from the policies and regulatory changes farmers must comply with over the next few years.

69. Farmers will be managing compliance with a number of new policies, as well as engaging on further regulatory changes, with overlapping time frames and competing priorities for farm planning and financial/physical resourcing. A factsheet will be created setting out an overview of all the regulatory changes and when they will each come into effect, to assist with farm planning.

70. The overall impact (including regulatory cost and effort[4]) was examined in detail as part of the overall assessment of the *Essential Freshwater* programme. The regulatory impact of these proposals is therefore limited to the impact of amending the conditions within the existing permitted activity standard.

[4] Refer to Supporting evidence for Government freshwater work programme: Assessment of impact on councils.

Section 2: Deciding upon an option to address the policy problem

2.1 What objectives are sought in relation to the policy problem?

71. The consideration of objectives is guided by the purpose of the RMA and the objectives of the *Essential Freshwater* programme. The key objectives are:

    (a) Any change must be implementable, ie, it must provide a realistic pathway for activities to occur where environmental effects can be appropriately managed and enforced.
    (b) Stop further degradation and loss, so the state of the country's freshwater resources, waterways and ecosystems does not worsen.
    (c) Reverse past damage, through changes to current methods to enable restoration of areas previously damaged by the IWG practice.

2.2 What criteria will be used to compare options to the status quo?

72. To assess the policy effectiveness of potential options for addressing IWG implementation issues the following criteria (a) – (g) are used. Any change to the NES-F regulations for IWG must:

    (a) not result in an **adverse environmental impact** worse than is possible under the current regulations. As far as possible, options should ensure people will minimise the adverse environmental impact of their activity and put the needs of the water body first. This includes the risk of any adverse effects that result from a further delay to the regulations taking effect;

    (The following criteria are not ranked or prioritised in any particular order as all are relevant and interrelate.) To the extent possible, any change should also:

    (b) **allow for (and encourage) practice changes and improvements**;
    (c) **enable innovative practices** that address underlying issues (such as companion planting);
    (d) **support the roll-out and function of freshwater farm planning**;
    (e) improve **ease of implementation**;
    (f) improve **ease of compliance, monitoring and enforcement;** and
    (g) consider **any inconsistencies or tension with animal welfare guidelines and ensure the changes do not impinge on animal welfare issues**.

73. The criteria are a refinement of the more generic criteria used in the regulatory impact assessment (RIA) for the *Essential Freshwater* programme (dated 22 April 2019). The RIA reviewed the IWG provisions in terms of the following assessment criteria:

    a) Effectiveness;
    b) Timeliness;
    c) Fairness;
    d) Efficiency;
    e) Principles of the Treaty of Waitangi; and

f) Te Mana o te Wai.

These continue to be relevant and are assessed as part of the analysis of the options against the criteria listed in the above paragraph. Te Mana o te Wai, and the priority it gives to the health and wellbeing of water bodies and freshwater ecosystems, is represented in the environmental protection criteria at (a) above.

74. Another important aspect of Te Mana o te Wai and principles of the Treaty of Waitangi is active protection, and engaging with iwi/Māori, as kaitiaki and partners. In this context, the process for developing proposed changes can be summarised as:

(a) Government received feedback on regulations, including from the SAG which included Te Ao Marama Inc (TAMI) as observer. This raised implementation issues that are more prevalent in the south of New Zealand, and Ngāi Tahu's takiwā.
(b) In September 2021, officials reached out to iwi/Māori stakeholders through Te Kōmiromiro e-pānui (MfE's newsletter aimed at delivering the latest updates for tangata whenua from te Manatū mō te Taiao). This included notification of the public consultation process, and details for those interested in attending online hui.
(c) We undertook full public consultation from 26 August to 7 October 2021. This included a discussion document outlining the proposed changes, an online submission portal, and online hui (as part of combined sessions also covering engagement on the FW-FP regime and proposed changes to the low slope map in the stock exclusion regulations). In this process, officials had limited engagement with iwi/Māori: three submissions were received from iwi/Māori groups. This is understandable given the range of reforms underway that iwi/Māori are interested in; the limited scope of this work; and that IWG is largely a South Island activity, falling with Ngāi Tahu's takiwā.
(d) Through the targeted exposure draft process undertaken in March 2022 (further details below), we engaged directly with Ngāi Tahu and Te Ao Marama to seek their feedback on the proposed drafting of the amendments. As set out below in section 2.3.2, that exposure draft process sought to test whether the drafting of the proposed changes would address the implementation issues as intended, and to minimise the risk of unintended consequences. It was not seeking further submissions on policies (which had been sought through the public consultation process above), but was testing the workability of specific drafting changes to the NES-F.

75. As a result of three submissions from the above, we understand issues of particular interest to iwi/Maori submitters include the following:

(a) Te Tumu Paeroa – The Office of the Māori Trustee had concerns relating to the application of the IWG regulations to leasehold land and the potential for driving unintentional consequences regarding the use of leased Māori land and freehold land (in particular, regarding the limitations on area and slope).
(b) Ngāi Tahu's submission can be summarised as that, while agreeing that some of the proposed amendments to the IWG regulations are appropriate in some

areas, they are not appropriate in other areas (eg, conditions managing area, slope). Ngāi Tahu's view is that this reinforces why a localised approach to environmental management, recognising mātauranga and local knowledge is important not only for recognising rangatiratanga and kaitiakitanga, but for ensuring good environmental outcomes. Ngāi Tahu also commented that there is no proposal for mana whenua input into guidelines relating to pugging, and the identification of CSAs.

(c) Ngāi Tahu also noted enforcement concerns, especially regarding the conditions managing pugging and resow.

(d) Te Ao Marama were largely supportive of the proposed amendments. Their concerns relate to the implementation and enforcement of the "practicable" standard in pugging and resow. These concerns are shared by other submitters, and addressed further below and in the Report and Recommendations.

76. We acknowledge these concerns, and agree that there are limitations with a permitted activity standard managing intensive winter grazing, given the local variation of the activity. This issue is addressed throughout this RIS, noting that FW-FPs will ultimately enable a more localised approach to environmental management, once they are available.

77. We acknowledge the concern raised by 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 in the development of guidance material relating to CSAs, which will include guidance on the identification of CSAs. This would be a more efficient and meaningful way to engage on this issue than regarding the identification of each individual CSA.

78. Concerns about enforceability are also shared by other submitters, and are assessed in more detail below and in the Report and Recommendations. However, the impacts of restrictions on total area and the decision-making roles under the RMA fall outside the scope of these proposals, and this work has a limited ability to address those wider concerns. These matters are also discussed in this RIS, and in the Report and Recommendations.

79. We acknowledge the Waitangi Tribunal's comments that kaitiaki rights, and the Crown's obligation to provide for Māori decision making according to the interest, is a "sliding scale".[5] As set out at the start of this RIS, the proposed amendments addressed in this RIS are of a limited scope focused on making changes to existing default conditions managing IWG. The broader NES-F and its structure were subject to public consultation and a significant body of analysis and advice before being agreed by Cabinet in late 2020. The assessment of iwi/Maori interests is balanced within the context of this limited scope of the proposed amendments.

[5] Refer to Extracts from Waitangi Tribunal commentary, findings and recommendations on the Resource Management Act 1991, pg 31.

2.3 What scope will options be considered within?

2.3.1 Existing policy decisions

80. Relevant prior government decisions, legislation and regulatory impact statements are described at section 1.1.4.

81. In particular, options considered here are focussed on ways to make permitted activity default conditions more practical to comply with while still managing the effects of IWG. They do 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 public consultation, and a significant body of analysis and advice before being agreed by Cabinet in late 2020 – they are not examined any further in this document.

82. The Cabinet decision (CAB-21-MIN-0121) to defer the implementation of Regulations 26 and 27 by one year to 1 May 2022 has enabled the review of the implementation challenges and development of feasible options to address those challenges.

2.3.2 Stakeholder engagement

83. Due to climatic conditions and livestock species, IWG practice varies across the country. Stakeholder engagement in Southland resulted in a set of recommendations by the SAG. Other options have been developed by officials, some of which respond directly to the feedback received from stakeholders. These are all reviewed in the options analysis below.

84. Officials analysed the implementation issues and the recommendations in the SAG Report. The Government proposed amendments to the NES-F to address implementation issues.

85. These proposed changes were publicly notified through the Discussion Document on proposed changes to the intensive winter grazing regulations. The Ministries undertook public consultation from 26 August to 7 October 2021, seeking feedback on the proposed amendments as set out in the Discussion Document.

86. To ensure an efficient process and to minimise the risk of consultation fatigue, consultation on potential changes to the IWG regulations was overlapped with consultation on FW-FPs, which took place from 26 July to 7 October 2021.

87. At that time, an interim regulatory impact statement (RIS) was prepared by officials, and made publicly available.

88. A total of approximately 85 submissions were received on the proposed amendments to the NES-F, from iwi/Māori, the primary sector, ENGOs, district and regional councils, and individuals. These submissions were analysed by officials, and a summary of submissions was prepared.

89. Having considered submissions and an interim report and recommendations prepared by officials, Ministers made policy decisions enabling drafting of amendment regulations to begin.

90. This draft formed the basis of an exposure draft process throughout March 2022. This process included members of the SAG and other stakeholders with relevant expertise in the operation of the IWG regulations. It sought to test whether the drafting of the proposed changes would address the implementation issues as intended, and to minimise the risk of unintended consequences. This process was not seeking further submissions on the policies, but testing the workability of specific drafting changes to the NES-F.

91. In particular, we sought feedback on:

    a. how CSAs are defined,

    b. how slope is measured, and

    c. whether the pugging and resow conditions should be drafted as stand-alone duties or permitted activity conditions (see section 2.4.3 for more detail on stand-alone duties).

    Comment on other drafting issues was also welcomed.

92. Exposure draft feedback resulted in minor changes to definitions and methods described in the regulations (eg, measuring slope) to improve clarify. Feedback will also be used to inform guidance development.

Changes are broadly supported by councils and the primary sector, but ENGOs remain opposed to underlying policy decisions.

93. Feedback from councils and primary sector bodies largely supports changes in the exposure draft of IWG regulations, and suggested ways they could be made clearer. Most express support for using stand-alone duties, consistent with our analysis (see section 2.4.3 for more detail).

94. ENGOs are opposed to a number of underlying policy decisions, and request the regulations go further to restrict IWG. In general, their feedback was focused on retaining provisions they see as more protective of the environment (eg, retaining the fixed date that farmers must resow land following IWG). However, their feedback also noted a preference to amend policy decisions that went beyond the scope of changes we proposed. This included requests to: remove the certified freshwater farm planning pathway entirely; use a more constraining activity status for the consenting pathway; and increasing set-backs from 5m to 10m.

Feedback from Ngāi Tahu and Te Ao Marama Incorporated (TAMI)

95. Ngāi Tahu and TAMI's objective is to see waterbodies restored to a state of hauora wherever degradation is present. They stress IWG regulations will likely be insufficient to address water quality issues and that there may need to be

fundamental system changes to achieve environmental gains required to meet hauora and fully recognise Te Mana o te Wai as described in the NPS-FM 2020.

96. Their feedback supports some of the changes in the exposure draft (eg, those relating to slope; managing critical source areas; and better defining IWG in relation to existing use rights). But overall, it seeks to retain provisions that better achieve the above.

97. They oppose further deferral of regulations and, in particular, any changes that would distinguish between surface and subsurface water bodies (ie, changes to definitions that exclude subsurface drains and groundwater). They want to resolve how nutrients and other contaminants discharged by subsurface drainage will be managed, and view this distinction as inconsistent with Te Mana o te Wai and the NPS-FM 2020.

98. While we recognise subsurface drains transport nutrients and other contaminants, we believe properly addressing this is beyond the scope of IWG regulations and the changes proposed here. These issues are better addressed through implementation of the NPS-FM 2020, and its requirements to limit resource to achieve desired outcomes. Where subsurface drains, IWG or any other resource use are an issue (eg, a significant source of contaminants) regional plans will need to manage them – and can more stringent than IWG regulations when doing so,

Priorities for guidance development

99. Feedback has identified areas where guidance is needed most, or soonest. This will inform MfE's guidance development and implementation support.

100. For example, most feedback highlighted remaining challenges with compliance monitoring and enforcement, which are inherent in standards that rely on what is reasonable or practicable. This feedback generally requests examples of what is reasonable or practicable, to illustrate what farmers are expected to do to comply with the amended regulations.

101. Other priorities include guidance on:

a. How to identify and manage critical source areas.

b. Why the regulations are proposed to commence on 1 November 2022, and that we expect farmers to begin changing practice where necessary before that (ie, as soon as amendments are gazetted), in preparation for the 2023 grazing season.

c. Existing use rights and that they will not be available for the 2023 grazing season.

d. How stand-alone duties operate in relation to activity status and the need for a resource consent.

e. How the definition of annual forage crop will apply, particularly if farmers decide to graze arable or horticultural crops instead of harvesting them (ie, that this will mean they come under the definition of annual forage crops and IWG regulations will apply), and how this differs from grazing of residual crops after being harvested.

f. How IWG regulations relate to the NPS-FM 2020, and that councils may well need to restrict activities further (eg, in relation to subsurface drains).

2.3.3 Available non-regulatory options

102. The key non-regulatory option is the use of education on preferred farm practices and encouraging voluntary environmental protection measures. While this is an important part of improving IWG practice, we cannot be confident this, by itself, will ensure the objectives of the *Essential Freshwater* programme are achieved. It is important, but only as support for the regulatory requirements which are needed to ensure the environmental effects of IWG activity are managed, not as a substitute for such regulation.

103. As set out above, the Minister for the Environment and the Minister of Agriculture asked the primary sector and councils to use the temporary deferral to 1 May 2022 to demonstrate improved IWG practice and increased monitoring and reporting.

104. A second non-regulatory option is an IWG module. This was recommended by the SAG as an alternative regulatory pathway, to be used until FW-FPs are available. However, an IWG module as proposed was not considered feasible.

105. A permitted activity standard must be clear on the face of it whether it is met, and that would not be met by the subjectivity of the IWG module, which would be submitted to regional councils and subjected to an audit process. For it to meet the legal standards required for a permitted activity standard, it would have needed to essentially be the same as certified FW-FPs, and could not have been developed before the FW-FPs are rolled out. An IWG module was therefore not a viable option as a permitted activity standard.

106. A module was, however, considered to be a suitable non-regulatory option. It could set out best practice and ultimately form part of FW-FPs (once they are available), which will have the necessary processes in place to be certified. MPI, MfE, regional councils and primary sector representatives developed the *2021/22 Intensive Winter Grazing Module* (the Module), an online resource to help improve practices to benefit freshwater quality and animal welfare. The Module was publicly launched in April 2021. It sets minimum expectations for IWG practices and helps farmers plan and plant annual forage crops.

107. The Module also identifies practical measures to avoid or mitigate the adverse effects of IWG. Such measures include leaving a 5m buffer area adjacent to waterways, grazing crops top down where they grow on a slope and using portable water troughs to minimise pugging.

108. The Module will be used to inform the IWG components of existing and new farm plans and enable them to be tested and incorporated into certified FW-FPs. As the Module is now in use, there is potential for this to accelerate the uptake of FW-FPs where IWG occurs.

109. The module was well utilised and received praise for being simple and easy to understand. However, a more in-depth piece of guidance on CSA, pugging and resow would be helpful to identify important environmental mitigation of these adverse effects and aid implementation.

110. Initial reporting shows that there are large gaps in IWG monitoring across the country and a lack of data on land use generally. However, throughout this process councils have worked to investigate options for assessing IWG nationally. This has resulted in a joint project with Manaaki Whenua to investigate the feasibility of nationally consistent land use reporting. Councils state that there will be a more in-depth report on 1 May 2022. The proposed IWG reference group will provide officials with valuable input into Councils' efforts to monitor IWG practice over the deferral period. An analysis of the quality of reporting will be available after the May quarterly report has been received.

2.3.4 Overseas examples and experience

111. Although IWG is used extensively in overseas jurisdictions, differing climatic and farming conditions mean practices vary considerably (eg, housing livestock in enclosures for the majority of the winter season), as do priorities (eg, the adverse effects of runoff and degradation of freshwater may be accorded a lower priority as it does not occur to the same extent as in New Zealand). One of the competitive advantages New Zealand farming practice has over international competition is the predominance of outdoor pasture grazing. This is aligned with overseas consumer preferences, including concerns regarding both environmental impact and animal welfare.

2.4 What options are being considered?

2.4.1 Status Quo Option

112. Maintaining the status quo keeps the regulations as they are, that is, the permitted activity default conditions pathway (Pathway 1), the FW-FP pathway currently under development (Pathway 2), and consenting pathway (Pathway 3) in the NES-F remain unchanged.

113. Feedback received from stakeholder groups and the primary sector indicates that many farmers are unlikely to rely on the permitted activity default conditions (Pathway 1). Some of the conditions (eg, pugging, and resowing by a specified date) are weather-dependent and therefore farmers will not be confident of meeting them in advance.

114. The date for introduction of the FW-FP regime across each region is currently unknown (but is expected to be by the end of 2022). It is also unknown whether there will be an interim approval process until the full certification process is in place.

115. In the meantime, where the permitted activity default conditions cannot be met, and a FW-FP is intended but not yet available, resource consents will be required if they are to continue carrying out IWG.

116. The status quo does not address the difficulties identified for implementation, and it will continue to be challenging for farmers to comply with these regulations, and for councils to undertake monitoring, compliance and enforcement. This is also likely to lead to a high number of resource consents being required (see detail in section 1.2.1), significantly impacting farmers, councils, ENGOs and iwi/Māori.

117. If the status quo is maintained, the implementation issues will be most significant in the short term. They will reduce over time as the FW-FP becomes widely available, because FW-FPs will provide a permitted activity pathway that does not have these implementation issues, due to the ability of FW-FPs to provide bespoke mitigation. The issues will also reduce over time as farmers continue to implement practice changes and improvements in line with the regulations and guidance. The problem being addressed here relates to the short-term, while FW-FPs are not available.

118. While the Module was released last year, that is non-regulatory guidance. It is helping to set consistent expectations for IWG management practices and prepare for the uptake of the FW-FP regime when that becomes available. The Module is expected to form part of the FW-FP regime.

119. There is some evidence of improvements in practice already occurring, and some councils have progressed their plans and included IWG restrictions (see detail in section 2.3.3).

120. However, we cannot be certain that these non-regulatory options alone will ensure that the environmental effects of IWG activity are managed.

2.4.2 Option 1 – Amend the default conditions for IWG and further defer commencement for six months

121. Option 1 amends the default conditions for IWG in Regulation 26(4) and further defers the commencement of the regulations to allow farmers time to adjust to the amended conditions.

122. The commencement of Regulations 26 and 27 would be delayed for a further period of 6 months (eg, delaying the commencement date from 1 May 2022 to 1 November 2022). This recognises that planning and planting for the winter of 2022 has already happened, and the winter of 2023 is the earliest changes could be implemented at the farm-level.

123. Note the regulations would commence immediately after the 2022 winter, to ensure individuals cannot rely on existing use rights and must comply with the amended regulations during the 2023 winter. This would be supported by consequential amendments to the definition of ‘intensive winter grazing’ to clarify the relationship between IWG and temporary existing use rights. The amendment to the definition of ‘intensive winter grazing’ would clarify that it is a continuous, year-round activity with

sowing, growing, and grazing phases. Consequential amendments may be necessary to avoid imposing additional controls on the non-grazing phases of the activity.

124. The proposed amendments seek to address the implementation issues identified with the default conditions. Those issues relate largely to the practical implementation of the default conditions, for example, it is impractical to implement buffer zones from the extensive networks of unmapped subsurface drains, and the exclusion of subsurface drains from this condition resolves that.

125. The amendments seek to meet the intent of the IWG regulations, by making the conditions more practical to comply with to ensure there is a viable permitted activity pathway, while still managing the adverse environmental effects of IWG activity.

126. The proposed changes also address some of the compliance, monitoring, and enforcement issues identified with the conditions. For example, it is impractical to measure slope as a 'mean across a paddock' from a monitoring perspective (just as it is from a practical implementation perspective). The amendment to measure slope as a 'maximum' across any 20-metre distance makes it easier to measure and monitor.

127. While the proposed amendments go some way to address these issues with implementation and enforcement, some implementation and enforceability risks remain. These relate particularly to proposed amendments to the pugging and resow conditions, as set out further in Table 2 and section 2.5.

128. Table 2 sets out the proposed amendments to the default conditions in Regulation 26(4).

2.4.3 Using stand-alone duties to mitigate uncertainty related to pugging and resow under Option 1

129. These remaining implementation and enforceability risks relate in particular to the pugging and resow conditions, given their inherent flexibility which make it difficult to determine if the permitted activity conditions are satisfied, or if a resource consent is required. This can be mitigated, by having pugging and resow requirements exist as stand-alone duties instead of permitted activity conditions, because they will be enforceable in much the same ways as conditions, but will not factor into whether you need consent.

130. The term 'stand-alone duty' is used here to refer to requirements within the NES-F, that sit outside the permitted activity default conditions (and therefore, outside Pathways 1 and 2). 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.

131. 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.

132. 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.

133. We note that expressing the pugging and resow requirements as permitted activity conditions 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 and timing for resow (eg, soil type, climate and other methods of establishing ground cover), there would be some variation in what is 'reasonably practicable'. This may reduce the certainty as to whether a resource consent is required.

134. Recognising this, we have considered the pugging requirement (of minimising adverse effects of pugging on freshwater) and resow requirement (of minimising time bare ground is exposed to weather) being expressed as stand-alone duties for persons undertaking IWG without a consent, rather than as permitted activity conditions. The default conditions on pugging and resow would be removed from regulation 26(4), and new stand-alone duties inserted as new provisions, sitting outside the permitted activity pathways (Pathways 1 and 2, as in regulation 26). This would mean, the pugging and resow requirements are no longer conditions which must be considered when determining whether it will be possible to comply with the default conditions or whether a resource consent is needed.

135. This addresses concerns about determining compliance with ambiguous conditions, while ensuring the risks to freshwater ecosystems from pugged soil and bare ground are mitigated. We consider managing pugging and resow as stand-alone duties 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.

136. 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, or established ground cover as soon as practicable. Once FW-FPs are available, monitoring and enforcement of the stand-alone duties would be supported by audits of certified FW-FPs where farmers have undertaken mitigations on-farm to manage pugged soil and bare ground, in

accordance with their certified FW-FP. Pugging and resow are already included in the IWG Module.

137. 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.

138. Despite all of this, there will still be a challenge in enforcing the permitted activity conditions due to the nature of permitted activity conditions (there are inherent difficulties in enforcement of any permitted activity conditions, so this is not a marginal impact here.) While the amendments to the conditions are an improvement, compliance will be difficult to establish in a consistent scale. Implementation guidance, however, will help to an extent to address these risks.

139. The stand-alone duties would be expressed as new regulations within the NES-F, after regulation 26, for example:

    a. the pugging condition (regulation 26(4)(c)) would be deleted. A new regulation would be inserted, requiring that a person using land for IWG in accordance with regulation 26 (that is, Pathway 1 or 2) must take all reasonably practicable steps to minimise adverse effects on freshwater of any pugging that occurs on that land.

    b. the resow condition (regulation 26(4)(e)) would be deleted. A new regulation would be inserted, requiring that a person using land for IWG in accordance with regulation 26 (that is, Pathway 1 or 2) must ensure that vegetation is established as ground cover as soon as practicable after livestock have finished grazing the land.

140. These two requirements would then sit outside the permitted activity pathways (Pathway 1 and 2). Anyone using land for IWG would not need to consider these requirements when determining whether they will need a resource consent, but they will need to comply with these requirements when they are undertaking IWG, and failure to do so could result in enforcement action.

141. All options are considered in this RIS, including the pugging and resow requirements being expressed either as permitted activity conditions, or as stand-alone duties. Further feedback and final recommendations are set out in the Report and Recommendations.

Table 2: Proposed amendments to the default conditions under Option 1

Default condition in the IWG regulations		Proposed amendment	Rationale for the proposed amendment
Reg 26(4)(a)	**Total area**: The area of the farm that is used for IWG must be no greater than 50 ha or 10% of the area of the farm, whichever is greater.	No change.	No amendments are proposed to this condition, to ensure a control on the extent of IWG remains (in conjunction with the interim intensification restrictions). Any amendment would necessitate additional controls to ensure larger areas of IWG are being used less intensively and would only further complicate implementation for councils and farmers. Farmers can already undertake IWG over larger areas where the effects will be managed through a certified FW-FP (Pathway 2) or resource consent (Pathway 3). We believe this is both appropriate and necessary to ensure the effects of large scale IWG is managed.
Reg 26(4)(b)	**Slope threshold**: IWG is restricted to paddocks where the mean slope is 10 degrees or less.	Set the slope threshold as a 'maximum slope' threshold (instead of 'mean slope threshold measured across a paddock'). Retain the slope threshold at 10 degrees. Measuring the *maximum slope* will be based on the average slope across any 20-metre distance.	The change from 'mean' to 'maximum' slope will make the condition easier to measure and practically implement and enforce. It will be more restrictive (ie, more paddocks will be above the threshold), but will ensure slopes above the threshold won't be grazed (whereas they could be under the 'mean' measurement, if they were a small area of the paddock). The slope threshold of 10 degrees is retained, as modelling shows sediment losses increases significantly above 10 degrees. An increase in sediment losses could result in an adverse environmental effect that is unable to be permitted by the NES-F.

Default condition in the IWG regulations		Proposed amendment	Rationale for the proposed amendment
Reg 26(4)(c)	**Pugging**: Pugging must not cover more than 50% of the paddock and must not be deeper than 20cm at any one point (except near fixed water troughs or entrance gates).	Remove the pugging condition (with specific limits on area and depth of pugging). Instead, require that all reasonably practicable steps are taken to minimise the effects of pugging on freshwater. (As noted above, this could be expressed either as a permitted activity condition, or as a new stand-alone duty.)	An outcome-focussed requirement means what is practicable will be case-by-case, rather than prescribed. This addresses the impracticality of the current prescriptive conditions, which are weather-dependent and difficult to measure. Section 2.4.3 above sets out more detail about how the pugging requirements being expressed as a stand-alone duty would address some of the implementation and enforcement issues relating to the pugging condition.
Reg 26(4)(d)	**Buffer zone from waterways**: Livestock must be kept at least 5m away from the bed of any river, lake, wetland, or drain.	Amend the definition of 'drain' to exclude subsurface drains. No other changes to the buffer zone condition.	The inclusion of subsurface drains within the definition of 'drain' was an unintended result of drafting. It is impractical to implement buffer zones from the extensive networks of unmapped subsurface drains, and the exclusion of subsurface drains from this condition resolves that. No implementation issues have been raised regarding the buffer zone itself.
Reg 26(4)(e)	**Re-sowing**: Land used for IWG must be replanted as soon as practicable after livestock have grazed the crop, but no later than 1 October (1	Remove the set resow date (ie, 1 October, or 1 November for Otago and Southland). Instead, require that land used for IWG must be replanted as soon as practicable after livestock have grazed the crop (which may vary according to circumstances and weather events). (As noted above, this could be	It is not practical to have a nationwide date: for the date to work in all instances, it would have to be overly permissive. The current condition may also restrict the ability of farmers to utilise good management practices (such as companion planting).The amended condition, 'as soon as practicable' will be case-by-case, but without a prescribed end date. This addresses the issue with the condition being weather-dependent and avoid any perverse outcomes due to being required to plant too early. Clarifying that the focus is

Default condition in the IWG regulations		Proposed amendment	Rationale for the proposed amendment
	November in Otago and Southland).	expressed either as a permitted activity condition, or as a new stand-alone duty.) Amend the drafting to enable alternative approaches to establishing ground cover (eg, companion planting), noting the purpose of this requirement is to minimise the amount of time bare ground is exposed to weather.	to minimise the amount of time bare ground is exposed to weather will enable other approaches to establishing ground cover. Section 2.4.3 above sets out more detail about how the resow requirements being expressed as a stand-alone duty would address some of the implementation and enforcement issues relating to the resow condition.
New reg	**Critical Source Areas (CSAs)**: No default conditions currently	Include a new condition requiring that CSAs be protected (ie, uncultivated and ungrazed), and that ground cover be maintained throughout the grazing period.	A new condition managing CSAs would provide additional environmental protection; CSAs can be pathways for runoff and contaminants into waterways, and this would be reduced through the management of CSAs under this new condition. There could be some challenges with implementation of a condition managing CSAs, and guidance would assist CSA identification and enforcement.

142. The new CSA condition has been added as a default condition in recognition of the high sediment loss to connected surface water bodies from these areas, as recommended by the SAG.

143. CSAs are considered high-risk landscape features due their existence in depressions where water naturally accumulates from the surrounding land as a result of overland flow. CSAs can be defined as landscape or hydrological features that accumulate and transport sediment-laden water to connected surface water bodies. Other contaminants such as phosphorus and nitrogen are often also mobilised to these areas. Examples of critical source areas include gullies, swales, and land depressions. These areas can often be identified as areas where permanent and ephemeral streams exist at the lowest point in a gully or swale, and areas where water runoff from the surrounding catchment collects.

144. Protecting CSAs from livestock grazing can minimise soil disturbance that occurs as a result of pugging damage and preserves the vegetative cover within the CSA that filters sediment out of overland flows before reaching connected surface water bodies.

145. Overall, restricting the access of cattle, deer, and sheep to CSAs during the winter months is considered a highly cost-effective management practice to reduce sediment loss.

146. Officials would also develop policy guidance to ensure a shared understanding of the changes, for example of what would constitute reasonably practical steps or timeframes. Further detail of this is set out in section 3.1.3.

2.4.4 Option 2 – Remove the permitted activity pathway based on default conditions (Pathway 1), and instead manage IWG through certified FW-FPs only (Pathway 2)

147. Under Option 2, the permitted activity pathway based on the default conditions (Pathway 1) is removed. IWG activity would therefore be permitted only if farmers have a certified FW-FP which manages IWG (Pathway 2), and otherwise a resource consent would be required (Pathway 3).

148. All of the default conditions are deleted from Regulation 26, and the substance of those conditions is incorporated instead into a set of requirements within the IWG regulations that a FW-FP must address. The certifier must be satisfied that the adverse effects (if any) allowed for by the FW-FP in relation to the IWG are no greater than those allowed for by the requirements. Bespoke mitigation options can be included in the FW-FP. For example, the requirement to specify a resow date: a FW-FP would factor in local conditions when determining the resow date to be included in that FW-FP and address how a farmer will respond to weather events that might delay resowing.

149. The commencement of the IWG regulations would be deferred until FW-FPs are available nationwide. As noted above, it is not yet clear when FW-FPs will become available, and such a deferral would likely need to be open-ended or risk further

deferrals in future. This means IWG activities could continue largely unregulated for a period of time.

150. Notwithstanding, Option 2 recognises that eventually all farmers will need a FW-FP under s217D of the RMA, regardless of IWG regulations. It takes advantage of those processes (ie, certified farm planners and auditing) to work through practical difficulties with the default conditions and finds farm-specific, bespoke mitigation actions that can be taken to reduce the impacts of IWG activity.

151. The ability to include bespoke mitigation specific to the farm and catchment context makes them better suited to manage the environmental effects of IWG activity, than is possible through default conditions in a permitted activity standard that serve as a bottom line.

152. Option 2 would address the implementation issues, as it would provide a permitted activity pathway that is able to be implemented from both a practical and enforcement perspective.

2.4.5 Transitional approach – Amend the default conditions, then remove Pathway 1 once FW-FPs are available

153. While either Option 1 or Option 2 could be progressed independently, it would also be possible to apply Option 1 on a transitional basis, until Option 2 can be implemented (ie, when FW-FPs are available). That would mean:

a. amending the default conditions in accordance with Option 1 (including a further deferral for six months) to address the implementation issues and provide a more workable permitted activity pathway based on default conditions (Pathway 1) until the FW-FP pathway is available,

b. then, removing Pathway 1 once FW-FPs are available, so certified FW-FPs are the sole permitted activity pathway to manage IWG.

154. The Transitional Approach and Option 1 are not mutually exclusive, and in fact, for the Transitional Approach to be followed, actioning Option 1 is the first step. Option 1 would not preclude the Transitional Approach being taken up in the future (ie, once FW-FPs are available), without needing a decision now to adopt the Transitional Approach.

155. Once FW-FPs are available, all IWG activity would either be managed by a certified FW-FP, or a resource consent, both of which are better equipped to manage the environmental effects of IWG in a way that is bespoke to the farm and catchment context, and provide clear enforcement options.

156. Under Option 1, the FW-FP pathway will become available alongside Pathway 1 once the FW-FP regime is rolled out. However, there are some remaining implementation risks with Pathway 1 under Option 1 (see sections 2.4.2 and 2.4.3). Removing Pathway 1 once the FW-FPs pathway is available would remove those risks, and would reduce disincentives to adopt FW-FPs.

157. As set out above, it is widely considered that improvements in IWG practice relating to freshwater will be achieved through FW-FPs, due to their ability to include bespoke mitigations specific to the farm and catchment context. However, they cannot be used until the FW-FP regime is rolled out, and Option 2 leaves a regulatory hiatus in the interim.

158. This Transitional Approach would address the risks of both Options 1 and 2. It would:

    a. in the short term until FW-FPs are available, ensure there is regulatory management of IWG activity (this would not be the case under Option 2, which would see a deferral of the IWG regulations until FW-FPs are available). Through making the amendments set out in Option 1, this would still address the implementation issues with the status quo (though with some remaining enforceability risks).

    b. in the long-term once FW-FPs are available, ensure IWG activity is managed under FW-FPs, or resource consents (thereby addressing the enforceability risks with the amended permitted activity default conditions that are present in Option 1).

159. For the same reasons as outlined under Option 1, the commencement date of the IWG regulations would need to be deferred for a further period of six months, to 1 November 2022.

2.4.6 Proposed amendments under Options 1 and 2, compared to the status quo

160. Table 3 sets out the amendments proposed under Options 1 and 2, alongside the status quo.

161. Note that the Transitional Approach is not included in this table. It can be better summarised as, making the amendments to the default conditions as set out in Option 1, in the short term. Then, once FW-FPs are available, removing the permitted activity pathway based on default conditions, and making the changes set out in Option 2. While this remains an option, Ministers did not propose to make this decision now. For all of the above reasons, the Transitional Approach is not assessed separately in the following table.

Table 3: Proposed amendments under Option 1 and 2 compared to the status quo

Default condition in the NES-F IWG Regulations (Status Quo)		Option 1: amend the default conditions	Option 2: remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs
Reg 26(4)(a)	Total area: The area of the farm that is used for IWG must be no greater than 50 ha or 10% of the area of the farm, whichever is greater.	No change.	Remove the default condition. Under FW-FPs, set a requirement that, the area of the farm that is used for IWG must be no greater than 50 ha or 10% of the area of the farm, whichever is greater. (No change from the current position). **See note on discretion.*
Reg 26(4)(b)	Slope threshold: IWG is restricted to paddocks where the mean slope is 10 degrees or less.	Set the slope threshold as a maximum slope threshold (instead of mean slope threshold measured across a paddock). Retain the slope threshold at 10 degrees. Nb. Measuring the *maximum slope* will be based on the average slope across any 20-metre distance.	Remove the default condition. Under FW-FPs, set the slope threshold as a maximum slope threshold (instead of mean slope threshold measured across a paddock). Retain the slope threshold at 10 degrees. **See note on discretion.*
Reg 26(4)(c)	Pugging: Pugging must not cover more than 50% of the paddock and must not be deeper than 20cm at any one point	Remove the pugging default condition (limits on area and depth of pugging) and instead, require that reasonably practicable steps are taken to minimise the effects of pugging on freshwater. (As noted above, this	Remove the default condition. Under FW-FPs, specify how degradation of soil structure and associated run-off would be minimised.

Default condition in the NES-F IWG Regulations (Status Quo)		Option 1: amend the default conditions	Option 2: remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs
	(except near fixed water troughs or entrance gates).	could be expressed either as a permitted activity condition, or as a new stand-alone duty.)	
Reg 26(4)(d)	Buffer zone from waterways: Livestock must be kept at least 5m away from the bed of any river, lake, wetland, or drain.	Amend the definition of 'drain' to exclude subsurface drains.	Remove the default condition. Under FW-FPs, set a requirement that livestock must be kept at least 5m away from the bed of any river, lake, wetland, or drain. (No change from the current position). Definition of "drain" to exclude subsurface drains. **See note on discretion.*
Reg 26(4)(e)	Re-sowing: Land used for IWG must be replanted as soon as practicable after livestock have grazed the crop, but no later than 1 October (1 November in Otago and Southland).	Remove the set resow date (ie, 1 October, or 1 November for Otago and Southland). Instead, require that land used for IWG must be replanted as soon as practicable after livestock have grazed the crop (which may vary according to circumstances and weather events). (As noted above, this could be expressed either as a permitted activity condition, or as a new stand-alone duty.) Amend the drafting to enable alternative approaches to establishing ground cover (eg, companion planting), noting the purpose of this requirement is to minimise the amount of time bare ground is exposed to weather.	Remove the default condition. Under FW-FPs, specify how bare ground (where the land was used for IWG) will be minimised as soon as practicable after livestock have grazed the crop, and how the effects of bare ground will be managed.
New Reg	Critical Source Areas (CSAs): No default conditions currently	Include a new condition requiring that CSAs be protected during IWG, and that ground cover be maintained throughout that the grazing period.	Under FW-FPs, identify CSAs and management of those areas (including livestock being excluded from CSAs and CSAs not being cultivated).

Default condition in the NES-F IWG Regulations (Status Quo)	Option 1: amend the default conditions	Option 2: remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs
**Note that the requirement would have some discretion: the requirement must be met under the certified FW-FP, or, the certified FW-FP must demonstrate that the environmental effects would be no more than if the requirement had been met. Any action that is written into a certified FW-FP will be mandatory and enforceable.*		

2.5 How do the options compare to the status quo?

162. The policy effectiveness of Options 1 and 2 is assessed against the criteria set out in section 2.2. This assessment, as a comparison showing the marginal impact against the status quo, is set out below in Table 4. For the purposes of this assessment, it is helpful to note that the status quo, against which Options 1 and 2 are being compared here, includes:

    a. a permitted activity pathway based on compliance with default conditions; and feedback has indicated that implementation issues make this pathway impractical to implement practically, or to monitor and enforce;

    b. a permitted activity pathway based on a certified FW-FP; and that pathway is not yet available to undertake IWG, but will be once the FW-FP regime is rolled out.

163. Note that the Transitional Approach is not included in this comparison. As outlined above, the Transitional Approach would entail actioning Option 1 in the short term, and then Option 2 in the long term. The effectiveness of the Transitional Approach against the criteria can be summarised as being the same as Option 1 in the short term, and the same as option 2 in the long term. While this remains an option, Ministers did not propose to make this decision now. For all of the above reasons, the Transitional Approach is not assessed separately in the following table.

164. An overall assessment of the Transitional Approach, which considers how this approach could potentially provide the best of both options, is covered in section 2.6.

Table 4: Comparison of Options 1 and 2 against the status quo

	Status Quo	Option 1 – amend the default conditions	Option 2 – remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs only
Comment on scoring		The scores given for Options 1 and 2 below (against each specific criteria) relate to the Options *over both the short and long term*, ie, assessing each Option as a whole. However, the scores will be quite different in the short term (especially for Option 2) which is central to any comparison between Options 1 and 2. Further, as set out in section 2.2, the environmental impact criteria must be given more weight than the other criteria. The overall assessment at the end of this table takes account of these factors.	

	Status Quo	Option 1 – amend the default conditions	Option 2 – remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs only
Environmental impact	0	+ The amendments to the default conditions will together lead to better management of the environmental effects of IWG. For some of the conditions, the amendment is not expected to affect the environmental impact, with the change focussed instead on addressing the implementation issue. For example, for the slope condition: the slope threshold of 10 degrees is retained (modelling shows that sediment loss increases significantly on slopes over 10 degrees). The change from measuring 'mean slope across a paddock' to 'maximum slope' is more restrictive, with more paddocks being above that threshold. By measuring as a maximum, and not as an average at a paddock scale, this will prevent the grazing of steeper slopes that are otherwise captured if they are a small part of the paddock. While only providing a minor improvement in environmental impact, this amendment will make this condition easier to measure and practically implement and enforce. For the overly prescriptive conditions (eg, pugging and resow), these are replaced by more outcome-focussed conditions, to help address the implementation issues that are unworkable, while retaining a similar level of management of the environmental impacts of IWG. (Consequential enforceability risks of these amendments are covered below under CME.) (This is	– The deferral (until FW-FPs are available) would result in a higher risk of adverse environmental effects, due to the absence of regulatory management of IWG activity. The FW-FP regime is still being developed, and even if roll-out commences by the end of 2022, the FW-FP pathway will not be available for all farmers undertaking IWG for several years. Therefore, it may be several years before the IWG regulations are in force. During that time, the lack of regulation could be mitigated to some extent through non-regulatory options, including the IWG Module setting best practice; further education and practice change driven by the primary sector; and increased monitoring and reporting of IWG activity by regional councils. However, we cannot be certain that these non-regulatory options would ensure that the environmental effects of IWG activity are managed. They are not a substitute for regulation. In the longer-term, once FW-FPs are available, they will provide effective management of IWG activities, through their ability to target on-farm risks and provide mitigation options specific to the farm and catchment context. They will be able to address the holistic impacts of IWG and farming practices as a whole, rather than just complying with the amended bottom lines.

	Status Quo	Option 1 – amend the default conditions	Option 2 – remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs only
		true whether these requirements are expressed as permitted activity conditions, or as stand-alone duties.) From other conditions, there will be increased environmental protection, for example, the new condition managing CSAs. If not managed, CSAs can be a pathway for sediment and contaminant loss from surrounding land into waterways. Studies suggest that a combination of protecting CSAs (excluding livestock from the areas) and strategic grazing on surrounding annual forage crops (eg, grazing direction, backfencing, and grazing duration), can reduce sediment loss from CSAs up to 82 percent.[6] The amendment to the definition of 'drains' could possibly lead to adverse environmental effects, as buffer zones would no longer be required for subsurface drains, even though subsurface drains remain a potential pathway for contaminants to waterbodies. However, while this is a change in the condition, in practical terms the status quo would not (could not) have resulted in buffer zones being effectively used for all subsurface drains – the precise implementation issue this amendment is addressing is that there are large networks of unmapped subsurface	

[6] Further information about CSAs is available at: https://envirolink.govt.nz/assets/Envirolink/1276-ESRC258-The-impacts-of-animal-wintering-on-water-and-soil-quality.pdf, and http://flrc.massey.ac.nz/workshops/13/Manuscripts/Paper_Orchison_2013.pdf, and https://www.tandfonline.com/doi/full/10.1080/00288233.2017.1345763.

	Status Quo	Option 1 – amend the default conditions	Option 2 – remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs only
		drains. So, while the permitted risk changes, the real impact of that wouldn't change. The deferral for a further six months (to 1 November 2022) would be no different to the status quo (where existing use rights mean the regulations would not have effect over the 2022 winter).	
Practice changes and improvements	0	+ The amendments to the default conditions will improve workability, encouraging uptake of Pathway 1. This would incentivise farmers to improve practice in order to meet those conditions, to make use of this permitted activity pathway (Pathway 1). The amendments will also allow for more improvement and practice change to continue to occur as they are more outcome-focussed rather than prescriptive, eg, the requirements to address the impacts of pugging on freshwater, or the allowance for alternative methods to establish ground cover as part of the amended resow condition. The condition requiring CSAs will also require better practice and achieve better environmental outcomes. As per the status quo and Option 2, the FW-FPs pathway will be available under this Option *once the FW-FP regime has been rolled out*. FW-FPs will provide the flexibility for farmers to manage the environmental impacts of specific farming activities including IWG in a way that is most appropriate to the farm and catchment context. This flexibility will allow	+ As per the status quo and Option 1, the FW-FPs pathway will be available under this Option *once the FW-FP regime has been rolled out*. FW-FPs will provide the flexibility for farmers to manage the environmental impacts of specific farming activities including IWG in a way that is most appropriate to the farm and catchment context. This flexibility will allow for practice changes and improvements – in the longer term once FW-FPs are available. This option would, however, create greater incentive for improvements and practice change, as the deferral would enable farmers to adjust their practice in a way that will meet the FW-FP pathway, without needing to, in the short-term, undertake potentially different practices to meet the default conditions (or obtain a resource consent). In the short-term until FW-FPs are available, the regulations would be deferred. There would be no regulatory incentive for practice changes or improvements, although they could be made voluntarily during that time, including in line with the non-regulatory IWG Module.

	Status Quo	Option 1 – amend the default conditions	Option 2 – remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs only
		for practice changes and improvements – in the longer term, once FW-FPs are available.	
Innovative practices	0	+ The amendments to the default conditions allow for innovative practices in order to meet the conditions, including within: - resow (where it will be clarified that alternative methods to establish ground cover (eg, companion planting) will be accepted as part of the amended resow condition); - the requirements to address the impacts of pugging on freshwater, which will no longer prescribe exact depth/area limits and therefore allow innovative practices to address mitigate impacts; - management of CSAs, which is not required under the current regulations. Innovative practices will otherwise still be encouraged under the FW-FPs pathway once available (as it will under the status quo and Option 2).	+ By removing Pathway 1, a greater uptake of FW-FPs would be expected, with more farmers therefore likely to be using FW-FPs with their increased flexibility, than the permitted activity pathway based on default conditions (Pathway 1). By using FW-FPs in the first instance, rather than being required to meet the default conditions for a period until FW-FPs are available, this would incentivise innovation. However, this would not occur until FW-FPs are available. In the short-term until FW-FPs are available, the regulations would be deferred. There would be no regulatory incentive for innovative practices, although they could be used and developed voluntarily during that time, including in line with the non-regulatory IWG Module.
Roll-out and function of freshwater farm planning	0	**0** Majority of farmers are likely to use the certified FW-FP pathway (once available), as all farmers will eventually require a FW-FP for other farming activities (regardless of IWG regulations). May reduce incentives for early adoption of FW-FPs that manage IWGs, as the permitted activity pathway	+ All farmers will eventually require a FW-FP for other farming activities (regardless of IWG regulations). This option will incentivise the early adoption of FW-FPs (once available), as the majority of farmers are likely to use the certified FW-FP pathway once it is available. This option benefits from the

	Status Quo	Option 1 – amend the default conditions	Option 2 – remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs only
		based on default conditions will be a more viable pathway (reducing the need to use the FW-FP pathway).	processes of FW-FP to enable more bespoke management options, and therefore may encourage early adoption of FW-FPs.
Implementation	0	+ Amendments will make the permitted activity based on default conditions (Pathway 1) more practical, therefore we expect a reduction in the number of resource consents required. Consultation and further engagement with stakeholders has indicated that the proposed amendments to the default conditions will, overall, improve the ability for them to be practically complied with. Councils have been reluctant to provide an estimate of the change in consent numbers expected as a result of the amendments, due to other factors that will also influence consent numbers (eg, regional planning regarding IWG). Based on the information received, officials estimate that consent numbers could decrease by up to 20% (from the original estimate of 10,000 consents expected under the status quo). While there will be some implementation improvements, there will also be outstanding enforceability risks that remain with the permitted activity conditions not providing absolute certainty or clarity in terms of measuring compliance. For pugging and resow, this could be addressed through those	+ In the short-term, will result in delayed implementation of any regulatory management of IWG activity (with the IWG regulations deferred until the FW-FP regime is rolled out). Once the FW-FP regime is in place and the IWG regulations take effect, however, this option will provide a simpler process for farmers and councils, with only one permitted activity pathway available (and FW-FPs will eventually be required by all farmers regardless of IWG regulations), alongside the consent pathway. FW-FPs are expected to address the implementation issues with the default conditions, due to their ability to include bespoke mitigations for managing the effects of IWG, specific to the farm and catchment context.

	Status Quo	Option 1 – amend the default conditions	Option 2 – remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs only
		requirements being expressed as stand-alone duties, as set out in section 2.4.2. The regulations would come into effect before the FW-FP pathway is available, so farmers who cannot meet the default conditions would require a consent. That could result in a double-up of costs, for a resource consent now and a FW-FP once available (FW-FPs will eventually be required by all farmers regardless of IWG regulations).	
Compliance, monitoring and enforcement (CME)	0	**0** Amendments to some of the conditions are expected to result in more readily enforceable conditions, eg, slope and buffer zones. However, it will be difficult to enforce regulations that depend on what is reasonable or practicable in the circumstances and rely on subjectivity and judgement-based decisions (ie, pugging and resow requirements) – as set out in section 2.4.3. This would require case-by-case assessment, and regional councils' ability to undertake compliance, monitoring and enforcement will be limited as a result. Note the current default conditions are also likely to cause difficulties in terms of CME (ie, it is inherently difficult to detect non-compliance for permitted activity conditions). The marginal impact of changes assessed here relates to the subjective nature of what is reasonable or practical (eg, compared to specific pugging depth standards).	**++** Once FW-FPs are available, CME will be much simpler because there will be a bespoke FW-FP for each farm, against which to undertake monitoring and compliance. FW-FPs will be required regardless of IWG regulations, and CME will be supported by the FW-FP process. It will also be easier to confirm compliance as a permitted activity – rather than assessing whether the FW-FP demonstrates that the effect of IWG activities is no greater than if they met the default conditions, there is instead an assessment of whether the specific matters have been covered by the FW-FP. In the interim until FW-FPs are available, the IWG regulations would not be in place to manage the environmental effects of IWG. Councils will still be able to, and expected to, undertake monitoring and reporting on IWG activities.

	Status Quo	Option 1 – amend the default conditions	Option 2 – remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs only
		While CME will be a challenge, the current default conditions have proven unworkable and difficult to enforce (eg, measuring the mean slope across a paddock, or the depth and coverage of pugging across a paddock).	
Animal welfare	0	**0** No impacts on animal welfare are expected by amending the default conditions.	**0** No impacts on animal welfare are expected by removing the default conditions and relying on the FW-FP pathway.
Overall assessment	0	**++** Option 1 helps to address some the implementation issues in the short-term while FW-FPs are unavailable, while still managing the environmental effects of IWG activity. Provides a permitted activity pathway that is expected to be more workable (ie, in terms of farmers being more confident they will be able to comply), and thereby reduce the number of resource consent applications otherwise expected. These risks will also be mitigated in the future when FW-FPs are available. The amendments help to address some of the workability issues identified with default the conditions that were weather-dependant (resow, pugging) and difficult to be practically complied with (pugging, slope, subsurface drains). They still, however, manage the environmental effects, including increased environmental protection through the new condition protecting CSAs.	**–** In the immediate/short term, Option 2 risks worse environmental impacts than the status quo and would not drive any practice improvement. The benefits of Option 2 as set out and scored in this table will only apply *once FW-FPs are available.* In the absence of FW-FPs, and having regard to the hierarchy of the criteria (with the most weight to be given to the environmental impact), Option 2 scores much lower compared to the status quo. (See note at the top of this table about the scoring of these criteria). The IWG regulations would need to be deferred until FW-FPs are available, which is likely to be several years (to be rolled out nationwide). This would result in a higher risk of adverse environmental effects, due to the absence of enforceable IWG regulations in the interim. We cannot be certain that non-regulatory options would ensure that the environmental effects of IWG activity are managed during that period. Once FW-FPs are available, they will enable effective management of IWG activities through the use of bespoke mitigation options unable under the FW-FP regime. The flexibility of FW-FPs will enable

	Status Quo	Option 1 – amend the default conditions	Option 2 – remove the permitted activity pathway based on default conditions and manage IWG through FW-FPs only
		Enforceability risks remain, especially in relation to the pugging and resow conditions. These will be mitigated to an extent through guidance. These could also be mitigated to an extent by the pugging and resow requirements being expressed as stand-alone duties, as set out in section 2.4.3. While compliance, monitoring and enforcement will continue to be a challenge, these amendments provide more effective management of IWG activity than the status quo. This is the case whether pugging and resow are expressed as permitted activity conditions or as stand-alone duties. Retains the FW-FP pathway (to be used once FW-FPs are available), recognising that FW-FPs will likely achieve long-term tangible improvements in IWG activity through their ability to provide bespoke mitigations for the farm and catchment-specific context.	innovation and improvement in practices, and the removal of Pathway 1 will ensure there is no disincentive to the adoption of FW-FPs. Likely reduces compliance and consenting burden and costs for farmers and councils, as FW-FPs will be required regardless of IWG regulations, and the deferral until FW-FPs would remove the risk of a large number of resource consent applications in the short-term.

Example key for qualitative judgements:	
++	much better than doing nothing/the status quo/counterfactual
+	better than doing nothing/the status quo/counterfactual
0	about the same as doing nothing/the status quo/counterfactual
-	worse than doing nothing/the status quo/counterfactual
- -	much worse than doing nothing/the status quo/counterfactual

2.6 What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

165. **Option 1 is the preferred option.** In the short term it is more likely to best some of address the implementation issues with the IWG regulations, while maintaining the intent of the regulations to manage the environmental effects of IWG activities on freshwater.

166. Both Options 1 and 2 could address the implementation issues identified with the default conditions in with IWG regulations. However, the key difference between the two options is the way that the implementation issues are addressed, and the risks that remain with each option. For Option 1, the remaining risk relates to the enforceability and measurability of certain conditions. For Option 2, the remaining risk relates to environmental impacts of IWG not being subject to any regulatory management until such time as FW-FPs are available.

167. Under section 43A(3) of the RMA a national environmental standard cannot state that an activity that has significant environmental effects is a permitted activity. Officials have limited evidence on the precise extent of environmental effects attributable to each of the default conditions. The regulations are intended to work as a whole to address factors known to increase the risk of adverse impacts on freshwater.

168. Note this RIS assesses a range of policy options and variations of those to best achieve the objectives of proposed amendments. It indicates where an option or variation is preferred and the reasons for that. Final recommendations to progress specific policy options and variations are also set out in the Report and Recommendations, and the reader should refer to amendment regulations for drafting that gives effect to those recommendations.

2.6.1 Option 1

169. Option 1 sets minimum requirements in regulations to manage the adverse environmental effects of IWG activity. The amendments to the default conditions are aimed at addressing the implementation issues to the greatest extent possible, to make the permitted activity pathway based on the default conditions more workable (ie, in terms of farmers being more confident they will be able to comply), and address some of the enforcement issues.

170. Consultation and further engagement with stakeholders has indicated that the proposed amendments to the default conditions will, overall, improve the ability for them to be practically complied with. Based on the information received, officials estimate that consent numbers would decrease by up to 20% (from the original estimate of 10,000 consents expected under the status quo).

171. Some of the minimum requirements under Option 1 are more outcome-focussed than prescriptive, eg, the requirements to address the impacts of pugging on freshwater, or the allowance for alternative methods to establish ground cover as part of the amended resow condition. While this may result in some local variation or inconsistency, the intent is for the regulations as a whole to manage the effects,

rather than prescribing exactly how the activity is undertaken in a nationally consistent way.

172. IWG activity varies greatly across the country, as do the climatic conditions and topography farmers are working with, meaning a certain level of flexibility is required. For example, it is not practical to have a nationwide date for resowing: for the date to work in all instances, it would have to be overly permissive. The amendment to the resow condition to resow *as soon as practicable* still requires farmers to take steps to minimise the time bare ground is exposed to weather, but enables that to be done in a way that is appropriate to the catchment and climatic context.

173. This flexibility does mean that there are some outstanding concerns regarding the enforceability and measurability of some of the amended conditions, in particular pugging and resow. In practice, it would require an enforcement officer to establish on a case-by-case basis what is practicable or reasonable. Based on this, there is a degree of implementation risk in that the permitted activity conditions do not provide clear certainty over whether they can be met or not, without farmers or enforcement officers making subjective judgement based decisions. However, given the diversity of farming conditions and natural conditions (which vary nationwide), there is a limited ability to mitigate this through permitted activity conditions. This inherent tension is what these amendments are trying to address. This could be mitigated to some extent through guidance, including technical guidance.

174. These remaining implementation and enforceability risks relate in particular to the pugging and resow conditions, given their inherent flexibility which make it difficult to determine in the permitted activity conditions are satisfied, or if a resource consent is required. This can be mitigated, by having pugging and resow requirements exist as stand-alone duties instead of permitted activity conditions, because they will be enforceable in much the same ways as conditions, but will not factor into whether you need consent. This is set out in further detail in section 2.4.3.

175. Feedback through the exposure draft process generally preferred stand-alone duties, for the above reasons. Given these benefits, and limited risks, we recommend expressing pugging and resow requirements as standalone duties. Failing to meet these duties would still allow councils to issue abatement notices, enforcement orders, or undertake prosecution on the basis of non-compliance with regulations. This is, therefore, the preferred version of this option.

176. Where activities are managed through a consenting model, associated cost sits with the applicant. The cost of compliance, monitoring and enforcement generally falls on councils, they are able to recover costs through a range of charges (including for the monitoring of permitted activities). Councils are not able to recover costs in this way in relation to stand-alone duties. While this may mean additional costs are borne by regional councils, it should be seen the context of other permitted activity conditions and consenting requirements that do allow for cost recovery – these can indirectly assist with compliance, monitoring and enforcement of stand-alone duties. For example, councils are able to 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 focussed.

177. Option 1 also retains the FW-FP pathway in the regulations, which farmers will be able to use once the FW-FP regime is rolled out. Once available, the FW-FP pathway will provide an additional permitted activity pathway, for farmers who are not able to meet the default conditions. The availability of the FW-FP pathway will resolve many of the implementation issues with the default conditions, as FW-FPs will enable bespoke mitigations to be identified and certified under the FW-FP process, so the effects of IWG can be managed in a way suited to the farm and catchment context. While FW-FPs would resolve the implementation issues, they will only do so once they are available.

178. To implement Option 1, a further delay to the commencement of the regulations would be required to allow farmers time to adjust their farm practices to meet the new conditions. A delay of six months by extending the deferral from 1 May 2022 to 1 November 2022 should be sufficient. This would not have any additional impact to the status quo, as the application of existing use rights would mean the regulations have no practical effect over the 2022 winter.

2.6.2 Option 2

179. Option 2 would address the implementation issues, as it would provide a permitted activity pathway that is able to be implemented from both a practical and enforcement perspective. It takes advantage of FW-FP processes to allow farmers to put in place farm-specific actions to reduce the impacts of IWG activity, which is not possible under the more rigid default conditions pathway.

180. Option 2 has a particular benefit when it comes to implementation, ie, that it reduces the available compliance pathways for farmers undertaking IWG to just two and reduces uncertainty regarding the application of the default conditions under Pathway 1. Under Option 2, either a farmer's IWG methodology on their farm is certified as part of a FW-FP, or a resource consent is obtained. In this way it addresses the implementation issues with the default conditions.

181. However, Option 2 is entirely dependent on the FW-FP regime being in place. Implementing Option 2 therefore requires a further deferral to the IWG regulations until FW-FPs are available.

182. The timeframe associated with this deferral is not fixed, and as noted above, it is not yet clear when FW-FPs will become available. Although the FW-FP roll out is expected to begin by the end of 2022, it is likely to take several years before FW-FPs are available to all farmers.

183. Under s217C of the RMA, freshwater planning requirements may be introduced on a region-by-region basis as specified in an Order in Council. If the roll-out of the FW-FP regime is staged based on risk, it could be prioritised to areas with high-risk IWG activity, and IWG regulations could be applied in a staged way to mirror that roll-out.

This would ensure that the IWG regulations only apply in an area once FW-FPs are available in that area.

184. Such a deferral would likely need to be open-ended or risk further deferrals in future. This means IWG activities could continue largely unregulated for a period of time.

185. This would result in a higher risk of adverse environmental effects, due to the absence of enforceable IWG regulations for that unknown period.

186. During that further deferral, non-regulatory programmes will continue to provide guidance to the primary sector and work to reduce adverse environmental effects. In particular, the IWG Module will continue to be deployed throughout this period, aimed at improving IWG practices. Implementation of the initiatives outlined in the Module will encourage a quicker adoption of FW-FPs for IWG once they are available. Regional councils will also be expected to continue increased monitoring and reporting. However, these are non-regulatory only, and we cannot be certain that they would ensure the environmental effects of IWG activity are managed. There would be no regulatory protection in place to ensure the environmental effects of IWG are managed in this interim period.

187. For these reasons, Option 2 is not considered viable. While it can address implementation issues to some extent and has a range of benefits in the long term, it means leaving IWG largely unregulated in the short term. This is fundamentally at odds with the purpose of the regulations – which is to manage the adverse effects of an activity that poses a high risk to the environment.

2.6.3 Transitional approach

188. The Transitional Approach of using both options would see benefits from each, addressing risks from each. That is:

a. in the short term (until FW-FPs are available), the amendments would address the implementation issues while still ensuring regulatory management of the adverse environmental effects of IWG activity, though with some remaining enforceability risks (as under Option 1),

b. in the longer term (once FW-FPs are available), ensure IWG activity is managed under either FW-FPs or resource consents (thereby addressing the enforceability risks with the amended permitted activity default conditions that are present in Option 1).

189. This ensures that IWG activity is regulated in the interim (in contrast to Option 2, which involves a longer delay than Option 1). However, it would still result in Option 2 ultimately being implemented, and encouraging farm-specific management of effects of IWG while removing the permitted activity pathway based on default conditions and the remaining enforceability risks with that approach (in contrast to Option 1).

190. As with Option 1, the Transitional Approach would require a further delay (see section 2.6.1).

191. Also as with Option 1, the Transitional Approach may still have enforceability risks in the short term (see section 2.6.1).

192. A risk with the Transitional Approach is that the two-step nature of this means the permitted baseline changes over time. This would send a changing signal over a short period as to what farmers must do for IWG to be permitted, and may result in a complex compliance and monitoring environment during this period for both farmers and councils. This risk is mitigated to some extent, as the requirements in Option 2 (that a FW-FP must address) are based on the substance of the conditions as amended under Option 1 (ie, while the permitted activity standards would change in structure, similar mitigations would be required in both the short and long term, so it is not radically different in substance).

193. The Transitional Approach and Option 1 are not mutually exclusive, and in fact, for the Transitional Approach to be followed, actioning Option 1 is the first step. Option 1 is the preferred option here, but that does not preclude the Transitional Approach being taken up in the future.

194. This was set out in the Discussion Document, which specifically noted that once FW-FPs are available, Ministers will look at phasing out Pathway 1 (the permitted activity pathway based on default conditions) altogether. It noted that it was too early to consult on that, but that it remains an option in the future.

195. While this remains an option, Ministers did not propose to make this decision now. For all of the above reasons, the Transitional Approach is not assessed separately in the following table.

2.7 What are the marginal costs and benefits of the option?

196. The marginal costs and benefits of Option 1, the preferred option, are set out in Table 5 below.

197. Note the marginal costs and benefits described here are assessed against the status quo, *which includes the existing IWG regulations*. The costs and benefits of existing IWG regulations were assessed as part of regulatory impact analysis underpinning the *Essential Freshwater* reforms.

198. In the interest of providing a full picture of costs and benefits, this table will outline the full costs and benefits of IWG regulations, ie, including under the status quo. It will then also comment on how this changes through our preferred option (Option 1), ie, the marginal impact (in **bold**).

Table 5: Marginal costs and benefits of the preferred option

Affected groups	**Comment** *nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks.*	**Impact** *$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts.*	**Evidence Certainty** *High, medium, or low, and explain reasoning in comment column.*
Additional <u>costs</u> of the preferred option (Option 1) compared to taking no action (status quo)			
Regulated groups: Farmers undertaking IWG	Variable mitigation costs per farm relating to: (a) setbacks and critical source areas (b) changes to paddock grazing management (c) changes to livestock feeding (supplementary feed, silage, etc,) (d) consequential need for additional/lease land for feed, run-off. (e) infrastructure construction Costs of mitigation may result in less winter forage crop grown and fewer stock (meat and milk production potentially affected). Costs of mitigation may result in further intensification to pay for mitigations. Consenting costs (approximately $3000 per application). There may be additional monitoring costs. Increased need for permitted activity support to manage complex stock grazing and feeding and stockholding options. Consultant costs. **Number of consents expected to be reduced, therefore reduced consenting costs.**	**Low**	**Medium**

	The new CSA condition is otherwise the only additional mitigation required for permitted activities.		
Regulators: Regional councils	Processing and staffing costs for new consent requirements (much of it recoverable from applicants). Compliance and monitoring activity standards – cost recovery included in current proposal. **The requirements relating to pugging, resow and CSAs may require increased compliance, monitoring and enforcement.** **Cost recovery is still available for permitted activity conditions. Note that direct cost recovery would be unavailable for pugging and resow requirements if they are expressed as stand-alone duties (instead of permitted activity conditions).**	**Low**	**High**
Others: Government, ENGOs	Development of implementation support and interpretation materials. Primary sector advisory services require support and development. Impact on processing companies if meat and milk production decreases. Ongoing monitoring and reporting costs. ENGOs are likely to rely on council and government reports as their primary source material rather than commissioning their environmental analysis and reporting. **Government's costs mostly generated by its reporting and policy effectiveness monitoring responsibilities, which apply regardless of the IWG provisions.** **Less mitigation of adverse environmental effects through the amended buffer zone condition (by not managing subsurface drains as a pathway for run-off of sediment and contaminants into connected waterways).**	**Low**	**Medium**
Total monetised costs			

Non-monetised costs		**Low**	**Medium**
Additional benefits of the preferred option (Option 1) compared to taking no action (status quo)			
Regulated groups: Farmers undertaking IWG	Associated farm production and animal health benefits. Supports good stewardship decision making and supports social licence. **Number of consents expected to be reduced, therefore reduced consenting costs.** **The amendments will make it easier for farmers to determine compliance with the default conditions and reduce the need to pre-emptively apply for a resource consent to account for weather dependant factors. Officials estimate that consent numbers could decrease by up to 20% (from the original estimate of 10,000 consents expected under the status quo).** **If pugging and resow are expressed as stand-alone duties that would assist further in making it easier for farmers to determine compliance with the permitted activity conditions.**	**High**	**Medium**
Regulators: Regional councils	Less costs and litigation involved in plan preparation to manage specific activity. Consistent approach to management of activity common across NZ. Noting with some amended conditions being more outcome-focussed than prescriptive, there may be some local variation (for example, in determining what is practicable). However, the purpose is to have consistency of outcome, that is, mitigation of adverse effects. **Some of the amended conditions will be easier to monitor and enforce (eg, measuring slope, monitoring compliance with setbacks).** **Number of consents expected to be reduced, therefore reduced consenting costs.** **The amendments will make it easier for farmers to determine compliance with the default conditions and reduce the need to pre-emptively apply for a resource**	**Medium**	**High**

	consent to account for weather dependant factors. Councils have been reluctant to provide an estimate of the change in consent numbers expected as a result of the amendments, due to other factors that will also influence consent numbers (eg, regional planning regarding IWG). Officials estimate that consent numbers could decrease by up to 20% (from the original estimate of 10,000 consents expected under the status quo). Changes to regional rules could either further increase or decrease the estimated number of resource consents in lieu of FW-FPs being available. **If pugging and resow are expressed as stand-alone duties that would assist further in making it easier for councils to monitor and enforce the permitted activity conditions. Monitoring and enforcement of stand-alone duties would sit alongside that of permitted activity conditions.**		
Others: Government, ENGOs	Targeted regulation to address high profile activity that support objectives for clean water. Confidence that adverse effects of targeted activities properly managed. Contribution to meeting water quality objectives supported. **Greater mitigation of adverse environmental effects through the new CSA condition (by managing that pathway for run-off of sediment and contaminants into connected waterways).**	**High**	**High**
Total monetised benefits			
Non-monetised benefits	**Confidence that environmental effects of targeted activities properly managed.** **Greater mitigation of environmental effects through the new CSA condition.** **Increased certainty in compliance with permitted activity pathway, and expected reduction in resource consent applications (and consenting costs). This certainty of compliance and reduction in consents is expected to be further enhanced if the pugging and resow conditions are expressed as stand-alone duties.**	**High**	**Medium**

Section 3: Delivering an option

3.1 How will the new regulations be implemented?

199. Under section 43 of the RMA the government may by Order in Council introduce new regulations as national environmental standards.

3.1.1 Ongoing operation and enforcement

200. Local authorities with resource management responsibilities under section 30 of the RMA (ie, regional councils and unitary authorities) will have the principal role for managing and enforcing the amended IWG regulations. The Ministries will support regional councils (including any unitary authority) and the farming sector to implement the new regulations through the publication of new and updated guidance documents.

201. Under section 35 of the RMA regional councils are responsible for monitoring and reporting on the state of the environment in their region. MfE has given direction to councils to increase their monitoring and reporting of IWG practice. A quarterly report will be delivered from the regional sector to show progress made this winter. Reports have been provided in August and November 2021, February 2022, and the next report is due May 2022.

202. In addition to councils' enforcement powers under the RMA for environmental breaches of the NES-F or a regional plan, MPI had a dedicated enforcement approach in the 2021 winter season for winter grazing monitoring from an animal welfare perspective. This occurred in two phases within the Otago and Southland regions:

    a. The first phase was a proactive, educative phase where MPI and Environment Southland visited farmers to ensure they had effective plans in place before the winter grazing practice started. Forty-two proactive inspections were completed across Otago and Southland.

    b. The second phase, which ran from 4 July to 16 August 2021, was more enforcement based. An additional animal welfare officer and National Animal Identification and Tracing (NAIT) officer were in the Southland region to conduct follow up inspections to ensure that the plans had been put into effect, respond to complaints, and record any livestock movement in and out of the region.

203. A similar programme of work described above has been planned for the 2022 season.

204. During a further deferral, as set out in the options, these monitoring and enforcement practices could be extended.

3.1.2 Timing for when regulations come into effect

205. With the further deferral of six months discussed under Option 1, the regulations would come into effect on 1 November 2022.

3.1.3 Stakeholder and council involvement in implementation

206. Work is already underway to address the issues associated with IWG. While the IWG regulations have been deferred for one year (from 1 May 2021 to 1 May 2022), central government, regional councils, farmers, and industry bodies have been working to improve IWG practices. Officials worked with council and primary sector representatives to develop an IWG Module which is now publicly available. This Module sets minimum expectations for IWG and helps support farmers to plan and plant winter forage crops according to government expectations for improved practice.

207. The Module was developed with the intention that it could ultimately form part of FW-FPs (once available). As the Module is now in use, there is potential for this to accelerate the uptake of certified FW-FPs where IWG occurs.

208. Freshwater policy implementation is led by MfE's internal Policy Implementation Directorate (PID). PID have developed a work programme to support the amended IWG regulations. The proposed work programme includes policy explanation and amendment guidance, as well as technical guidance.

209. Technical guidance will cover, but is not limited to, developing definitions, identification, and management of: minimising pugging, resowing and critical source areas (CSA). That is, methodology will be provided on how to reliably and effectively assess: the degree of pugging and appropriate mitigations; requirements for resowing; requirements for CSAs, to ensure CSAs are proportionate to the risk and scale of the IWG area surrounding the CSA.

210. Project plans, guidance products and external communications will be reviewed through the Intensive Winter Grazing Reference Group (IWG-RG). The IWG-RG members are from stakeholder sectors, such as ENGOs, regional councils, iwi, and primary sector, and were nominated by Freshwater Implementation Group (FIG).

211. MfE is also working in collaboration with MPI. A communications plan will be developed, ensuring that guidance and tools to assist farmers and councils will have greater reach, thus increasing uptake across New Zealand's primary industry.

212. To complement the regulation changes, MfE will investigate non-regulatory initiatives. MfE will work with MPI and the IWG-RG to assist regional councils with the collection of data on the current and changing state of IWG in New Zealand. This is important to demonstrate the efficacy of the *Essential Freshwater* programme and to encourage on-farm IWG practice change, for improved freshwater outcomes.

3.1.4 Public notification process of the regulatory changes/other work required for successful implementation

213. MfE, MPI and regional councils will need to continue their existing educative and monitoring efforts through the production of further guidance notes and advisory notices to the primary sector. This is part of the normal operational practice that occurs whenever new RMA regulations under an NES or a council regional plan change becomes operative.

3.1.5 Implementation risks

214. Option 1 helps to address some of the known implementation issues with the IWG regulations to an extent but risks making them more difficult to enforce. It may limit the ability of regional councils, albeit temporarily, to manage and enforce a national standard for an activity which may adversely affect freshwater bodies.

215. The concern is that it will be difficult to enforce default conditions that depend on what is reasonable or practicable in the circumstances (ie, those relating to pugging and resow) and relies on subjective decision making. This would require case-by-case assessment, and regional councils' ability to undertake compliance, monitoring and enforcement will be limited as a result. This is set out further in section 2.4.3.

216. Given the diversity of farming practices and natural conditions in New Zealand, we do not think increasingly specific conditions can address this inherent tension. The current default conditions were in large part drafted as they are to be more specific and enforceable – in practice this is what has led to issues with those conditions not being practical to implement.

217. While compliance, monitoring and enforcement will be a challenge, the current default conditions have proven unworkable, and we believe the changes presented here are preferable to having no conditions that manage the pugging and bare earth created by IWG. As outlined above, the scope of this work was focussed on ways to make permitted activity default conditions more practical to comply with while still managing the adverse effects of IWG. The scope does not extend to wider changes to the NES-F or its structure (eg, the use of a permitted activity pathway).

218. Further, these challenges will be mitigated by pugging and resow requirements being expressed as stand-alone duties for persons undertaking IWG without a consent, instead of permitted activity conditions. Councils will still be able to issue abatement notices, enforcement orders, or undertake prosecution on the basis of non-compliance with regulations.

219. Another risk for Option 1 is that farmers who cannot meet the default conditions (Pathway 1) but would be able to obtain a FW-FP (Pathway 2) in the future once they are available, will have to get a resource consent for the time period that the FW-FP pathway is not available. This is not appropriate from a cost and administrative efficiency perspective for both famers and regional councils.

3.1.6 Existing management arrangements for IWG

220. Once new IWG regulations come into effect, both MfE and regional councils have a significant role in managing their implementation. Thereafter the majority of responsibility for implementation, enforcement and monitoring will rest with regional councils as one of their section 30 RMA responsibilities.

3.2 How will the new arrangements be monitored, evaluated, and reviewed?

3.2.1 Monitoring and evaluation of the new regulations

221. The monitoring, evaluation and review of NES regulations and regional plan provisions is a requirement under the RMA.

222. Arrangements for the monitoring, evaluation and review of the FW-FP regime (including the certification and audit of farm plans) are described in the FW-FP discussion document and the FW-FP regulatory impact analysis.

223. Monitoring and evaluation of the new IWG regulations will rest with MfE and regional councils as part of their ongoing responsibilities under section 35 of the RMA to monitor the state of the environment. This will include data on compliance and the number of consents granted being provided by regional councils.

224. Current monitoring of IWG practice includes:

    a. Site visits by council staff;

    b. Previous analysis that estimated the environmental impact of permitted activity conditions (largely focused on the relationship of slope and sedimentation, and controls on IWG expansion);

    c. Resource consent conditions on consents granted under existing regional plans.

225. Current environmental monitoring is not sufficient to identify the effects of IWG, because it cannot be used to link environmental change to specific point source causes. There are further complications when it comes to monitoring sediment, as levels are dictated largely by weather events and the time it takes sediment to travel through catchments and to monitoring sites varies widely.

226. If the IWG regulations are delayed further, commitment from the primary sector and councils is necessary to identify and manage the effects of IWG during this period.

227. There are a range of cost-effective alternatives to existing environmental monitoring of IWG activities. It is possible to use satellite and/or aerial imagery to monitor the extent of IWG activities, however this requires further investigation to determine effectiveness and accuracy of these methods when measuring default conditions. Southland undertook flyovers over the past two winter seasons. Monitoring the direct effects of IWG on water on a site-by-site basis is more challenging, on account of the difficulty with assessing the discharges from individual IWG sites. However, studies show the adverse environmental impact of IWG on waterbody health.

3.2.2 Opportunities for feedback

228. Further to the initial feedback received highlighting implementation issues, the Ministries have provided opportunities for feedback through the public consultation undertaken on proposed amendments, and the targeted exposure draft process

which sought feedback specifically on the drafting of amendments. These processes are summarised above.

229. Once the amended IWG regulations come into effect, it is expected the Minister for the Environment will continue to receive feedback from regional councils, iwi, farmers, primary sector representatives, ENGOs, and other stakeholders on implementation.

230. If required, further amendments can be made at both the national and regional level. Government can at any stage introduce further changes to the NES-F regulations, while regional councils can change their regional plans to include additional or more stringent controls on IWG activities.

3.2.3 Future regulatory reviews

231. The NES-F may be reviewed again at any stage. The Transitional Approach remains an option for future consideration. While it has not been progressed at this time, it remains open for the permitted activity pathway based on default conditions (Pathway 1) to be removed from the IWG regulations in the future, once FW-FPs are available.

232. A further consideration is the transition to a new planning and resource management regime under the future Natural and Built Environments Act and how this effects NES-F regulations.

233. The Government expects councils to continue working on the requirements of the RMA and current national direction. The development of the National Planning Framework (under the RM reform work) is intended to capture the policy intent of existing national direction, align it with the new legislation, and determine how to fill gaps. The policy intent of the NES-F, including the IWG provisions, will be carried over into the framework.