

Interim Regulatory Impact Statement: Options to amend stock exclusion regulations

Coversheet

Purpose of Document	
Decision sought:	<i>Approval to consult and gather additional information to inform a final decision on whether changes should be made to the Resource Management (Stock Exclusion) Regulations 2020</i>
Advising agencies:	<i>Ministry for the Environment, Ministry for Primary Industries</i>
Proposing Ministers:	<i>Minister for the Environment, Minister of Agriculture</i>
Date finalised:	<i>17 May 2023</i>
Problem Definition	
<p>Livestock entering water bodies causes a range of environmental effects, including increased contaminant losses and damage to the banks and beds of water bodies. These effects can adversely impact freshwater ecosystems, human health, and cultural values.</p> <p>The Resource Management (Stock Exclusion) Regulations 2020 (the Regulations) require the exclusion of specified stock from water bodies in a range of situations. The purpose of the Regulations is to reduce the impact of environmental damage to our waterways from livestock. The application of the Regulations to lower intensity farming systems is not an efficient means of improving water quality. Low intensity farms tend to be stocked at lower rates, and the marginal environmental benefit of excluding stock from accessing waterways in these areas is lower, for higher costs to farmers (ie, per unit of stock excluded).</p> <p>The Regulations incorporate by reference a map which uses land slope as a proxy for identifying intensive farming systems, where the risk of impact on water bodies is high. The map may also capture some lower intensity farming systems, estimated to be around 0.37 million hectares. Based on earlier estimates, this could cost in the order of \$37.4 million for fencing of this area.¹</p> <p>To address the issues in relation to these lower intensity farming systems, the Government has agreed to develop and undertake further consultation to inform decisions on whether to make changes to the Regulations. Two potential ways of addressing these issues are proposed: An exception from the map of low slope for low intensity systems, and relying on certified freshwater farm plans instead of the low slope map and associated requirements to exclude stock, including from wetlands.</p>	
Executive Summary	

¹ In the 2022 report for the Ministry for the Environment *Stock Exclusion Regulations: Fencing costs associated with amendments to the stock exclusion low slope land map*, the total cost estimated to fence the area of the map was \$623.2M. The area of low producing grassland (as a proxy for lower intensity farms) is estimated to be 6 per cent of the total area, resulting in an estimated cost of \$37.4M. This is a rough estimate only based on available information at this time.

In August 2020, as part of the *Essential Freshwater* package, the Regulations were gazetted, requiring the exclusion of specified livestock from rivers wider than one metre, lakes, and natural wetlands (water bodies).

The Regulations incorporate by reference a map which identifies low slope land as a proxy for identifying higher intensity beef cattle and deer farming systems to manage the higher risk of impact on water bodies. Low slope land tends to have higher producing grassland and can sustain more grazing stock, which increases the environmental risk of stock access to water bodies.

Cabinet did not intend the Regulations to apply to lower intensity hill country farming² because the impact on water bodies is lower, and the cost of fencing can be high. When the Regulations were put in place, Cabinet agreed the Regulations would require exclusion of beef cattle and deer on low slope land only.

That is why the Regulations incorporate by reference the map, which identifies low slope land. Beef cattle and deer on land identified by the map must be excluded from water bodies from 1 July 2025 (or from 3 September 2020 on any new pastoral system).

Following gazettal, feedback received from councils and others indicated the Regulations required modifying to support effective implementation. Specifically, the map of low slope land was capturing:

- significant areas (11.5 per cent of the map) of higher sloped land (over 10 degrees in slope) incorrectly, and
- lower intensity farming in the high country, contrary to Cabinet's intent [CAB-21-MIN-0270],

— meaning that the requirements to exclude beef cattle and deer would apply in these areas where the marginal environmental benefit of excluding stock from water bodies is lower, for higher costs.

After consultation in August 2021, the following changes were made to the map of low slope land and took effect on 5 January 2023:

- a more advanced mapping methodology to identify low slope land without averaging across land parcels, and
- a more conservative 5-degree threshold to identify low slope land and avoid capturing steeper land above 10 degrees, and
- an altitude threshold of 500 metres to the map to avoid capturing high country farms.

While these recent changes have improved how the map identifies low slope land and now exclude lower intensity farming in the high country, the map is still likely to capture some areas of lower intensity farming (ie, at lower slopes and altitudes). Approximately 6 per cent of the map's current area is low producing grassland, which is often used in lower intensity beef cattle and deer farming systems. This could result in fencing costs up to ~\$37.4M for these farming systems.³

Lower intensity farming systems are stocked at lower rates, meaning the marginal environmental benefit of excluding stock is reduced while cost is increased. It therefore

² [DEV-20-MIN-077]

³ Estimated as 6 per cent of the total fencing costs of \$623.2M for the map area.

may be appropriate to have an exception from needing to comply with the map and related requirements to exclude stock.

The Stock Exclusion Regulations require all stock on low slope land to be excluded from wetlands. Draining wetlands for agricultural and urban development over the past 150 years has led to significant wetland loss and deterioration. However, many wetlands exist in their current state as part of a farming system, and in lower intensity farming systems it may not be feasible to fence these wetland areas. These requirements could have unintended outcomes for weed management and poor environmental outcomes for some wetlands.

We propose to seek feedback through consultation on the following:

- Two options to exempt lower intensity farming systems from needing to exclude stock from water bodies:
 - Exception from the low slope map — Defining lower intensity farming for the purpose of an exception to the map of low slope land. This includes a suite of options relating to the measure and threshold used.
- Relying on certified freshwater farm plans instead of the map of low slope land and associated requirements to exclude stock.
- Addressing the unintended outcomes of excluding stock from wetlands where they are part of a lower intensity farming system.
- Minor technical issues of clarification and definition:
 - Whether the definition of a permanent fence in the Regulations is too prescriptive, and what other fences, or elements of a fence, should be included in that definition.
 - Whether amendments should clarify the associated requirements to exclude stock do not apply to areas above 10 degrees in slope and still captured by the map of low slope land.

Providing an exception from the Regulations for lower intensity farming systems is expected to lower the cost for farmers with mixed environmental benefits/costs. In some areas, stock access to water bodies will maintain sediment loss and *E. coli*, resulting in environmental costs, while in other areas, stock access to water bodies will mean control of plant pest species can continue, resulting in some environmental benefits.

The Government has agreed to develop and undertake further consultation to inform decisions on whether to make changes to stock exclusion requirements for lower intensity farming systems.

We are expecting that consultation will improve our information and evidence of the problems and how best to address them. This could either result in changes to the Regulations (ie, through an exception) or result in the removal of some of the Regulations (ie, relying on certified freshwater farm plans instead of the map), and possible required changes to primary legislation. The information gathered from consultation and further analysis of data will inform the final policy proposal and assessment of costs and benefits.

Limitations and Constraints on Analysis

The scope of this interim Regulatory Impact Statement is limited to interventions that can be carried out within the scope of the *Essential Freshwater* regulatory package and can best meet the outcomes agreed by Cabinet and Ministers.

In 2022, Cabinet authorised further work and consultation to develop an exception from the requirement to exclude stock from water bodies for farms that meet a threshold or definition for lower intensity farming [ENV-22-MIN-0051].

This further work was not intended to affect any other requirement to exclude stock, including where beef cattle and deer are intensively grazed, or where farm planning processes determine it is appropriate in the circumstances. It was also noted by Cabinet that an exception may be inappropriate in some circumstances, for example where particularly sensitive water bodies are present (eg, spring-fed streams and lakes, and inanga spawning sites).

We have very limited data on the location and extent of existing wetlands. Wetland extent cannot be reported with accuracy, nor is it possible to quantify the rate of loss or measure quality change. Anecdotal evidence has been presented in this Regulatory Impact Statement observed by officials visiting Crown Pastoral Lease land. Through consultation, we are seeking to elicit further information about wetlands in lower intensity farming systems.

We have limited information about the marginal costs and benefits of the different options. Consultation will improve our information and evidence base, and previous analyses and available information will be used to inform final policy proposals.

Responsible Manager(s) (completed by relevant manager)

Nik Andic
Manager, Land and Water Systems
Ministry for the Environment



17.05.2023

Mackenzie Nicol
Manager, Water Policy
Ministry for Primary Industries



17.05.2023

Quality Assurance (completed by QA panel)

Reviewing Agency:	Ministry for the Environment and the Ministry for Primary Industries
Panel Assessment & Comment:	A quality assurance panel with members from the Ministry for the Environment and the Ministry for Primary Industries has reviewed the Regulatory Impact Statement. The panel considers that it partially meets the Quality Assurance criteria.

A joint Ministry for the Environment – Ministry for Primary Industries Regulatory Impact Analysis Panel has reviewed this interim Regulatory Impact Statement. The panel considers that the interim Regulatory Impact Statement partially meets the quality assurance criteria. There are a number of information gaps in the interim Regulatory Impact Statement which constrains the analysis (for example, around the cost and benefits of the proposed options). However, the interim Regulatory Impact Statement highlights these gaps and the panel considers the interim Regulatory Impact Statement will support effective consultation and help provide this information.

Proactively released

Section 1: Diagnosing the policy problem

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

Current state

1. Livestock entering water bodies cause a range of environmental effects, including increased contaminant losses (eg, pathogens, nitrogen) and damage to the banks and beds of water bodies. These effects can adversely impact freshwater ecosystems, human health, and cultural values.⁴
2. Existing regional plans have stock exclusion requirements, though these are highly variable in scope and effectiveness. Industry initiatives (eg, *Sustainable Dairying: Water Accord*) have increased the uptake of voluntary stock exclusion in recent years, however large stretches of water bodies remain unfenced. Where an existing regional plan has a more stringent rule for stock exclusion, the rule in the regional plan prevails over the national rules.
3. In August 2020, as part of the *Essential Freshwater* package, the Resource Management (Stock Exclusion) Regulations 2020 (the Regulations) were gazetted, requiring the exclusion of livestock from rivers wider than one metre, lakes, and natural wetlands (water bodies). The Regulations apply to any new pastoral system from 2020, and for all other farming systems by either 2023 or 2025 depending on the specific requirements. Exclusion must be in place by either 2023 or 2025 to comply with the Regulations.
4. Alongside the Regulations, the *Essential Freshwater* package also comprised:
 - a) the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-F)
 - b) the National Policy Statement for Freshwater Management 2020 (NPS-FM)
 - c) amended Resource Management (Measurement and Reporting of Water Takes) Regulations 2010.
5. Further background and analysis relating to the *Essential Freshwater* package can be found on the Ministry for the Environment's website,⁵ including regulatory impact analysis that supported the development and amendment of the Regulations in 2020 and 2023, respectively.^{6,7}
6. The Ministry for the Environment and the Ministry for Primary Industries are continuing to engage with stakeholders and partners to identify issues as they arise, and to ensure they have the support needed to effectively implement the *Essential Freshwater* package. This has included partnering with iwi/Māori, regional councils, and the primary sector on key areas of work; establishing a cross-sector Freshwater Implementation Group; and appointing freshwater commissioners to facilitate the preparation of freshwater planning instruments by regional councils. Certified freshwater farm plans are being introduced to manage environmental effects and comply with other regulatory requirements. New regulations to create the farm planning

⁴ See *Regulatory Impact Statement – Action for healthy waterways Part II: detailed analysis*:

<https://environment.govt.nz/what-government-is-doing/cabinet-papers-and-regulatory-impact-statements/regulatory-impact-statement-action-for-healthy-waterways-part-ii/>.

⁵ <https://environment.govt.nz/what-government-is-doing/areas-of-work/freshwater/work-programme/supporting-evidence-for-government-freshwater-work-programme/>

⁶ <https://environment.govt.nz/assets/publications/essential-freshwater-ria-part-ii-detailed-analysis.pdf>

⁷ <https://environment.govt.nz/acts-and-regulations/regulations/stock-exclusion-regulations/>

system are expected to be ready for rollout from mid-2023, with the regulations in place for all regions by the end of 2025.

Key features and objectives of the Regulations

7. The Regulations incorporate by reference a map of low slope land, which identifies land across New Zealand where specified stock must be excluded from water bodies from 1 July 2025 (or from 3 September 2020 on any new pastoral system).
8. The requirements relating to the map of low slope land are only a partial picture of requirements to exclude certain stock from water bodies. For example, if beef cattle and deer are “intensively grazing”, they must be excluded from water bodies on any terrain, regardless of the map.⁸
9. Requirements to exclude stock under the Regulations are also a minimum requirement. Regional plans and, once available, certified freshwater farm plans can impose more stringent requirements.
10. Following gazettal of the Regulations, feedback received from councils and others indicated the Regulations required modifying to support effective implementation. Changes to the map of low slope land were aimed at addressing concerns that it:
 - was inaccurate due to the way it averaged slope across land parcels, and
 - captured lower intensity hill country farming systems, contrary to Cabinet’s intention when introducing the Regulations [CAB-21-MIN-0270].
11. Changes were made to the map of low slope land after consultation and took effect on 5 January 2023. Further background and the regulatory impact assessment on these recent changes can be found on the Ministry for the Environment website.⁹
12. The amendments to the map included:
 - a more advanced mapping methodology to identify low slope land without averaging across land parcels, and
 - a more conservative 5-degree threshold to identify low slope land and avoid capturing steeper land above 10 degrees, and
 - an altitude threshold of 500m to the map to avoid capturing high-country farms. It is expected that land between 5 and 10 degrees will be managed through certified freshwater farm plans so the environmental outcomes will remain the same.

While these recent changes have improved how the map identifies low slope land and now exclude lower intensity farming in the high country, the map is still likely to capture some areas of lower intensity farming (ie, at lower slopes and altitudes).¹⁰ Approximately 6 per cent of the map’s current area is low producing grassland, which is often used in lower intensity beef cattle and deer farming systems.

⁸ “intensively grazing” is defined in the Regulations as:

- (a) break feeding;
- (b) grazing on annual forage crops; or
- (c) grazing on pasture that has been irrigated with water in the previous 12 months.

⁹ <https://environment.govt.nz/acts-and-regulations/regulations/stock-exclusion-regulations/>

¹⁰ Lower intensity farming generally refers to a system that uses fewer inputs (eg, labour, fertilisers) relative to the land area being farmed. For the purpose of this analysis, the term is used interchangeably with extensive farming.

Feedback from stakeholders

13. Public consultation on the introduction of the *Essential Freshwater* package, including the Regulations, was undertaken in 2019.
14. Following the introduction of the Regulations and stakeholder concerns related to the map of low slope land, further public consultation was undertaken in 2021 seeking feedback on proposed amendments to the map.
15. The 2021 consultation was limited in scope to proposed changes to improve the mapping methodology used to identify low slope land and address specific issues relating to the map. Recommending exemptions from the proposed map and removal of the map (relevant to the current proposals) were beyond the scope of the earlier consultation.¹¹
16. Detailed stakeholder feedback can be found on the Ministry for the Environment website.¹² A summary of feedback from the 2021 consultation relevant to the current proposals is included in the following paragraphs:

Discretion and exemptions

17. The use of discretion and exemptions were a common theme to address any perceived errors in the map of low slope land. Some submitters felt that where the map is inaccurate, the use of discretion should be permitted.
18. Councils exercising discretion was what most submitters suggested, along with certifier and farmer discretion, when managed under certified freshwater farm plans.
19. A process for applying for exemptions from the regulations was also a common theme.

Removal of the map, and use of certified freshwater farm plans

20. Some submissions asked for the low slope map to be removed altogether, and for certified freshwater farm plans to be the sole management response to stock exclusion.
21. Te Rūnanga o Ngāi Tahu noted there could be confusion because of differing requirements to exclude livestock in the Regulations and under certified freshwater farm plans, and requested the map be removed from the Regulations and that the Regulations instead list or explain the requirements for stock exclusion.

Sensitive water bodies¹³

22. Te Ao Marama Incorporated (on behalf of Waihopai Rūnaka, Te Rūnanga o Oraka Aparima and Te Rūnanga o Awarua) supported stock exclusion from water bodies. They, along with Te Rūnanga o Ngāi Tahu, noted that sensitive water bodies can be impacted by grazing livestock and that stock exclusion in these areas needs to be determined on a case-by-case basis.

Costs for Māori landowners

23. Tairāwhiti Whenua were broadly concerned with the costs (upon people) associated with the proposed low slope map and certified freshwater farm plan requirements, as well as productive land being removed from Māori landowners. They noted the requirement to exclude livestock in accordance with the proposed changes to the map

¹¹ <https://consult.environment.govt.nz/freshwater/stock-exclusion-regulations/>

¹² <https://environment.govt.nz/publications/proposed-amendments-to-the-low-slope-map-for-stock-exclusion-summary-of-submissions/>

¹³ Sensitive water bodies could include spring-fed streams and lakes, and inanga spawning sites which are less able to cope with stock breaking down the streambank, sediment runoff and damage to habitat.

(and alongside certified freshwater farm plans) would add additional costs, complexity, and bureaucracy for Māori landowners.

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

24. Livestock entering water bodies cause a range of environmental effects, including increased contaminant losses and damage to the banks and beds of water bodies. These effects can adversely impact freshwater ecosystems, human health, and cultural values.
25. The Regulations require the exclusion of specified stock from water bodies in a range of situations. The purpose of the Regulations is to reduce the impact of damage to our waterways from livestock.
26. The application of the Regulations to lower intensity farming systems is not an efficient means of improving water quality. Low intensity farms tend to be stocked at lower rates, and the marginal environmental benefit of excluding stock from accessing waterways in these areas is lower, for higher costs (ie, per unit of stock excluded).
27. Under the status quo, any beef cattle and deer in areas captured by the map will need to be excluded from water bodies – including on lower intensity farming systems.
28. Using low producing grassland as a proxy to estimate the area of lower intensity farming captured by the map, we estimate that 372,976 hectares or 6 per cent of the map's total area could capture lower intensity farming systems (Table 1).

Table 1: Estimated area and cost of fencing of lower intensity farming systems in the stock exclusion area of the map

Area of Low producing grassland (ha)					
Region	Not in stock ex area	In stock ex area	Total area	Percentage in stock ex area	Estimated fencing cost (\$M)
Northland	27,182	14,420	41,601	35%	0.24
Auckland	16,061	4,760	20,821	23%	0.12
Waikato	145,734	19,540	165,273	12%	0.96
Bay of Plenty	33,954	9,408	43,362	22%	0.25
Gisborne	218,448	4,317	222,765	2%	1.30
Hawkes Bay	184,677	14,775	199,452	7%	1.16
Taranaki	67,324	7,860	75,183	10%	0.44
Manawatu	527,353	20,480	547,834	4%	3.19
Wellington	129,863	10,945	140,809	8%	0.82
West Coast	248,948	45,720	294,668	16%	1.72
Canterbury	1,766,318	101,599	1,867,917	5%	10.88
Otago	1,578,166	61,275	1,639,441	4%	9.55
Southland	599,745	44,618	644,363	7%	3.75
Tasman	96,696	4,735	101,431	5%	0.59

Nelson	3,152	228	3,381	7%	0.02
Marlborough	405,052	8,296	413,347	2%	2.41
Grand total	6,048,673	372,976	6,421,649	6%	37.40

29. Estimated fencing costs vary by fence type and steepness of terrain (among other factors). Costs are highest for deer fencing and typically increase with steepness for all fence types. Other significant costs for such beef cattle and deer farms would include:
- stock water reticulation, although it is not known how many of New Zealand's waterways are currently used as a source of stock drinking water, and
 - the opportunity costs of retiring productive land as a result of fencing.¹⁴
30. A further issue for lower intensity farming systems are the requirements to exclude stock from wetlands. Wetlands support high levels of biodiversity, provide habitat, act as 'kidneys' and giant sponges, and have strong cultural and spiritual importance for Māori.¹⁵ However, many wetlands exist in their current state as part of a farming system, and benefit from ongoing weed management.
31. Fencing wetlands in lower intensity farming systems is similarly unlikely to be efficient. At particularly low stocking rates farmers are more likely to destock and/or operate more intensively on smaller areas that can be fenced efficiently. There is a risk this will lead to:
- reduced weed management of the wetland area and a negative outcome to wetlands (eg, relatively impenetrable thatches of pasture grasses to the detriment of smaller, low growing and threatened indigenous plants), and
 - adverse effects on water quality where farmers choose to operate more intensively on smaller areas of land.

Relevant prior Government decisions, legislation, and Regulatory Impact Statements

32. The Regulations, gazetted on 3 August 2020 and then amended on 5 January 2023, require the exclusion of certain livestock from certain water bodies.
33. Requirements to exclude stock are intended to manage the environmental risks associated with stock entering water bodies, particularly in relation to sediment and E.

¹⁴ For more detailed information on the benefits and costs of excluding stock from water bodies, see:

- National Stock Exclusion Study: Analysis of the costs and benefits of excluding stock from New Zealand waterways July 2016:* <https://www.mpi.govt.nz/dmsdocument/16513-National-Stock-Exclusion-Study-Analysis-of-the-costs-and-benefits-of-excluding-stock-from-New-Zealand-waterways-July-2016>
- Modelling the impacts of the Draft Stock Exclusion Section 360 Regulations on river water quality, October 2020:* <https://www.mpi.govt.nz/dmsdocument/50149-Modelling-the-impacts-of-the-Draft-Stock-Exclusion-Section-360-Regulations-on-river-water-quality>

¹⁵ <https://www.stats.govt.nz/indicators/wetland-extent/>

coli, which can adversely impact freshwater ecosystems, human health, and cultural values.¹⁶

34. Cabinet did not intend the Regulations to apply to lower intensity hill country farming because the impact on water bodies is lower, and the cost of fencing can be high.¹⁷ When the Regulations were put in place, Cabinet agreed the Regulations would require exclusion of beef cattle and deer on low slope land only [CAB-21-MIN-0270].¹⁸
35. That is why the Regulations incorporate by reference the map, which identifies low slope land. It was Cabinet's intent that areas of lower intensity farming were not captured by the map. Beef cattle and deer on land identified by the map must be excluded from water bodies from 1 July 2025 (or from 3 September 2020 on any new pastoral system).
36. Further background and analysis relating to the *Essential Freshwater* package can be found on the Ministry for the Environment website, including regulatory impact analysis that supported development of the Regulations in 2020,¹⁹ and the more recent regulatory impact analysis that supported changes to the map of low slope land in the Regulations.²⁰

Other government work programmes with interdependencies and linkages

37. The Regulations are expected to reduce faecal contamination and support the NPS-FM's national target to increase proportions of specified rivers and lakes that are suitable for primary contact (ie, swimming) to at least 80 per cent by 2030, and 90 per cent no later than 2040.
38. The NPS-FM requires regional councils to map natural inland wetlands that are 0.05 hectares or larger, or of a type that is naturally smaller and known to contain threatened species. This mapping when complete will support the implementation of requirements to exclude stock on low slope land from natural wetlands 0.05 hectares or greater in size by 1 July 2025.
39. Certified freshwater farm plans are a legal instrument established under Part 9A of the Resource Management Act 1991 (RMA) (sections 217A to 217M). Once implemented, all farm systems that meet specific area thresholds will need a certified freshwater farm plan, which will include practical actions to manage environmental effects and comply with other regulatory requirements. Stock exclusion is a straightforward way to manage the effects of stock entering water bodies and may be required as a result of farm planning, including in situations where the Regulations do not require it (ie, on higher slopes). New regulations to create the farm planning system are expected to be ready

¹⁶ See *Regulatory Impact Statement – Action for healthy waterways Part II: detailed analysis*:

<https://environment.govt.nz/what-government-is-doing/cabinet-papers-and-regulatory-impact-statements/regulatory-impact-statement-action-for-healthy-waterways-part-ii/>.

¹⁷ See *Essential Freshwater – Public consultation on national direction for freshwater management*:

<https://environment.govt.nz/assets/Publications/essential-freshwater-public-consultation-national-direction-freshwater-management.pdf>.

¹⁸ See *Action for Healthy Waterways – Decisions on national direction and regulations for freshwater management*:

<https://environment.govt.nz/assets/publications/Cabinet-papers-briefings-and-minutes/cab-paper-action-for-healthy-waterways-decisions-on-national-direction-and-regulations-for-freshwater-management.pdf>.

Detailed recommendations relating to stock exclusion are contained in Appendix 1 of that Cabinet paper:

<https://environment.govt.nz/assets/Publications/Files/appendix-1-policy-and-recommendations-action-for-healthy-waterways-cab-paper.pdf>.

¹⁹ <https://environment.govt.nz/assets/publications/essential-freshwater-ria-part-II-detailed-analysis.pdf>

²⁰ See *Regulatory Impact Statement: Changes to the map of low slope land in stock exclusion regulations*

<https://environment.govt.nz/acts-and-regulations/regulations/stock-exclusion-regulations/>

for rollout from mid-2023, with the regulations in place for all regions by the end of 2025.²¹

40. Recently proposed changes to the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 (NES-DW) are aimed at improving the protection of drinking water sources used for human consumption.²² Mapping criteria introduced under the NES-DW could overlap with the Regulations and impose additional requirements. Proposed changes to the NES-DW are still subject to final decisions.

What is the policy problem or opportunity?

Nature, scale, and scope of the problem

41. The Regulations are intended to manage the environmental risks associated with stock entering water bodies. Cabinet did not intend the Regulations to apply to lower intensity hill country farming because the impact on water bodies is lower, and the cost of fencing can be high [CAB 21-MIN-0270].
42. Areas of lower intensity farming are still likely to be captured by the map. This is because the map is based on the characteristics of land (ie, slope, altitude, etc) and is an imperfect proxy for the intensity of land use. It has been estimated that approximately 6 per cent of the map's current area is low producing grassland, which is often used in lower intensity beef cattle and deer farming systems.
43. The application of the Regulations to lower intensity farming systems is not an efficient means of improving water quality. Lower intensity farming systems tend to be stocked at lower rates, and the marginal environmental benefit of excluding stock from accessing waterways in these areas is lower, for higher cost (ie, per unit of stock excluded).
44. A related matter is whether an exception for lower intensity farming should also apply more broadly to requirements to exclude stock from wetlands. These requirements, when applied in lower intensity farming systems, could lead to reduced weed management and negative environmental outcomes for some wetlands.

²¹ <https://environment.govt.nz/acts-and-regulations/freshwater-implementation-guidance/freshwater-farm-plans/>

²² <https://consult.environment.govt.nz/freshwater/nes-drinking-water/>

Overall regulatory burden

45. There is an overall regulatory burden to consider relating to implementation of any changes to the Regulations, namely:
 - a) farmers will need to comply with the Regulations alongside multiple other regulations from central and local government, for example, in relation to intensive winter grazing, feedlots, and²³
 - b) regional councils are responsible for their compliance monitoring and enforcement, and
 - c) regulatory requirements may also overlap, for example, where regional plans and certified freshwater farm plans impose more stringent requirements to exclude stock.
46. Feedback indicates there may be some confusion because of the above, and general concern about the overall impact on farmers.

What objectives are sought in relation to the policy problem?

47. The consideration of objectives is guided by the purpose of the RMA and the objectives of the *Essential Freshwater* package. The key objectives are that changes to the Regulations must be:
 - **effective** in giving effect to the principles of Te Mana o te Wai and preventing further degradation and loss of the country's freshwater resources, waterways, and ecosystems (and if possible, reversing past damage);
 - **practical** in enabling farmers subject to the Regulations to meet their obligations as intended within required timelines;
 - **equitable** in allocating the costs of implementing the Regulations appropriately.

²³ Councils are required to notify their regional plans to give effect to the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 by 2024.

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

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

48. Following the objectives above, the criteria used in the previous Regulatory Impact Statement²⁴ are also used to evaluate the options in this document:
- **effective:** does the option avoid, remedy, or mitigate the effects of farming on freshwater, by ensuring that the Regulations specify stock exclusion from those waterways where it will have the greatest environmental benefits (and in so doing, give effect to the principles of Te Mana o te Wai and the requirements of the RMA, the NPS-FM and the NES-F)?
 - **practical:** does the option:
 - provide farmers and regional councils with clear information about the waterways from which stock must be excluded?
 - provide farmers with flexibility to implement solutions (especially through certified freshwater farm plans) that are appropriate to the specific circumstances of their farm?
 - set realistic timeframes for measures to be implemented to meet these obligations?
 - **equitable:** does the option:
 - allocate the costs of implementing the Regulations to landowners with waterways at most risk of degradation?
 - avoid imposing costs on landowners with waterways at low risk of degradation or where costs of exclusion would be excessive relative to environmental benefits?
 - **consistent with the Treaty of Waitangi (Te Tiriti o Waitangi):** does the option:
 - take into account the principles of Te Tiriti o Waitangi?
 - promote partnership and protect Māori rights and/or interests and relationships with their taonga?
 - acknowledge opportunities that may arise for Māori to exercise rangatiratanga and kaitiakitanga?

What scope will options be considered within?

49. The scope of this Regulatory Impact Assessment is limited to interventions that can be carried out within the scope of the *Essential Freshwater* regulatory package and can best meet the outcomes agreed by Cabinet and Ministers.
50. In 2022, Cabinet authorised further work and consultation to develop an exception from the requirement to exclude stock from water bodies for farms that meet a threshold or

²⁴ <https://environment.govt.nz/what-government-is-doing/cabinet-papers-and-regulatory-impact-statements/regulatory-impact-statement-changes-to-map-of-low-slope-land-in-stock-exclusion-regulations/>

definition for lower intensity farming, even where these are captured by the map of low slope land [ENV-22-MIN-0051].

51. This further work was not intended to affect any other requirement to exclude stock, including where beef cattle and deer are intensively grazed, or where farm planning processes determine it is appropriate in the circumstances. It was also noted by Cabinet that an exception may be inappropriate in some circumstances, for example where particularly sensitive water bodies are present.

What options are being considered?

52. Government has agreed to develop and undertake further consultation to inform decisions on whether to make changes to stock exclusion requirements for lower intensity farming systems. We are proposing to seek feedback through consultation on the following issues:
 - a) Issue One: Options to except lower intensity farming systems from the map of low slope land. Options include:
 - i. defining lower intensity farming for the purpose of an exception to the map of low slope land. This includes a suite of options relating to the measure and threshold used
 - ii. relying on certified freshwater farm plans instead of the low slope map and associated requirements to exclude stock, including from wetlands.
 - b) Issue Two: Addressing the unintended outcomes of excluding stock from wetlands where they are part of a lower intensity farming system. Options include extending the exception for lower intensity farm systems or relying on certified freshwater farm plans.
 - c) Issue Three: Minor and technical issues of clarification including looking at:
 - i. whether the definition of a permanent fence in the Regulations is too prescriptive, and what other fences, or elements of a fence, should be included in that definition
 - ii. whether amendments should clarify the associated requirements to exclude stock do not apply to areas above 10 degrees in slope and still captured by the map
 - iii. other such issues if identified through consultation.

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

53. At this stage, there are no preferred options and further information is required about the problems and how these can best be addressed. We are expecting that consultation will improve our information and evidence on the impacts and benefits and enforcement options of each of the options or identify alternative proposals. This will further inform our analysis on a preferred option.
54. Initial pre-consultation assessment of the various options has been completed (refer to tables below). A final assessment of these options and any others identified will be completed following consultation.

Issue One: Options to exempt lower intensity farming systems from the map of low slope land

Option One – Status quo and/or counterfactual

55. The current map is retained, all beef cattle and deer farms captured by the map, including lower intensity farms, must exclude stock and from water bodies from 1 July 2025 (or 3 September 2020 for new pastoral systems). The Regulations remain unchanged.
56. The current map identifies low slope land as land with a slope between 0 and 5 degrees with an altitude threshold of 500 metres above sea level. It is estimated that the map captures an estimated 372,976 hectares of lower intensity farming area.

Option Two – Defining lower intensity farming for the purpose of an exception to the map of low slope land

57. Under Option Two, an exception from the map is proposed for lower intensity farming systems based on stocking rate. Lower intensity farming systems would be defined according to a threshold for stock units per hectare, annualised and calculated for the farm as a whole.
58. An exception would mean that if a farm meets a definition of lower intensity farming, then there would be no requirement to exclude stock from water bodies, despite the farm being captured by the map.

Defining a threshold

59. Stock units are a means of calculating stocking rate across different species and age groups of animals, based on their relative feed demands. For example, a breeding bull might amount to 5.5 stock units while a steer under 1 year old might amount to 4.5 stock units. Established methods for calculating stock units are available and widely used in the primary sector.
60. Stock units per hectare are considered a useful proxy for the intensity of a farming system, and a measure that is well understood at the farm level. Stats NZ collects data about stocking rates across a range of farm types as part of the Agricultural Production Survey.
61. Annualising stocking rates for the farm as a whole is proposed to avoid complicating how the exception would apply in practice and align with how the measure is commonly used (ie, as part of industry benchmarking).
62. Other options may be more appropriate to calculate stocking rate, for example over a shorter period than annual, or applying a different area to the whole farm. We will seek feedback on the proposal and alternatives through the consultation process.
63. As there is no established threshold to define lower intensity farming, especially in the context of access to water bodies, we propose to seek feedback on an appropriate stocking rate threshold and the practicalities of any approach.
64. Farm types that are typically thought of as lower intensity can still vary significantly in terms of stocking rate. What is typically considered a lower intensity farming stocking rate may also differ between beef and deer farms, meaning that a one-size fits all threshold may not be appropriate.

Sensitive water bodies

65. An exception to the map of low slope land for lower intensity farming may be inappropriate in some situations, for example, where stock entering particularly sensitive water bodies could cause significant harm, even at lower stocking rates. This could include spring-fed streams and lakes, and inanga spawning sites which are less

able to cope with stock breaking down the streambank, sediment runoff and damage to habitat.

66. An exception to the map for lower intensity farms could pose a risk to sensitive water bodies. We propose to test how best to design the exception so that lower intensity farms are excluded and risks to sensitive water bodies are managed. We will also explore how sensitive water bodies could be identified for this purpose, drawing on the expertise of stakeholders.

Compliance monitoring and enforcement

67. It will be difficult for councils to detect non-compliance with a stocking rate threshold. This is because stocking rates can vary over time and depend on factors such as the age or sex of the animals as well as total area of land to which they have access.
68. We understand that farmers are familiar with stock movements on their farm and may already collect information that could be provided to councils to demonstrate compliance. However, officials believe the empowering provisions in the RMA do not allow for regulations that would compel farmers to supply stocking rate information.
69. We propose to seek feedback on ways to better enable compliance monitoring and enforcement. One option in the short term could be to amend the empowering provisions in the RMA, so that the regulations can require the supply of information needed to detect non-compliance.
70. The transition to the National Planning Framework (NPF) under the Natural and Built Environment Bill (NBE) may make this unnecessary, with changes proposed that provide for the collection of information and regulation making powers for compliance monitoring, although the phasing of this could be three to seven years.
71. Difficulties with compliance monitoring and enforcement are common to activity-based regulations, and we propose to seek feedback on how we can better enable compliance monitoring and enforcement.

Option Three – Rely on certified freshwater farm plans instead of the low slope map and associated requirements to exclude stock

72. Under Option Three, certified freshwater farm plans are proposed as an alternative to the map and associated requirements to exclude stock.
73. Certified freshwater farm plans are a legal instrument established under the RMA. Eventually all farmers that meet specified thresholds (eg, 20 ha of land in pastoral use) will need a certified freshwater farm plan, which among other things must:
 - a) identify any adverse effects of activities carried out on the farm on freshwater and freshwater ecosystems; and
 - b) specify requirements that are appropriate for the purpose of avoiding, remedying, or mitigating the adverse effects of those activities on freshwater and freshwater ecosystems.²⁵
74. This option proposes to use certified freshwater farm plans as a mechanism for:
 - a) assessing the risk of stock entering water and whether exclusion is needed in different contexts (eg, in lower intensity farming systems, between different

²⁵ Section 217F of the Resource Management Act 1991.

- catchments and/or beef and deer farms, and where one part of a farm is more intensively grazed, etc)
- b) identifying sensitive water bodies and assessing the risk of stock entering them and whether exclusion or additional protection is needed irrespective of low stocking rates, and
 - c) assessing the risk posed by stock entering wetlands, and whether it is desirable to exclude them on lower intensity farms.
75. Freshwater farm plan regulations are expected to commence in all regions by 2025. Certified freshwater farm plans could, for example, be used as a sunset clause for the map and associated requirements to exclude stock. This would mean that, as certified freshwater farm plans 'turn on' region by region, the map and associated requirements to exclude stock would 'turn off'. Alternatively, the map and associated requirements to exclude stock could be removed now. In either case, whether beef cattle and deer need to be excluded would then depend on a risk assessment undertaken as part of the farm planning process. We propose to seek feedback on the most effective implementation approach.
76. Following the recent changes to the map of low slope, stock exclusion of beef cattle and deer on slopes between 5 and 10 degrees will be managed through a certified freshwater farm plan risk assessment.
77. This approach is broader in scope than an exception for lower intensity farming. That is, it would replace the map of low slope land and all associated requirements to exclude stock. Further changes to their regulation or implementation support may also be needed to ensure stock are excluded as expected (eg, in most, if not all situations on flat land).
78. Freshwater farm plan regulations are also not expected to be in place for all regions until the end of 2025. The development and certification of a plan could then take another year, with actions not commencing until 2027, potentially delaying environmental improvements.

Table 2

Proactively reviewed

How do the options compare to the status quo/counterfactual?

Table 2: Initial pre-consultation assessment of options to exempt lower intensity farming systems from the map of low slope land

	Option One – Status quo, no change to the Regulations	Option Two – Define lower intensity farming for the purpose of an exception to the map of low slope land	Option Three – Rely on certified freshwater farm plans instead of the low slope map and associated requirements to exclude stock
<p>Effective</p> <p>Does the option avoid, remedy, or mitigate the effects of farming on freshwater, by ensuring that the Regulations specify stock exclusion from those waterways where it will have the greatest environmental benefits?</p>	<p>The Regulations and incorporated map provide an effective way of excluding stock from water bodies to avoid, remedy, or mitigate the effects on freshwater.</p>	<p>This option may be more effective for specifying stock exclusion for the greatest environmental benefit as it will exclude lower intensity farming systems where the marginal environmental benefit is low compared to the cost.</p>	<p>This option may be more effective than the current Regulations as certified freshwater farm plans take a risk-based approach and will encourage actions to reduce effects of farming on freshwater. These actions are subject to certification and audit which will ensure environmental benefits can be monitored and measured. Effective stock exclusion based on these plans will be in place later than the status quo, and further degradation of water bodies could continue until plans are implemented.</p>
<p>Practical</p> <p>Does the option:</p> <ul style="list-style-type: none"> provide farmers and regional councils with clear information about the waterways from which stock must be excluded? provide farmers with flexibility to implement solutions (especially through certified freshwater farm plans) 	<p>The Regulations and incorporated map are a practical method in most cases for defining where stock need to be excluded from water bodies. There is limited data on wetland extent. Councils are required under the NPS-FM to map wetlands by 2030. The regulations were introduced in 2020 with all requirements to be met by 2025.</p>	<p>This option may be less practical than the current Regulations as there will be exceptions to the map which could create confusion about where the map applies and does not apply, if not mapped accurately. It will provide greater flexibility for lower intensive farming systems to manage how they exclude stock on their farms. There is no change to the timeframe for implementation.</p>	<p>This option may be less practical in terms of information about which waterways must have stock excluded. It provides the greatest level of flexibility for farmers to implement solutions for their farms. The timelines for implementation vary between the Regulations and certified freshwater farm plans, this could create uncertainty and a gap in protection for water bodies.</p>

	Option One – Status quo, no change to the Regulations	Option Two – Define lower intensity farming for the purpose of an exception to the map of low slope land	Option Three – Rely on certified freshwater farm plans instead of the low slope map and associated requirements to exclude stock
<p>that are appropriate to the specific circumstances of their farm?</p> <ul style="list-style-type: none"> set realistic timeframes for measures to be implemented to meet these obligations? 			
<p>Equitable</p> <p>Does the option:</p> <ul style="list-style-type: none"> allocate the costs of implementing the Regulations towards landowners with waterways at most risk of degradation? avoid imposing costs on landowners with waterways at low risk of degradation or where costs of exclusion would be excessive relative to environmental benefits? 	<p>The Regulations and incorporated map capture some, but not all, lower intensity farming systems on low slope land which may not be considered equitable.</p>	<p>Creating an exception from the map for lower intensity farming systems may be more equitable as farms with lower risks of degradation avoid having to pay an excessive cost for stock exclusion.</p>	<p>Certified freshwater farm plans may be more equitable than the status quo as farmers can take specific actions to improve freshwater in the most cost-effective way for their farm system.</p>

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	Option One – Status quo, no change to the Regulations	Option Two – Define lower intensity farming for the purpose of an exception to the map of low slope land	Option Three – Rely on certified freshwater farm plans instead of the low slope map and associated requirements to exclude stock
<p>Takes into account Te Tiriti o Waitangi</p> <p>Does the option:</p> <ul style="list-style-type: none"> take into account the principles of Te Tiriti o Waitangi? promote partnership and protect Māori rights and/or interests and relationships with their taonga? acknowledge opportunities that may arise for Māori to exercise rangatiratanga and kaitiakitanga? 	<p>The principles of Te Tiriti were taken into account in the development of the Regulations.</p>	<p>The principles of Te Tiriti are being taken into account with the proposed changes to the Regulations.</p>	<p>The principles of Te Tiriti are being taken into account with the proposed changes to the Regulations.</p> <p>Certified freshwater farm plans may provide more opportunity to exercise rangatiratanga as actions can be tailored to the specific farm.</p>
<p>Overall assessment</p>	<p>The requirements of the Regulations and incorporated map to exclude stock are intended to manage the environmental risks of stock entering water bodies. The Regulations may not be equitable in the allocation of costs for some lower intensity farming systems.</p>	<p>Defining lower intensity farming for the purpose of an exception to the map of low slope land may be more equitable and effective than the status quo as it avoids imposing costs on lower intensity farming systems and may still achieve similar environmental outcomes.</p>	<p>Replacing the map of low slope land and all associated requirements with certified freshwater plans may be more effective and equitable than the status quo as it provides a practical and flexible way for farmers to achieve environmental outcomes that are subject to audit.</p>

Issue Two: Addressing the unintended outcomes of excluding stock from wetlands where they are part of a lower intensity farming system

79. Draining wetlands for agricultural and urban development over the past 150 years has led to significant wetland loss and deterioration. Wetlands support high levels of biodiversity, provide habitat, clean water, control flood water and pollutants, and act as carbon sinks. Wetlands have strong cultural and spiritual importance for Māori.²⁶
80. Allowing stock to graze in a wetland can have negative environmental outcomes on water quality and biodiversity by increasing sediment runoff and habitat damage, especially where stock are intensively grazing. Conversely, some wetlands benefit from grazing at very low stocking rates to achieve weed management from invasive pest species.
81. There are limited data on the location and extent of existing wetlands, and where they may exist in their current state as part of a farming system benefitting from ongoing weed management by the farmer.
82. Recent feedback from the High Country Accord Trust and official's visit to Mt Nicholas Station in Otago highlighted that issues relating to lower intensity farming may not be limited to the map of low slope land but might also apply to wetlands more broadly.
83. Issue One above relates to the map of low slope land and includes the requirement to exclude stock from natural wetlands with an area more than 500 square metres. The Regulations also contain other requirements²⁷ to exclude stock from wetlands, irrespective of the map of low slope land, where:
 - a) the wetland is identified in a regional or district plan or regional policy statement, or
 - b) the wetland supports a population of threatened species.
84. Excluding stock from wetlands within a lower intensity farming system will come at an increased cost to the farmer and may still have a negative environmental outcome. Fencing wetlands in a lower intensity farming system is unlikely to be efficient, and large amounts of fencing would be required. In cases where Crown land is used, activities such as soil disturbance (eg, for fencing) would also be subject to consent from the Commissioner of Crown Lands.
85. The requirement to exclude stock from wetlands may lead to increased intensification on smaller areas that can be fenced more efficiently, and reduced weed management (through grazing) by farmers which would lead to negative outcomes for wetlands.
86. The purpose of consultation is to elicit more information about the scale of the problem, and what solutions may exist to address it. Feedback will also be sought on two options, that is, whether any exception for lower intensity farming (ie, in relation to the map) should be extended to requirements to exclude stock from wetlands, and under what circumstances, and whether freshwater farm plans could be used.

Table 3

²⁶ <https://www.stats.govt.nz/indicators/wetland-extent/>

²⁷ Regulations 16 and 17 of the Regulations.

How do the options compare to the status quo/counterfactual?

Table 3: Initial pre-consultation assessment of options to address the unintended outcomes of excluding stock from wetlands on lower intensity farming systems

	Option One – Status quo, no change to the Regulations	Option Two – An exception for lower intensity farming should also apply more broadly, to requirements to exclude stock from wetlands	Option Three – Certified freshwater farms plans assess the risk posed by stock entering wetlands, and whether it is desirable to exclude them on lower intensity farms
<p>Effective</p> <p>Does the option avoid, remedy, or mitigate the effects of farming on freshwater by ensuring that the Regulations specify stock exclusion from those waterways where it will have the greatest environmental benefits?</p>	<p>The Regulations and incorporated map provide an effective way of excluding stock from wetlands. It is not known if this will have the greatest environmental benefit as there may be unintended outcomes of excluding stock, that is, reduced weed management or adverse effects on water quality from intensification on smaller areas.</p>	<p>This option may be more effective than the status quo in managing the effects of farming on freshwater and achieving environmental benefits relating to weed management where the risk of exclusion is greater than the alternative.</p>	<p>This option may be more effective than the status quo in managing the effects of farming on freshwater and achieving environmental benefits relating to weed management as farmers can take actions that are subject to certification and audit which would ensure environmental benefits could be monitored and measured.</p>
<p>Practical</p> <p>Does the option:</p> <ul style="list-style-type: none"> provide farmers and regional councils with clear information about the waterways from which stock must be excluded? provide farmers with flexibility to implement solutions (especially through certified freshwater farm plans) that 	<p>The Regulations contain clear information and timeframes for excluding stock from wetlands. There is little flexibility within the Regulations to implement solutions for specific circumstances.</p>	<p>This option may be more practical for lower intensity farmers as it provides some flexibility depending on circumstance. Depending on how it is implemented, there may be less clarity about which water bodies the rules apply to.</p>	<p>Certified freshwater farm plans may be more practical as they require clear and auditable information about actions and provide for flexible solutions for each individual farm's circumstances. The timelines for implementation vary between the Regulations and certified freshwater farm plans. This could create uncertainty and a gap in protection for water bodies.</p>

	Option One – Status quo, no change to the Regulations	Option Two – An exception for lower intensity farming should also apply more broadly, to requirements to exclude stock from wetlands	Option Three – Certified freshwater farms plans assess the risk posed by stock entering wetlands, and whether it is desirable to exclude them on lower intensity farms
<p>are appropriate to the specific circumstances of their farm?</p> <ul style="list-style-type: none"> set realistic timeframes for measures to be implemented to meet these obligations? 			
<p>Equitable</p> <p>Does the option:</p> <ul style="list-style-type: none"> allocate the costs of implementing the Regulations towards landowners with waterways at most risk of degradation? avoid imposing costs on landowners with waterways at low risk of degradation or where costs of exclusion would be excessive relative to environmental benefits? 	<p>Fencing wetlands in lower intensity farming system is unlikely to be efficient. The costs may be high for marginal environmental benefit and in some cases may lead to negative environmental outcomes.</p>	<p>Creating an exception for lower intensity farming systems may be more equitable as it avoids imposing costs on lower risk farming systems where the costs are high compared to the marginal environmental benefit.</p>	<p>It may be more equitable in terms of costs and benefits to use certified freshwater farm plans to assess the risk posed by stock entering wetlands, and whether it is desirable to exclude them on lower intensity farms.</p>
<p>Takes into account Te Tiriti o Waitangi</p> <p>Does the option:</p> <ul style="list-style-type: none"> take into account the principles of Te Tiriti o Waitangi? 	<p>The development of the Regulations considered Te Tiriti o Waitangi.</p>	<p>The development of the Regulations considered Te Tiriti o Waitangi as will the application of any exception.</p>	<p>The principles of Te Tiriti are being taken into account with the proposed changes to the Regulations.</p> <p>Certified freshwater farm plans may provide more opportunity to exercise rangatiratanga as actions can be tailored to the specific farm.</p>

	Option One – Status quo, no change to the Regulations	Option Two – An exception for lower intensity farming should also apply more broadly, to requirements to exclude stock from wetlands	Option Three – Certified freshwater farms plans assess the risk posed by stock entering wetlands, and whether it is desirable to exclude them on lower intensity farms
<ul style="list-style-type: none"> • promote partnership and protect Māori rights and/or interests and relationships with their taonga? • acknowledge opportunities that may arise for Māori to exercise rangatiratanga and kaitiakitanga? 			
Overall assessment	The requirements of the Regulations and incorporated map are intended to manage the environmental risks of stock entering water bodies including wetlands. The Regulations may not be equitable in the allocation of costs for some lower intensity farming systems but there is limited information available.	Extending the exception for lower intensity farming to wetlands may be more equitable and effective than the status quo as it avoids imposing costs on lower intensity farming systems.	Replacing the Regulations with certified freshwater farm plans may be more effective and equitable than the status quo as it provides a practical and flexible way for farmers to achieve environmental outcomes that are subject to audit.

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Issue 3: Minor technical issues of clarification and definition

87. Minor technical issues of clarification and definition are proposed to be addressed as part of the review of the Regulations. Two issues will be consulted on and include:

Permanent fences

88. Feedback will be sought on whether the definition of a 'permanent fence' in the Regulations is too prescriptive, and what other fences, or elements of a fence, should be included in that definition.
89. The Regulations provide for an exception where an existing 'permanent fence'²⁸ or existing riparian planting already effectively excludes stock. These existing permanent fences established at 3 September 2020 do not have to be moved.
90. This was to address issues raised during the consultation on the Essential Freshwater package in 2019 that existing fences would need to be moved to comply with the three metres setback requirement.
91. More recent feedback indicates the definition of a permanent fence could be unnecessarily prescriptive and exclude fence types that are nonetheless permanent. Appendix 1 provides examples of fences not currently included in the definition of permanent fence, but which are likely to be similar in durability and effectiveness at excluding stock. We propose to seek feedback on whether modifications are required to the definition and what should be included.

Clarifying map requirements

92. Feedback will be sought on whether amendments should clarify that the requirements to exclude stock do not apply to areas which are above 10 degrees in slope but still captured by the map.
93. Recent changes have largely addressed the map's unintended capture of steeper land. The area of land with an average slope greater than 10 degrees has decreased to approximately 0.02 per cent of the map (which corresponds to approximately 1,160 hectares).
94. While this is a relatively small area, we propose to seek feedback on whether we need to clarify that the map and associated requirements to exclude stock do not apply on slopes that are in fact greater than 10 degrees.

²⁸ Permanent fence means a post and batten fence with driven or dug fence posts, or an electric fence with at least two electrified wires and driven or dug fence posts, or a deer fence.

What are the marginal costs and benefits of changing the Regulations?

95. The marginal cost and benefits of excluding stock are examined in the Regulatory Impact Statement: Changes to the map of low slope land in stock exclusion regulations.²⁹
96. As we are proposing to seek more information through consultation about the scale of identified problems and the solutions that may exist, we have only completed a simple qualitative assessment of the marginal costs and benefits of changing the Regulations (Table 4).
97. We are expecting that consultation will improve our information and evidence of the problem and how it can best be addressed. This could either result in changes to the Regulations (ie, through an exception) or result in the removal of some of the Regulations (ie, relying on freshwater farm plans instead of the map) or possible changes to primary legislation. The information gathered from consultation and further analysis of data will inform the final policy proposal and assessment of costs and benefits.
98. Under the status quo there is a higher marginal cost of excluding stock from waterways for lower intensity farming systems for lower marginal environmental benefit. There are also instances of negative environmental outcomes from stock exclusion due to reduced control of plant pest species.
99. Creating an exception for lower intensity systems captured by the map would reduce the cost of exclusion from the status quo for lower intensity farmers. There would be mixed environmental benefits and/or costs compared to the status quo. In some areas, stock access to water bodies will cause an increase in sediment loss and E. coli, resulting in environmental costs, while in other areas, stock access to waterbodies will mean control of plant pest species continue, resulting in some environmental benefits.
100. Replacing the requirements of the low slope map with a certified freshwater farm plan risk assessment would allow farmers flexibility to consider a broader range of mitigations alongside stock exclusion and could provide the same or greater environmental benefit as the status quo.
101. Changing the regulations to allow for a less prescriptive definition of permanent fence would mean less fencing needing to be replaced to meet the definition under the status quo. This would decrease the marginal cost to farmers who would need to replace their fences and decrease the cost to the environment from sediment loss when replacing fence lines.
102. An initial pre-consultation qualitative assessment of the costs and benefits is provided in

²⁹ <https://environment.govt.nz/assets/publications/ris-changes-map-low-slope-land-in-stock-exclusion-regulations.pdf>

103. Table 4. A final assessment will be completed following consultation.

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Table 4: Initial pre-consultation qualitative overview of costs and benefits

Affected groups	Comment	Impact	Evidence Certainty
Additional costs of changing regulations compared to taking no action			
Regulated groups	Costs to lower intensity farmers of the change to Regulations will vary depending on the option chosen and the timing of any change.	Low	Low
Regulators (regional councils)	There is unlikely to be additional costs to regulators.	None	Low
Māori	The proposed changes are not expected to result in any loss of protection of water bodies.	Low	Low
The wider community	As for Māori above.	Low	Low
Total monetised costs	—	NA	NA
Non-monetised costs	—	Low	Low
Additional benefits of changing the regulations compared to taking no action			
Regulated groups	Lower intensity farmers are expected to benefit from the changes as they will be excluded from the requirements of the map and won't face the increased costs of fencing and loss of productive land.	Medium	Low
Regulators (regional councils)	Depending on the options chosen, regional councils are likely to have lower monitoring and compliance costs.	Low	Low
Māori	As for regulated groups above for Māori lower intensity farmers.	Low	Low
The wider community	Depending on the option chosen, there could be improved environmental outcomes for water bodies.	Low	Low
Total monetised benefits	—	NA	NA
Non-monetised benefits	—	Low	Low

Section 3: Delivering an option

How will the new arrangements be implemented?

104. The Regulations are made under section 360 of the RMA, meaning they are administered by regional councils as part of their functions and roles under the RMA. The Ministry for the Environment will help regional councils in their role by working with them and industry groups to update any guidance as necessary.
105. The Policy Implementation and Delivery directorate of the Ministry for the Environment is actively developing guidance and provides implementation across the entire Essential Freshwater package.³⁰ Subject to decisions on the preferred option, officials will determine what guidance products are needed to support implementation for delivery before the relevant requirements to exclude beef cattle and deer take effect on 1 July 2025.
106. Regional councils are responsible for enforcing compliance with the Regulations and administering the imposition of any infringement fees. Compliance with regional rules relating to farm activities is already an established part of regional council work, including the enforcement of their existing rules for stock exclusion.
107. Non-compliance with the Regulations is an infringement offence, and subject to a fee set under Schedule 1A of the Resource Management (Infringement Offences) Regulations 1999³¹ (the Infringement Regulations). The fees set under the Infringement Regulations are based on a 'per animal' basis, up to specified maximums.
108. The Policy Implementation and Delivery directorate of the Ministry for the Environment has an ongoing role in developing and maintaining relationships with councils and industry groups. This will involve discussing issues and concerns regarding implementation, and how these can be resolved.

Transitional arrangements and implementation timeframes

109. Depending on the option chosen, there may be transitional arrangements. These will be worked through once final decisions are made. As mentioned above, active engagement with key stakeholders and guidance material will be key to the successful implementation of any changes.
110. Beef cattle and deer that are not intensively grazing must be excluded from water bodies from 1 July 2025 (except for new pastoral systems, where this applies from 3 September 2020). Table 5 below outlines the implementation timeframes for the Regulations (with the map timelines highlighted in yellow).
111. Freshwater farm plan regulations are expected to be ready for rollout from mid-2023. The regulations will take effect region by region, with the rollout schedule for the 16 regional and unitary council areas informed by:
 - existing farm planning infrastructure
 - the investment needed in capability and capacity
 - regional council alignment with, and progress on, the development of new freshwater regional plans as required under the National Policy Statement for Freshwater Management 2020.

³⁰ <https://environment.govt.nz/acts-and-regulations/freshwater-implementation-guidance/>

³¹ [Resource Management \(Infringement Offences\) Regulations 1999 \(SR 1999/359\) \(as at 03 September 2020\) – New Zealand Legislation](#)

112. The first regions for roll out in 2023 are Southland and Waikato with other regions to follow. Freshwater farm plan regulations are expected to have commenced in all regions by the end of 2025.

Table 5: Key implementation timelines for the Regulations

	2020–21	2023	2025 and beyond
Excluding all cattle, deer and pigs from lakes and rivers with a bed wider than 1 metre, with a 3-metre minimum setback	From 3 September 2020, the requirements apply to any new pastoral system.	By 1 July 2023 , the requirements apply to: <ul style="list-style-type: none"> dairy cattle (except dairy support cattle) and pigs. all beef cattle and deer that are break feeding or grazing on annual forage crops or irrigated pasture. (See extra restrictions for winter grazing.) 	By 1 July 2025, the requirements apply to: <ul style="list-style-type: none"> dairy support cattle (regardless of land slope) beef cattle and deer when the land is low slope as shown on the map.
Requiring cattle and pigs crossing rivers more than twice per month to use a dedicated culvert or bridge.		By 1 July 2023 , the requirements apply to: <ul style="list-style-type: none"> dairy cattle (except dairy support cattle) and pigs. 	By 1 July 2025 , the requirements apply to: <ul style="list-style-type: none"> dairy support cattle (regardless of land slope)
Excluding all cattle, deer, and pigs from natural wetlands.	From 3 September 2020, the requirements apply to any new pastoral system.	By 1 July 2023 , the requirements apply to natural wetlands identified in an operative regional plan, district plan, or regional policy statement as at 3 September 2020.	By 1 July 2025, the requirements apply to: <ul style="list-style-type: none"> natural wetlands that support a population of threatened species as described in the National Policy Statement for Freshwater Management 2020 natural wetlands that are more than 500 square metres on low slope land as shown on the map.

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

113. The effectiveness of the Regulations will be assessed in 2026 using the reports on the state of New Zealand's freshwater prepared under the Environmental Reporting Act 2015. This assessment may be too early to assess whether the Regulations and any changes are contributing to improvements as the requirements do not apply broadly until 2025, and future reports may be more useful.
114. A key aspect of monitoring, evaluating, and reviewing the Regulations is to identify performance indicators to gauge regulation effectiveness (eg, monitoring of E. Coli. and sediment in waterways). Monitoring will be part of the wider Essential Freshwater monitoring, as well as standard compliance, monitoring, and enforcement functions of regional councils.
115. Other key monitoring sources will aid in the evaluation, review, and overall effectiveness of the Regulations, namely:
 - a) monitoring and reporting on the state of the environment required under section 35 of the Resource Management Act 1991 and reporting under the Environmental Reporting Act 2015, which may indicate changes in key indicators affected by stock exclusion (eg, E. coli and sediment)³²
 - b) voluntary reporting by industry, for example, the Sustainable Dairying: Water Accord reports on progress in fencing water bodies.³³

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³² <https://environment.govt.nz/facts-and-science/environmental-reporting/>

³³ <https://www.dairynz.co.nz/environment/environmental-leadership/sustainable-dairying-water-accord/>

Appendix 1: Example of fence types not currently included in the definition of permanent fence



Dug post and/or netting fences are not currently included in the definition of a permanent fence because they lack battens or electrified wires. However, feedback has highlighted those fences and other common fence types (eg, post and/or rail fences) are nonetheless permanent; and are likely to be similar in cost and durability, and effectiveness at excluding stock.