

# Interim Regulatory Impact Statement: National direction for plantation and exotic carbon afforestation: Resource management proposals

## Coversheet

Purpose of Document	
Decision sought:	<i>Approval to consult</i>
Advising agencies:	<i>Ministry for the Environment and Ministry for Primary Industries</i>
Proposing Ministers:	<i>Minister for the Environment Minister for Agriculture Minister for Forestry Associate Minister for the Environment</i>
Date finalised:	<i>14 October 2022</i>
Problem Definition	
<p>The Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 (NES-PF) came into force in 2018 to manage and control some of the environmental effects associated with plantation forestry.</p> <p>Since then, the demand for exotic forests has increased and is expected to accelerate in the coming years. This increase is due to a combination of continued strong demand for exotic plantation forestry to meet local and export needs, its critical role in reaching our emission reduction ambitions as long-term carbon sinks, and contribution to our bioeconomy as sources of renewable materials and a substitute for emission-intensive products.</p> <p>The expected increase in exotic plantation and carbon forests will result in changes in land use patterns, with some areas previously used for other purposes being planted in exotic forests for the first time. This change in land use will have an impact on the environment, and rural communities and economies, by reducing the versatility of land for instance, limiting the use of that land for other uses and reducing (depending on the scale and extent of afforestation), the viability of services and certain agricultural supply chains that support or depend upon these land uses. This change may also result in either increased or new environmental risks (eg, wilding trees) and/or changes in environmental services such as improved biodiversity, water quality and erosion control.</p>	

The Government is seeking to support the right mix, level and location of afforestation.<sup>1</sup> In supporting this objective, the following key issues have been identified within the resource management regulatory framework:

- there is an absence of national standards for managing the environmental effects of exotic carbon and transitional forests; and
- councils, in response to historical afforestation rates, have adopted a permissive approach to controlling the location and scale of exotic forests in their communities.

Since the NES-PF came into force, a number of operational and technical issues have been identified, through the Year One Review of the NES-PF and our on-going engagement with industry and local councils.

## Executive Summary

The options and proposals in this interim, pre-consultation, Regulatory Impact Statement (RIS) principally focus on amending the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 (NES-PF).

The proposals are presented in four parts:

- **Part A:** Managing the environmental (biophysical) effects of exotic carbon forestry. The options considered are<sup>2</sup>:
  - *Option one:* Status quo
  - *Option two:* Amend the NES-PF to include a new forest category, 'exotic carbon forest' (preferred)
  - *Option three:* Develop a new NES for exotic carbon forests
  - *Option four:* Amend the NES-PF to require forest management plans for exotic carbon forests (preferred).
- **Part B:** Controlling the location of plantation and exotic carbon afforestation to manage social, cultural, and economic effects. There is no preferred option for Part B. The options considered are:
  - *Option one:* Status quo
  - *Option two:* Local control - amend the NES-PF to clarify councils' ability to make rules for matters outside the scope of the NES-PF, and add a new power to enable councils to make more stringent (or lenient) rules relating to afforestation than established by the NES-PF
  - *Option three:* National direction – design and implement a new consent requirement, either under the RMA by amending the NES-PF or developing a new NES, or under the proposed new resource management legislation as part of the National Planning Framework (NPF). This consultation is seeking views on the factors and thresholds that if taken forward will require further

<sup>1</sup> Focus area 1 (page 277) of the Emission Reduction Plan

<sup>2</sup> Note that in places the numbering of options in this interim RIS differs from the consultation document. This is because the interim RIS assesses a wider range of options.

consultation and therefore there is no specific proposal to consider for this option.

- **Part C:** Improving wildfire risk management in all forests within the scope of the NES-PF. The options identified are:
  - *Option one:* Status quo
  - *Option two:* Amend the NES-PF to add a new requirement for forests over one hectare to have a wildfire risk management plan (preferred)
  - *Option three:* A suitably qualified professional must certify a wildfire risk management plan.
- **Part D:** Enabling foresters and councils to better manage the environmental effects of forestry by addressing matters identified through the Year One review of the NES-PF. In particular:
  - managing wilding conifer risk (natural spread of seed)
  - slash management (management of harvesting residues)
  - initial alignment with the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-Freshwater)
  - operational and technical issues.

Public consultation and the development of section 32 Evaluation and Cost Benefit Analysis required under the Resource Management Act 1991 (RMA) will provide greater clarity on the impact of the options.

Feedback received during the consultation on the Emissions Reduction Plan (ERP) and 'Managing exotic afforestation incentives'<sup>3</sup> was reflected in the views expressed during targeted engagement undertaken earlier this year. These included:

- the cumulative impact of concurrent changes on the pace and scale of afforestation
- the need to meet the challenges and opportunities presented through the climate crisis as well as meeting international targets. It should be noted that there was a difference with some placing greater emphasis on the role of indigenous afforestation and nature-based solutions.
- the regulatory impost for the introduction of a resource consenting system was a concern for industry and local government
- Māori have shown concern that limits on exotic carbon forestry will negatively impact economically viable land-use options on their land and will interfere with tino rangatiratanga over their land.

In ERP consultation, many submitters said that kaitiakitanga and te tino rangatiratanga, especially in relation to forestry and other land uses were of central importance. Māori submitters requested that a partnership approach should be used more than consultation, support for Māori to participate as equals in decision-making, and scaling up Māori-led initiatives. Many submitters, including both Māori and other submitters,

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<sup>3</sup> Managing exotic afforestation incentives by changing the forestry settings in the NZ Emissions Trading Scheme. <https://www.mpi.govt.nz/consultations/managing-exotic-afforestation-incentives>

emphasised the need for the Government to consider and support a more holistic kaupapa Māori approach and integrate mātauranga Māori concepts.

Other points included:

- emissions pricing should incentivise afforestation
- given the longevity of tree crops it is important that our forestry owners have all the information required to make informed decisions
- forestry owners should have the flexibility to utilise their land in an effective manner
- concerns about the loss of biodiversity and cultural practices associated with these places and species such as mahinga kai and rongoā.

In response to the consultation on 'Managing exotic afforestation incentives', Māori submitters held varying views although there was agreement on most issues. The majority of Māori submitters wanted the permanent forestry category in the New Zealand Emissions Trading Scheme (ETS) to remain open for exotic species. Some thought it should be closed but with exceptions. Some Māori submitters raised concerns related to:

- while there is support for native afforestation, the cost and rates of sequestration meant it could not be relied upon to achieve targets without significant government intervention
- Māori landowners were better placed than government to make the trade-offs for their communities between the jobs, profits, environmental and cultural impacts of different land uses
- exotic afforestation was one of the few viable options for Māori land given its physical characteristics and the difficulty of accessing capital for other uses
- any environmental risks from permanent forestry could be managed as they are for plantation forestry
- perceptions that the intention is to plant and leave forests. They indicated that many whenua Māori are working towards transitioning exotic to indigenous forest, and managing forests that provide jobs and economic returns to their communities.

### Limitations and Constraints on Analysis

There are parts of this interim RIS where the following limitations or constraints apply:

- Ministers have indicated a preferred approach to use the NES-PF to either clarify councils' ability to make plan rules to control the location of plantation and exotic carbon afforestation or, depending on the outcome of the consultation, develop a framework that requires a resource consent within the NES-PF
- the interim RIS has been prepared under tight time pressures whilst policy was being developed
- there are limits to publicly available published research on the risks and impacts of exotic carbon forests at the scales envisaged under the status quo, due to this being a new land use option. There is also little evidence on how, where and under what

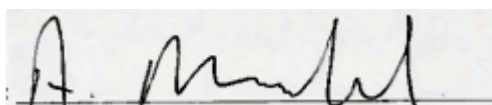
conditions the transition of exotic carbon forests to indigenous forests over time can be effectively realised, as it is a new form of forest management in New Zealand

- as exotic carbon afforestation is an emerging issue and not currently managed consistently through the resource management system, it is difficult to accurately determine the future number of resource consent applications and their costs
- there are several parallel policy processes and changes that may impact on options described in this interim RIS including RMA reform, the special forestry test under the Overseas Investment Act, forestry policies within the ERP, and the review of incentives through the ERP as well as the proposed National Policy Statement for Indigenous Biodiversity and National Policy Statement for Highly Productive Land
- the NES-PF applies to exotic and indigenous plantation forests. The Government is currently developing a programme to support indigenous carbon forests, therefore these forests are outside the scope of these proposals.

### Responsible Manager(s) (completed by relevant manager)

*Alex Macdonald*

*Acting Manager Land and Water Systems  
Ministry for the Environment*



14 October 2022

*Shannon Tyler*

*Manager Forestry and Bioeconomy Policy  
Ministry for Primary Industries*



14 October 2022

### Quality Assurance (completed by QA panel)

Reviewing Agency:	Ministry for the Environment and Ministry for Primary Industries
Panel Assessment & Comment:	The combined Ministry of Primary Industries and Ministry for the Environment Regulatory Impact Analysis Panel has reviewed the Regulatory Impact Statement " <i>Managing Permanent Exotic Afforestation</i> " produced by the Ministry for Primary Industries and the Ministry for the Environment. The review team considers that the RIA meets the QA criteria.

## Section 1: Diagnosing the policy problem

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

What is the current state within which action is proposed?

1. Forestry provides a key pathway for Aotearoa New Zealand to meet the first three emissions budgets set under the Climate Change Response Act 2002 (CCRA). The first ERP<sup>4</sup> projections for forestry across all emissions budget periods are anticipated to deliver around 144.5 Mt CO<sub>2</sub>-e in carbon removals and storage.<sup>5</sup>
2. Forests provide social, cultural, economic, and environmental benefits at a local, regional, national, and international levels. Approximately 40 per cent (10.1 million hectares<sup>6</sup>) of our land is covered in forests. Over the last century New Zealand has developed a successful productive forest estate and industry. Exotic forests cover approximately 2.1 million hectares, around 8 per cent of New Zealand's land area, with significant regional variation as shown in **Table 1**.

Table 1: Land by Land Use Capability and Land Cover (LUM) by Region.

Region	Proportion of land within each region by Land Use Capability (LUC) classes			Grand Total ('000 ha)	Land use by LUM Class					
	1 - 3	4 - 6	7 - 8		Cropland	Grassland	Grassland - with woody biomass	Forests	Natural Forest	Other
Auckland Region	28%	57%	15%	440	3%	49%	3%	12%	28%	5%
Bay of Plenty Region	11%	39%	50%	1,193	3%	21%	2%	24%	48%	2%
Canterbury Region	20%	40%	41%	4,287	6%	67%	5%	3%	9%	10%
Gisborne Region	8%	36%	56%	835	2%	41%	5%	24%	27%	1%
Hawke's Bay Region	13%	50%	37%	1,396	2%	51%	4%	12%	30%	1%
Manawatū-Whanganui Region	18%	45%	38%	2,204	1%	59%	6%	8%	26%	1%
Marlborough Region	6%	31%	63%	1,029	3%	46%	6%	10%	30%	5%
Nelson Region	6%	26%	67%	40	0%	13%	5%	29%	49%	4%
Northland Region	10%	75%	15%	1,234	1%	46%	5%	16%	29%	3%
Otago Region	13%	48%	39%	3,094	1%	76%	5%	5%	8%	5%
Southland Region	19%	29%	52%	2,906	0%	48%	5%	3%	39%	5%
Taranaki Region	26%	35%	39%	719	0%	53%	2%	5%	39%	1%
Tasman Region	6%	17%	77%	956	1%	19%	5%	11%	61%	3%
Waikato Region	24%	54%	22%	2,364	1%	56%	2%	13%	26%	3%
Wellington Region	16%	41%	43%	779	1%	45%	6%	11%	36%	1%
West Coast Region	1%	20%	79%	2,278	0%	18%	8%	2%	64%	9%
National	15%	41%	45%	25,755	2%	51%	5%	8%	29%	5%

3. Exotic forests in 2018<sup>7</sup> and more recent conversions<sup>8</sup> are predominantly on Land Use Capability (LUC) classes 6 and 7, as shown in Figure 1.<sup>9</sup> LUC classes 6 and 7 comprise mainly hill and high country land. This land type is also widely used for sheep and beef farming (including strong and fine wool), particularly breeding and breeding/finishing

<sup>4</sup> <https://environment.govt.nz/publications/aotearoa-new-zealands-first-emissions-reduction-plan/>

<sup>5</sup> Emissions budgets are based on June 2021 projections and reflect policies and measures at that time

<sup>6</sup> <https://www.mpi.govt.nz/forestry/new-zealand-forests-forest-industry/about-new-zealands-forests/> Accessed on 4 August 2022

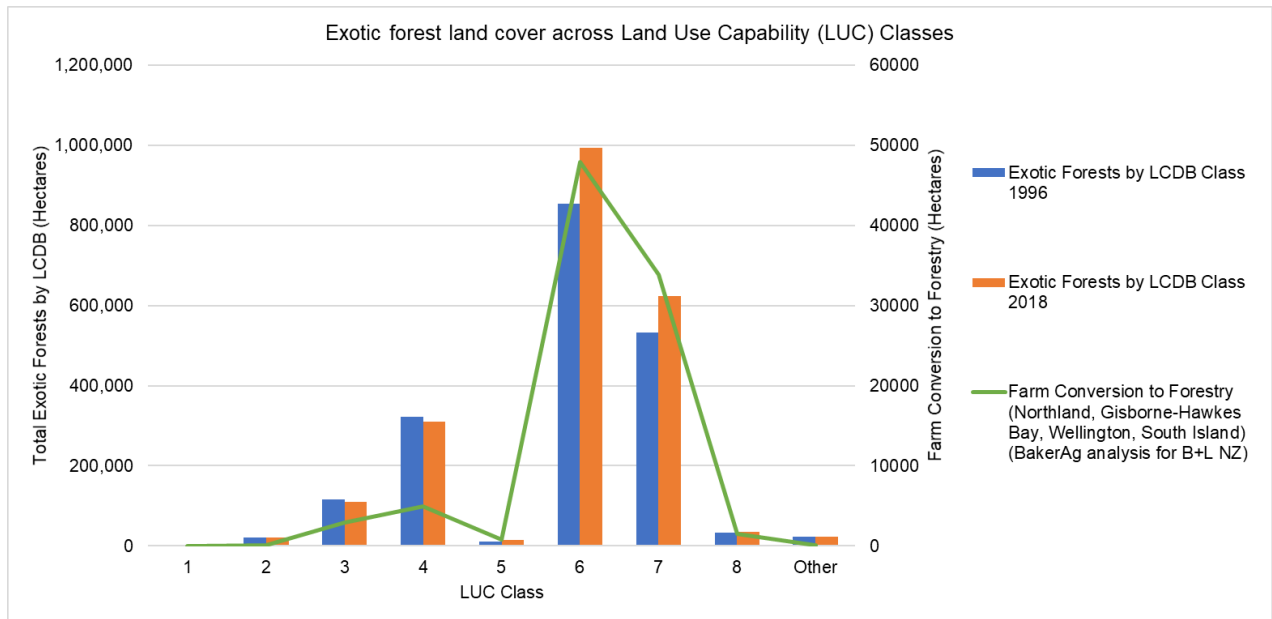
<sup>7</sup> LUC data has been calculated for exotic forest cover using the Land Cover Database (LCDB 2018) version 5.0 Exotic forest cover consists of the following LCDB classes: Deciduous Hardwoods, Exotic Forests, and Forest – Harvested.

<sup>8</sup> Independent validation of land-use change from pastoral farming to large-scale forestry. (BakerAg, July 2021) <https://beeflambnz.com/sites/default/files/Potential-land-use-change-pasture-to-forest-species-report.pdf>

<sup>9</sup> LUC descriptors are from Land Use Capability Survey Handbook, 3rd edition. Landcare Research. (2009).

farms, and deer. In parts of the country LUC 6 and 7 land is also used for dairying, orcharding and vineyards.

**Figure 1: Exotic forest land cover across Land Use Capability (LUC) classes**



**Figure 1 Legend**

LCDB: Land Cover Database

**LUC Class Descriptors**

LUC Class 1: Suitable for a wide range of crops (0.7% of New Zealand's land area)

LUC Class 2: Suitable for many crops (4.5% of New Zealand's land area)

LUC Class 3: Restricted range of crops, intensity of cultivation is limited (9.2% of New Zealand's land area)

LUC Class 4: Occasional cropping but reduced range of crops and intensity of cultivation (10.5% of New Zealand's land area)

LUC Class 5: Non-arable, high producing (0.8% of New Zealand's land area)

LUC Class 6: Non-arable, suited to grazing, tree crops, & forestry (28.1% of New Zealand's land area)

LUC Class 7: Non-arable, with soil conservation measures suited to grazing and forestry in some cases (21.4% of New Zealand's land area)

LUC Class 8: Unsuited for arable, pastoral or commercial forestry use (21.8% of New Zealand's land area)

4. The permanent forestry category within the New Zealand Emissions Trading Scheme (NZ ETS) will come into effect from 1 January 2023. This category is for post-1989 forests that are not intended to be harvested for at least 50 years after they are registered in the NZ ETS.
5. The Ministry for Primary Industries' Afforestation and Deforestation Intentions Survey<sup>10</sup> (published in May 2022) estimates that 101,400 hectares of afforestation has occurred over the last three years and that 18 per cent of recent afforestation is likely to be permanent exotic (carbon) forest.
6. An MPI projection<sup>11</sup> is that 350,000 hectares of exotic carbon forests could be established over this decade. This projection is likely to be conservative, as rising NZU prices can be an incentive for exotic carbon forests. Actual rates of afforestation will be influenced by a variety of factors, including NZ ETS policy settings.

<sup>10</sup> <https://www.mpi.govt.nz/dmsdocument/52405-Afforestation-and-Deforestation-Intentions-Survey-2021>

<sup>11</sup> Based on current NZ ETS settings and returns for permanent exotic forests (at the 2022 and 2026 auction trigger prices)



7. Carbon prices within the NZ ETS have doubled within the past two years, from around \$35 in late 2020 to \$75 in 2022. This has significantly increased the profitability of afforestation.
8. The effects of the current increase in exotic afforestation are a concern for some community groups, primary sector representative organisations and workers, local councils, and Non-Government Organisations (NGOs).
9. The social, cultural, economic, and environmental effects of afforestation and forests vary according to species of trees, location, size, density, harvesting models, rotation length, management strategies, and the function of the forest, as well as existing patterns of land-use and the characteristics of individual communities.

### Māori forestry interests

10. Māori interests in forests and forestry are extremely wide in scope as the forests represents a broad range of meanings including providing for a home for ancestors, taonga, land and forest owners, workers within the forestry supply chain, business owners in other parts of the forestry supply chain, hunting and cultural activities.
11. In 2018, Māori were estimated to own \$4.3 billion of forestry assets (6 per cent of the total Māori asset base).<sup>12</sup> An estimated 46 per cent (625,000 hectare) of whenua Māori is in forestry (33 per cent indigenous and 13 per cent planted exotic) and a further 15 per cent is in scrub (196,000 hectare).<sup>13</sup> In 2017 it was estimated Māori make up around 22 per cent of the total workforce of around 38,545 across the forestry sector (ie, around 8,480).<sup>14</sup> Around 30% of New Zealand's 1.7 million hectares of plantation forestry is estimated to be on Māori land and this is expected to grow to 40 per cent as Treaty settlements are completed.<sup>15</sup> A significant proportion of New Zealand's privately owned indigenous forest is on Māori customary and freehold land as defined under the Te Ture Whenua Māori Act 1993.
12. Compared to the distribution of LUC classes nationally, a higher proportion of Māori land is less versatile land (i.e. LUC 5-7) and a lower proportion is more versatile land (ie, LUC 1-4). Approximately 71,000 hectares of Māori freehold land comprises remote and less versatile land, making it well suited to carbon or long rotation plantation forestry.<sup>16</sup> Any regulatory changes concerning the matters considered could have a disproportionate effect on Māori given that Māori freehold land and land that has been returned in Treaty Settlements includes significant areas of existing forests or would be well suited for afforestation.
13. The development of options and proposals under the RMA needs to take into account the principles of Te Tiriti o Waitangi, post-settlement commitments, and Māori interests in forestry, including:
  - The significant interests Māori have in forestry, including indigenous forests

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12 Te Ōhanga Māori 2018 <https://berl.co.nz/sites/default/files/2021-01/Te%20%C5%8Changa%20M%C4%81ori%202018.pdf>

13 Unlocking the Potential of Māori Land? It's complex... Holden Hohaia.

14 Forestry and Wood Processing Workforce Action Plan 2020-2024 (mpi.govt.nz)

15 Crown Forestry Rental Trust (Ngaa Kaitiako Reeti Ngahere). Economic of Alternative Land use on Crown Forest Licensed Land. <https://cfrt.org.nz/wp/wp-content/uploads/2018/05/EconomicofAlternativeLandUseonCrownForestLicensedLand.pdf>

16 Based on the LUCAS NZ Land Use Map, analysis undertaken by Te Uru Rākau – New Zealand Forest Service



- Māori freehold land has different characteristics to general title land and is disproportionately on land considered marginal, steep, and/or erosion prone
- the wider cultural, social, environmental, and economic aspirations of Māori, including the ability of tangata whenua to make decisions about their own land.

#### *Summary of Māori views*

14. In response to the ERP consultation, many submitters said the Māori concept of kaitiakitanga, especially in relation to forestry and other land use was of central importance. Some submitters also called for the Government to investigate the different issues with the NZ ETS for freehold general title land and Māori land.
15. Some submitters raised other equity issues with forestry on Māori land, and with ensuring they can gain credit. Submitters mentioned the importance of ensuring Māori land is not alienated under the NZ ETS.
16. Other submitters said some of the policy suggestions threatened the rangatiratanga of Māori landowners to restore their land to its natural state, through managed regenerating permanent forestry or other approaches.
17. In July 2021, Tairāwhiti Economic Action Plan commissioned a report on the impact of permanent carbon farming in Te Tairāwhiti Region. This found that carbon forests have long term economic, wellbeing, and environmental effects.<sup>17</sup>

#### *Pre-consultation hui with Māori with an interest in forestry*

18. At a recent workshop during the pre-engagement on these proposals, concerns were raised from a small number of Māori participants on:
  - the difficulty in properly engaging in this consultation without first knowing the outcome of the decisions on if permanent exotic forestry will be included in the NZ ETS
  - the difficulty in giving councils or communities the ability to make decisions around land use through the proposals due to inconsistencies, lack of capacity and capability to effectively make these decisions
  - the desire for co-design when developing options
  - more compliance costs and more regulations if these proposals are implemented, which may alter the opportunities for Māori to improve financial returns on land and affect the flexibility to use their land in an effective manner
  - lack of an evidence base for the proposals.

#### **What are the key features of the regulatory system(s) already in place in this area (if any)? What are its objectives?**

19. Forestry, including afforestation, is controlled through several statutory instruments (see **Table 2**). The scope of this interim RIS is limited to the Resource Management Act 1991.

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<sup>17</sup> Some of the findings of the report included:

- exotic carbon forests provide financial benefits for the current generation of forest owners, future generations may have ongoing costs, such as rates and insurance, with little direct income from carbon sequestration
- any significant reduction in jobs and wages is likely to lead to significant migration out of the district
- replacing farmland and production forests with exotic carbon forests would improve water quality.

Table 2: Statutory instruments that control afforestation and forestry

Statutory instrument	Comment
Fire and Emergency New Zealand Act 2017	Manages fire
Wildlife Act 1953	Protects native wildlife Enables management or control of wild animals under the Wild Animal Control and Biosecurity Acts Manages hunting and taking of wildlife
Biosecurity Act 1993	Enables pest and weed management, largely through regional pest management plans Manages the risk of disease through surveillance plans such as the Government Industry Agreement for Forestry – Forest Biosecurity Surveillance.
Wild Animal Control Act 1978	Enables management or control of deer, chamois and tahr, and feral goats and pigs; Operates in tandem with the Biosecurity Act
Forests Act 1949	Controls and limits timber production from indigenous forests.
Overseas Investment Act 2005	Ensures that the conversion of land to plantation forestry by overseas investors continues to bring broad benefits to New Zealand

### Resource Management System

20. The RMA is Aotearoa New Zealand's principal environmental land use planning legislation. It provides the regulatory framework to manage the protection, use, and development of natural and physical resources.
21. The purpose of the RMA is to promote the sustainable management of natural and physical resources in a way that enables people and communities to provide for their social, economic, and cultural wellbeing, while sustaining the potential of natural and physical resources to meet the needs of future generations (s 5).
22. National direction supports local decision-making via the RMA. The instrument of most relevance to this proposal is National Environmental Standards (NES).

### Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017

23. The NES-PF, an instrument under the RMA, needs to be consistent with Part 2 of the RMA. Part 2 describes the purpose and principles of the Act and states that persons exercising functions under the RMA must provide for:
  - the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development (s 6(a))
  - the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development (s 6(b))

- the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna (s 6(c))
  - the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga (s 6(e))
  - the protection of protected customary rights (s 6(g))
  - the management of significant risks from natural hazards (s 6(h)).
24. In addition, in achieving the purpose of the RMA states that persons exercising functions under the RMA shall have regard to:
- kaitiakitanga (s 7(a))
  - the ethic of stewardship (s 7(aa))
  - the efficient use and development of natural and physical resources (s 7(b))
  - the maintenance and enhancement of amenity values (s7 (c))
  - intrinsic values of ecosystems (s7 (d))
  - any finite characteristics of natural and physical resources (s7 (g))
  - the protection of the habitat of trout and salmon (s7 (h))
  - the effects of climate change (s7 (i)).
25. The NES-PF also needs to take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) (s 8) and be consistent with a number of relevant Treaty Settlement Acts and commitments made in settlement agreements.
26. The NES-PF was developed and introduced to manage some environmental effects of forests deliberately established to be harvested. The forest must be at least 1 hectare of continuous forests and at least 30 meters wide. The trees must have the potential to grow to at least 5 metres tall.
27. The current policy objective of the NES-PF is to:
- Maintain or improve the environmental outcomes associated with plantation forestry activities nationally
  - Increase the efficiency and certainty in the management of plantation forestry activities under the RMA.
28. The provisions in the NES-PF are intended to achieve this policy objective through:
- providing nationally consistent provisions (including specified permitted activity conditions) for the management of plantation forestry activities under the RMA
  - establishing rules that permit plantation forestry activities where it is efficient and appropriate to do so, and where the activities will not have significant adverse effects on the natural environment
  - requiring a resource consent for activities where the environmental risk is higher and more site-specific oversight is needed, or where permitted activity conditions cannot be complied with.
29. The NES-PF generally takes precedence over rules in regional and district plans. However, Regulation 6 of the NES-PF allows more stringent plan rules to prevail over

the NES-PF in certain circumstances.<sup>18</sup> Local rules established before the NES-PF came into force remain applicable to forests outside the scope of the NES-PF.

30. There are also certain activities and effects related to plantation forestry that are not regulated under the NES-PF and continue to be managed under the relevant regional or district plan.

### Year One Review

31. In December 2019, Te Uru Rākau – New Zealand Forest Service and the Ministry for the Environment undertook a review of the NES-PF.<sup>19</sup>
32. The review found that the NES-PF is effective, but changes could be made to improve environmental outcomes in the following areas:
- further implementation support for councils and the forestry sector is required to lift performance and compliance
  - changes to the regulations could improve environmental outcomes in some areas, including changes to the Wilding Tree Risk Calculator, slash management, biodiversity provisions, and improved alignment with other national direction.
33. These proposals will address some of those findings.

### Local council plan rules

34. Councils are able to develop rules to manage forests that are not defined by the NES-PF and any effects of plantation forests that are outside the scope of the NES-PF. The NES-PF places no constraints on council ability to make rules for forests that are not for harvest.
35. There are certain activities and effects related to plantation forestry that are not regulated under the NES-PF and continue to be managed under the relevant regional or district plan (eg, effects on cultural and historic heritage and areas identified as Matters of National Importance). The NES-PF Plan Alignment Guidance<sup>20</sup> provides more detailed information on where plan rules may be more stringent than the NES-PF, and activities and effects that are not regulated under the NES-PF.

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<sup>18</sup> These circumstances are limited to when plan rules:

- give effect to an objective developed to give effect to the National Policy Statement for Freshwater Management (NPSFM) and any of policies 11, 13, 15 and 22 of the New Zealand Coastal Policy Statement 2010 (NZCPS);
- recognise and provide the protection of outstanding natural landscapes and features and significant natural areas and matters of national importance under section 6(b) and 6(c) of the RMA; and
- manage specific unique and sensitive environments identified in a regional policy statement, regional plan, or district plan (geothermal areas, karst geology, and areas with separation point granite soils) and certain protect sources of human drinking water supply.

<sup>19</sup> Report on the Year One Review of the National Environmental Standards for Plantation Forestry <https://www.mpi.govt.nz/dmsdocument/44914-Report-on-the-Year-One-Review-of-the-National-Environmental-Standards-for-Plantation-Forestry>

<sup>20</sup> NES-PF Plan Alignment Guidance, and other NES-PF Guides can be found on the MPI website (<https://www.mpi.govt.nz/forestry/national-environmental-standards-plantation-forestry/nes-pf-guidance/>)

36. At present we are aware of three councils proposing new rules for carbon forestry. These are Waimakariri, Waitaki, and Marlborough District Councils. The proposed rules relate to environmental effects and related environmental matters such as impact on landscapes.<sup>21</sup>
37. We are not aware of any councils developing plan content to control the location of afforestation on social, cultural, or economic grounds.

**Are there any previous government decisions, legislation, or Regulatory Impact Statements in this area that are relevant to this problem?**

38. In June 2016, the Ministry for Primary Industries published an Interim Regulatory Impact Statement for the National Environmental Standard for Plantation Forestry.<sup>22</sup>
39. In March 2022, the Ministry for Primary Industries published an Interim Regulatory Impact Statement on Managing Exotic Afforestation Incentives.<sup>23</sup>

**How is the status quo expected to develop if no action is taken? Are there any other ongoing government work programmes with interdependencies and linkages to this area that might be relevant context from a systems view?**

Addressing climate change

40. The forestry chapter of the ERP<sup>24</sup> sets the Government's 2050 vision<sup>25</sup> for forestry. In meeting the 2050 targets, the ERP focuses on the following areas:
- support afforestation by:
    - considering amendments to the NZ ETS and resource management settings to achieve the right type and scale of forests, in the right place
    - supporting landowners and others to undertake afforestation, particularly for erodible land.
  - provide advisory services to land users, councils, Māori, and other stakeholders to support choices for sustainable afforestation
  - encourage native forests as long-term carbon sinks by reducing costs and improving incentives
  - maintain existing forests by exploring options to reduce deforestation and encourage forest management practices that increase carbon stocks in pre-1990 forests
  - grow the forestry and wood processing industry to deliver more value from low-carbon products, while delivering jobs for communities.
41. The National Adaptation Plan for Climate Change<sup>26</sup> sets out several relevant actions including:

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<sup>21</sup> Waitaki District Plan Review ([LINK](#)) Marlborough Environment Plan ([LINK](#)) and Waimakariri proposed district plan ([LINK](#))

<sup>22</sup> <https://www.mpi.govt.nz/forestry/national-environmental-standards-plantation-forestry/>

<sup>23</sup> <https://www.mpi.govt.nz/consultations/managing-exotic-afforestation-incentives>

<sup>24</sup> <https://environment.govt.nz/publications/aotearoa-new-zealands-first-emissions-reduction-plan/>

<sup>25</sup> By 2050, Aotearoa New Zealand has a sustainable and diverse forest estate that provides a renewable resource to support our transition to a low-emissions economy. Forestry will contribute to global efforts to address climate change and emissions reductions beyond 2050, while building sustainable communities, resilient landscapes, and a legacy for future generations to thrive.

<sup>26</sup> <https://environment.govt.nz/publications/aotearoa-new-zealands-first-national-adaptation-plan/>

- prevent the spread of wilding conifers and contain or eradicate established areas of wilding conifers by 2030
- implement the Sustainable Land Management Hill Country Erosion Programme
- provide a forestry planning and advisory service
- establish an integrated work programme to deliver climate, biodiversity and wider environmental outcomes which includes actions to support native afforestation.

### Reform of the Resource Management Act

42. The Government is planning to repeal the RMA and replace it with the following three pieces of legislation:
- Natural and Built Environments Act (NBA) which will seek to protect and restore the environment while better enabling development. It would be the primary replacement for the RMA.
  - Spatial Planning Act (SPA) which will seek to coordinate and integrate decisions made under relevant legislation by requiring the development of long-term regional spatial strategies.
  - Climate Adaptation Act (CAA) which will seek to address complex issues associated with managed retreat from climate change effects.
43. A proposed National Planning Framework (NPF) is the tool in the NBA that the Government would use to provide integrated strategic direction on the management of the environment, and consistent regulation. It is proposed as a single, comprehensive framework that would consolidate the existing national direction. The policy intent of existing national direction will be transitioned into the NPF.

### Other relevant workstreams

44. In March 2022, the Government published a discussion document that sought feedback on proposals to manage the incentives for afforestation.<sup>27</sup>
45. The Overseas Investment (Forestry) Amendment Bill was introduced into the New Zealand Parliament on 31 May 2022.<sup>28</sup> This bill aims to ensure that overseas investments that result in the conversion of farmland or other land to forestry benefits New Zealand, and that any risks can be better managed. The Treasury has published a Regulatory Impact Statement<sup>29</sup> to support the changes.
46. The draft forestry and wood processing industry transformation plan is a proposed suite of actions to transform the sector. The actions are designed to transform the sector over time to maximise the value of the forestry and wood processing sector.

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<sup>27</sup> Managing exotic afforestation incentives by changing the forestry settings in the NZ Emissions Trading Scheme. <https://www.mpi.govt.nz/consultations/managing-exotic-afforestation-incentives>

<sup>28</sup> [https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/BILL\\_124038/overseas-investment-forestry-amendment-bill](https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/BILL_124038/overseas-investment-forestry-amendment-bill)

<sup>29</sup> <https://www.treasury.govt.nz/publications/risa/regulatory-impact-statement-overseas-investment-screening-settings-forestry-conversions>



47. Other workstreams to note include: the Forest (Legal Harvest Assurance) Amendment Bill<sup>30</sup> and the implementation through regulations of the Forests (Regulation of Log Traders and Forestry Advisers) Amendment Act 2020.<sup>31</sup>

**If it is expected to change, describe how it will evolve and its impact in the absence of action (i.e. the counterfactual).**

48. The net impact of the reform of the RMA on afforestation and forestry is still to be fully determined. The overall impact of the reform will:
- protect and restore the environment and its capacity to provide for the wellbeing of present and future generations
  - better enable development within natural environmental limits
  - give proper recognition to the principles of Te Tiriti o Waitangi and provide greater recognition of te ao Māori including mātauranga Māori
  - better prepare for adapting to climate change and risks from natural hazards, and better mitigate emissions contributing to climate change
  - improve system efficiency and effectiveness and reduce complexity while retaining appropriate local democratic input.

**What is the policy problem or opportunity?**

**What is the nature, scope, and scale of the problem?**

49. The Government is seeking to ensure that regulatory settings deliver the right type and scale of forests, in the right place.
50. The expected increase in exotic plantation and carbon forests (as detailed earlier) will result in changes in land use patterns, with some areas previously used for other purposes being planted in exotic forests for the first time. The effects of these forests will vary according to species of trees, location, size, density, extent, surrounding uses and management models, and function of the forest as well as the profile of the rural community and economies.
51. This change in land use will impact the versatility of land, for instance, limiting the availability of that land for other uses and potentially impacting (depending on the location, scale and extent of afforestation) existing community and commercial services, including certain agricultural supply chains that support or depend upon current land uses. This change may also result in either increased or new environmental risks (eg, wilding trees) and/or changes in environmental services like improved biodiversity, water quality and erosion control outcomes.
52. National direction under the RMA is principally focussed on the management and control of environmental effects associated with plantation forestry. Whilst the RMA enables councils to make their own rules to manage afforestation for forests outside the NES-PF, it is understood that in most cases councils have adopted a permissive approach. Typically, forestry is a permitted activity in rural zones subject to basic controls, for example, on shadowing roads and neighbours.

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<sup>30</sup> [https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/BILL\\_123846/forests-legal-harvest-assurance-amendment-bill](https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/BILL_123846/forests-legal-harvest-assurance-amendment-bill)

<sup>31</sup> <https://www.legislation.govt.nz/bill/government/2020/0250/latest/LMS324328.html>



53. As more exotic forests are established, the lack of national direction for exotic carbon forests could result in an inconsistency in the rules adopted by each council to manage the effects of these forests. This lack of national direction could also result in different approaches to the management of certain effects of exotic carbon forests even though they may be the same, or similar, to those of exotic plantation forests.
54. In addition, the current framework is not effective or efficient in managing the environmental effects of forests where the forester's intention changes from an exotic plantation to a carbon forest after establishment.
55. The focus of national direction on managing and controlling the environmental effects through technical standards, methods or requirements relating to RMA matters does not support councils to manage the location and scale of exotic forests in their communities.
56. The location and scale of exotic forests have potentially medium and long term cumulative social, cultural, economic and environmental effects. Afforestation in the incorrect place could affect existing economic and community services. For example, large scale afforestation could result in the loss of agricultural or commercial activity that supports supply chains and the community. This could include impacts on meat processing, stock yards, vets, fertiliser sales, and agricultural contractors such as shearers, fencers, and agrichemical spray contractors. Plantation forestry may bring new opportunities, services, and supply chains.
57. For exotic carbon forests there is potential that these and other issues will need to be managed and controlled. These additional issues could include the locking up of wood fibre resources. As a result agricultural supply changes and services may not be replaced with forest product supply chains and services. However, these forests can provide other environmental services (improved water quality, biodiversity, climate change mitigation by capturing carbon, and reduced erosion/sedimentation outcomes) depending on their management.
58. The Year One Review identified possible changes that could be made to improve environmental outcomes. Further implementation support for councils and the forestry sector is also required to lift performance and compliance. Implementing some of these changes would ensure that the regulatory settings remain effective and efficient.

### Stakeholders, sectors and populations impacted

59. The Government recently completed consultation on the ERP and on 'Managing the exotic afforestation incentives' by changing forestry settings in the NZ ETS.<sup>32</sup> Feedback was sought on the role of forests in the ERP, including permanent exotic forests. This feedback is included in **Table 3**.
60. Officials held workshops on options for managing exotic afforestation under the resource management system with selected representatives from industry, local government and NGOs, in May and June 2022. Feedback during this pre-consultation engagement was primarily focussed on the incentives for exotic carbon afforestation, with participants repeatedly indicating that they were unable to provide feedback without knowing the decisions on the NZ ETS proposals. Stakeholder views on changes to the management of exotic afforestation through the resource management system will be explored during consultation.

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<sup>32</sup> Managing exotic afforestation incentives by changing the forestry settings in the NZ Emissions Trading Scheme. <https://www.mpi.govt.nz/consultations/managing-exotic-afforestation-incentives>

Table 3: Stakeholders and sectors impacted

Stakeholder or Sector	Nature of interest	Views
<p><i>Commercial (plantation) forestry industry</i></p>	<p>Forestry export revenue is forecast to be \$6.2 billion for the year to 30 June 2022<sup>33</sup> and 35,000 people are directly employed in production, processing, and commercialisation. The sector accounts for around 7 per cent of land use in Aotearoa New Zealand.<sup>34</sup> Forestry provides a critical input for Aotearoa New Zealand's wood processing and manufacturing sector and has an important role in the Climate Change Commission's pathway to reduce gross emissions by providing bioenergy and construction materials with low embedded carbon.</p> <p>Māori have a significant interest in forestry, including the commercial forestry industry.</p> <p>The Forestry and Wood Processing ITP aims to maximise the value of the sector by getting more value from our logs. For the sector, the objectives are to improve the productivity of our forests, diversify our forests to build sector resilience, and increase the use of woody residues to produce high-value products and fuels. This is in response to the expected rapid increase in demand for forest products over the next decade, largely on the back of the bioeconomy, and the commercial forestry sector's reliance on radiata pine (90 per cent of commercial estate) and clearfell forestry systems in the face of a changing climate and social licence issues.</p>	<p>At a recent workshop, representatives from the forestry industry raised concerns about the:</p> <ul style="list-style-type: none"> <li>• cumulative impact of concurrent processes (Overseas Investment Act, NZ ETS, etc.) on the pace and scale of afforestation</li> <li>• inequity of approach with voluntary regulation being taken forward for farming and regulations for forestry, suggesting that a carbon industry agreement might deliver similar outcomes</li> <li>• need to meet challenges and opportunities presented through the climate crisis as well as meeting international targets</li> <li>• impact of the proposals on the industry, in particular reducing afforestation as a result of regulatory barriers</li> <li>• rights of landowners to choose how their land is used</li> <li>• need for resource management consent for plantation forestry as this has already been established through the creation of the NES-PF.</li> </ul> <p>In addition, some parties indicated that the NES-PF is still being implemented and therefore it is still too early to alter or amend the regulation.</p>

<sup>33</sup> <https://www.mpi.govt.nz/dmsdocument/51754-Situation-and-Outlook-for-Primary-Industries-SOPI-June-2022>

<sup>34</sup> Situation and Outlook for Primary Industries: <https://www.mpi.govt.nz/dmsdocument/45451-Situation-and-Outlook-for-Primary-Industries-SOPI-June-2021>

Stakeholder or Sector	Nature of interest	Views
<i>Farming sector</i>	The meat and wool sector provided \$10.7 billion of export revenue in 2020 and employs 92,000 people in the wider supply chain. The sector is a significant land-use in Aotearoa New Zealand with 7.4 million hectares of pasture, 2.2 million hectares of tussock that is farmed less intensively, and 139,500 hectares of forestry and natives. The sector is particularly important in some regions, contributing between 10 and 12 percent to the regional economies in Taranaki, Manawatu, Whanganui, Otago and Southland. <sup>35</sup>	In response to the ERP consultation, agricultural industry groups expressed concern about the scale and speed of productive land being converted into exotic forests and the negative impacts this can have on rural communities, especially where there is no intention to harvest.  Beef+Lamb NZ have indicated that requiring resource consents for farmland to be converted to forests will not address the issue of large-scale conversion.
<i>Local government</i>	One of the purposes of local government is to promote the social, economic, environmental, and cultural wellbeing of communities in the present and for the future. <sup>36</sup>  In addition, under the RMA, local authorities have specific duties in respect of integrated management of natural and physical resources.	At a recent workshop, representatives from councils raised concerns about the impact of introducing resource consent requirements, in particular: <ul style="list-style-type: none"> <li>• the cost, time taken to consider applications, and the additional complexity</li> <li>• difficulty in considering economic, social, and cultural factors</li> <li>• effects on the community as this could result in polarising views.</li> </ul> Participants noted that local communities are constantly changing, but forestry is not the key driver of this change. It was also noted that some permanent carbon forests have been established on farms that prior to purchase were vacant. Some also advocated that management plans may be a useful option.

<sup>35</sup> Beef+Lamb NZ, Farm Facts 2021: [https://beeflambnz.com/sites/default/files/data/files/Compendium%202021\\_digital.pdf](https://beeflambnz.com/sites/default/files/data/files/Compendium%202021_digital.pdf)

<sup>36</sup> Local Government Act 2002, section 10 (1)

Stakeholder or Sector	Nature of interest	Views
		<p>In March 2021, Tararua District Council commissioned a study looking at the impact of afforestation<sup>37</sup> on local communities. It found that afforestation provides opportunities (eg, increased employment during plantation, pastoral farmers to realise their assets, soil stabilisation, improved water quality), as well as costs (eg, flow-on impact of less pastoral farmers supporting industries, increased risk of fire and pests). Other concerns raised, some of which were difficult to express included: increased stress, decreasing mental health and wellbeing from rapid land use change, and a loss of community structure and culture.</p> <p>Local Government NZ, 16 local authorities, and Beef+Lamb NZ co-funded a paper<sup>38</sup> to investigate the drivers of wholesale land-use change as well as options to address the issues. The paper concluded the land-use change is driven by incentives, decisions are made by landowners, the reformed resource management system will allow for a strategic framework and focus on environmental outcomes, and amending the NES-PF to allow Councils to have more control will be difficult to implement without a national strategic framework.</p>
<i>Exotic carbon forestry (permanent exotic foresters)</i>	This is a relatively recent and growing industry. There are a small number of companies in New Zealand that establish permanent exotic forest to access New Zealand Units (NZU) through the NZ ETS.	At a recent workshop, representatives from carbon foresters raised similar concerns to the plantation forestry industry. In addition, during the ERP consultation they indicated that permanent exotic forestry could play a pivotal role in addressing the climate crisis. Some companies advocate models that are focussed on transitioning exotic forests to native forests and consider that this is only economically viable through the inclusion of permanent exotic forests within the NZ ETS.

<sup>37</sup> The Impacts of Afforestation on Rural Communities – A case study in the Tararua District of New Zealand, Tararua District Council (H Collins, A McFetridge) March 2021

<sup>38</sup> Managing Forestry Land-Use under the influence of Carbon The Issues and Options <https://beeflambnz.com/news-views/discussion-paper-outlines-carbon-farming-threat-sheep-and-beef-sector>

Stakeholder or Sector	Nature of interest	Views
<i>Farm Foresters</i>	Small forest owners <sup>39</sup> are an important component of the plantation estate, providing an increasing portion of the annual wood harvest in New Zealand. They include farmers, private owners, syndicates, and partnerships that have less than 1,000 hectares. There are approximately 14,000 to 15,000 small forest owners who account for more than 40 percent of the expected harvest during the 2020s. This is up from 25.5 percent in 2015 and just 14 percent in 2007.	Offsetting emissions by sequestering carbon with fast growing exotic tree species is needed immediately and at scale. By committing to a programme of planting offset forests that create significant carbon sinks for the next 50 years, Aotearoa New Zealand will buy time and international credibility. They accept that some pastoral land will need to be converted to permanent carbon forests to achieve the agreed timeline. However, inaction may lead to the ultimate devastation of our pastoral and forest industries.
NGO	There are range of environmental groups that include Environmental Defence Society, Forest and Bird, the Native Forest Coalition, Pure Advantage, the Tindall Foundation and others.	At a recent workshop, representatives from NGOs raised concerns about the: <ul style="list-style-type: none"> <li>• adverse environmental, economic, social, and cultural effects of commercial (plantation and exotic) afforestation on local communities</li> <li>• benefits from planned and managed native afforestation and nature-based solutions</li> <li>• incentives that encourage exotic species, they indicated the incentives should support and enable native afforestation that supports broader outcomes especially biodiversity.</li> </ul>

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<sup>39</sup> Definition for small scale growers used in the National Exotic Forests Description available at [Data, statistics, and surveys on NZ forests | Te Uru Rākau – New Zealand Forest Service | NZ Government \(mpi.govt.nz\)](https://data.mpi.govt.nz/data-stories/data-statistics-and-surveys-on-nz-forests-te-uru-rakau-new-zealand-forest-service-nz-government/)

## Populations affected by proposed changes

61. The key populations that will be affected by the proposed changes to the resource management settings are:

*Māori*: Māori have significant interests in forests as rangatira, kaitiaki, land and forest owners, workers, and business owners. These are described earlier.

*Rural and local communities*: Changing land-use can alter the pattern of social and economic opportunities as well as environmental effects.

Some submitters to the ERP consultation raised concerns for rural communities from extensive exotic forestry, commenting that it led to negative outcomes for rural livelihoods. Submitters highlighted the need to ensure that the right tree is grown in the right place, at the right time.

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

62. The policy objectives sought in relation to the problem are to:
- ensure the environmental effects of all exotic afforestation are effectively managed in a nationally consistent manner
  - enable local councils to control the location and scale of exotic afforestation in local communities, while ensuring national objectives for afforestation are met.
63. These objectives seek to support the achievement of the Government's vision for New Zealand's forests for 2050 set out in the ERP.
64. There is a broad spectrum of tensions and trade-offs that often play out within the local setting, which reflect trade-offs and tensions between the objectives. For example, in some instances communities may not want forests within their local or regional communities. This needs to be balanced against the national requirement to establish forests to address climate change including through transition to a bio-economy, as well as to supply timber and wood products for domestic and export markets.

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

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

65. The below criteria, which are equally weighted, were used to evaluate the options. It is important to recognise that there can be tensions between the criteria. For example, if there is an increased requirement for a local authority to consider the location and type of afforestation, this may improve outcomes at community level, but increase uncertainty for the industry and introduce tension with national objectives.

Table 4: Evaluation criteria

Criteria	Explanation
Consistent with the Crown's Treaty obligations and supports Māori aspirations.	<p>Māori connections to forestry and forest land in New Zealand are cultural and spiritual, as well as commercial.</p> <p>To be successful the proposals should be consistent with the principles of Te Tiriti o Waitangi, including the principles of partnership and active protection of Māori interests. As forestry is a key taonga for Māori, the proposals need to take into account the significant Māori interests in the resource, for instance, the ability for Māori to make decisions about the use of Māori land to meet their needs and aspirations.</p> <p>This also aligns with the reform of the resource management objective to give effect to the principles of Te Tiriti o Waitangi and provide for greater recognition of te ao Māori, including mātauranga Māori.</p>
Provides local authorities with effective tools for managing the social, cultural, economic, and environmental effects of permanent exotic afforestation by considering the location of exotic forests.	<p>Permanent exotic afforestation and the ongoing management of permanent exotic forests have a spectrum of positive and adverse effects on the local environment and community.</p> <p>If the proposal is to be considered successful, it should ensure that the effects of the activity are appropriately managed to mitigate against any potential adverse impact on the environment and community, including the consideration of the location of permanent exotic forests.</p> <p>This also aligns with the resource management reform objectives: improving system efficiency and effectiveness, and reducing complexity, whilst retaining appropriate democratic input.</p>



Criteria	Explanation
<p>Improve forestry management and consistency of regulatory controls by removing variation in the controls for commercial exotic afforestation, including forests that are intent not to be harvested.</p>	<p>Forest operators work across multiple local authorities and require a level of national consistency and certainty to enable them to make decisions in terms of afforestation and the long-term management of their forests.</p> <p>If the proposal is to be considered successful, it should support local authorities to focus resources on the purpose and principles of the RMA, provide a framework to enable consistent decision making, and provide confidence to operators to make decisions regarding their operations.</p>
<p>Improves resource management system efficiency and effectiveness and can be easily implemented, including monitoring, enforcement, and the speed of implementation.</p>	<p>A properly functioning resource management system is essential to achieving Government goals.</p> <p>If the proposal is to be considered successful, it should be proportionate to the scale of the issue, local government and operators should be able to understand and implement the policy intent, and it should be resilient to future changes and avoid unintended consequences.</p> <p>It should also provide benefits across Aotearoa New Zealand.</p>
<p>Aligns with the proposed NBA and NPF</p>	<p>The Government is repealing the RMA and will be introducing a new regulatory framework.</p> <p>If the proposal is to be considered successful, it should be aligned with the RM reforms, in particular the objectives of:</p> <ul style="list-style-type: none"> <li>• protecting, and where necessary restoring, the natural environment (including its capacity to provide for the wellbeing of present and future generations).</li> <li>• better enabling development within natural environmental limits, including a significant improvement in housing supply, affordability and choice, and timely provision of infrastructure including social infrastructure (to ensure afforestation supports well-functioning rural areas).</li> <li>• better preparation for adapting to climate change and risks from natural hazards, and better mitigation of the emissions that contribute to climate change.</li> </ul>

66. The criteria seek to assess whether the option or proposal will deliver on the intended outputs and outcomes, is aligned with statutory framework, and whether the benefits outweigh the costs.

67. Not all criteria will be relevant for all options.

### What scope will options be considered within?

68. The scope of options has been agreed by Cabinet and includes to:

- amend the existing NES-PF, to include exotic carbon afforestation
- create a decision-making framework for councils to better control the location of exotic carbon and plantation forestry including through the resource consent process
- develop national objectives and policies through national direction under the RMA, or through the proposed NBA once it comes into force.

69. Whilst the NES-PF applies to indigenous forests established for harvest, the scope of this work does not include indigenous carbon forests. This may constrain councils' ability to make decisions that fully support social, cultural, and economic outcomes whilst recognising cumulative land-use changes.

70. One of the assumptions is that the NES-PF currently is effective and efficient and the controls it has established are appropriate to delivering the environmental outcomes for plantation forestry.

71. This regulatory impact analysis only considers regulatory options involving national direction under the RMA to consider the effects of exotic afforestation and forests. Alternative options to address the problem definition, for example involving changes to guidance or similar non-regulatory alternatives, were given short consideration based on Ministerial direction.

72. **Appendix 1** provides a list of options that have been ruled out as part of the policy development process.

### What options are being considered?

73. This section sets the proposals and the options in four parts:

- **Part A:** Managing the environmental (biophysical) effects of exotic carbon forests
- **Part B:** Controlling the location of plantation and exotic carbon afforestation to manage social, cultural and economic effects
- **Part C:** Improving wildfire risk management in all forests within the NES-PF
- **Part D:** Enabling foresters and councils to better manage the environmental effects of forestry. The part addresses matters identified through the Year One review of the NES-PF, in particular:
  - wilding conifer risk management (natural spread of seed)
  - slash management (management of harvesting residues)
  - initial alignment with the NES-Freshwater
  - operational and technical issues.

## Part A: Managing the environmental (biophysical) effects of exotic carbon forests

74. The options identified to manage the environmental effects of exotic carbon and transitional (forests planted as exotic with the intention to transition to indigenous) forests are:

Option	Description
One	<u>Status quo</u> Maintaining the existing regulatory approach.
Two	<u>Amend the NES-PF to include exotic carbon forests</u> This option would amend the NES-PF to apply to exotic carbon forests. It would use many of the existing regulations, particularly afforestation provisions, to manage the environmental effects of exotic carbon forests.
Three	<u>Develop a new NES for exotic carbon forests</u> This option would involve defining exotic carbon forest and identifying the environmental effects that need to be managed at afforestation.
Four	<u>Amend the NES-PF to require Forest Management Plans for exotic carbon forests</u> This option would amend the NES to require the development of forest management plans for exotic carbon forests that councils could request at notification of afforestation.

75. Options two and three are mutually exclusive. Option four could be implemented independently, through option one or two, or by using other regulatory or non-regulatory approaches.

### Option one: Status quo - councils retain power to make objectives, policies and rules to manage exotic carbon forests

76. Councils are already empowered to make objectives, policies, and rules for exotic carbon forests because forests that will not be harvested are currently outside the scope of the NES-PF. Councils' rules prior to commencement of the NES-PF still apply. As detailed earlier, we are aware of three councils which have started to develop plan and rules to manage the environmental effects of exotic carbon forests.
77. Maintaining the status quo, or encouraging local councils through an advice note or guidance, would allow councils to maintain full decision-making powers over these forests and tailor their regulatory regime according to their broader community and environmental needs.
78. Key risks associated with this approach include:
- compliance issues for councils as plantation and exotic carbon forests are often the same, and foresters' intentions may change over time
  - the potential for different approaches used across the country, adding complexity and uncertainty for all parties.

Option two: Amend the NES-PF to include exotic carbon forests

79. This option would incorporate regulation for all exotic forestry (and the small amount of indigenous plantation forestry) in one set of regulations. This would look at existing effects being managed under the NES-PF and identify where they are relevant to exotic carbon forests as well as developing additional rules where necessary to manage other effects.
80. The benefits of this approach include:
- a single integrated regulatory framework that covers all exotic afforestation
  - a nationally consistent approach across the country whilst reducing complexity and uncertainty for all parties
  - increased participation by Māori, iwi, hapū and communities in managing the environmental effects of exotic carbon forests
  - provisions and controls if, at a later date, intentions change and a 'permanent' forest is to be harvested
  - provisions which could be included, or modified, to allow for councils to develop more stringent, and / or lenient rules, to reflect local circumstances.
81. Key risks associated with this approach include:
- the NES-PF was developed to address the effects and manage risks (including wilding conifer spread) of forests established with the intention of being clearfell harvested, therefore expanding its scope could increase complexity and cover effects that do not relate to that type of forest
  - compliance issues for councils as plantation and exotic carbon forests are often the same, and foresters' intentions may change over time
  - increased regulatory burden for Māori foresters and related businesses who own or are intending to invest in carbon forests. This may have a negative impact on the continued use or enjoyment of their resources.

Option three: Develop a new NES for exotic carbon forests

82. As with option two, the environmental effects that need to be managed will need to be identified and rules developed to control these effects. Whilst this would borrow heavily from effects being managed through the NES-PF, a new NES for exotic carbon forests would specifically seek to address the environmental effects associated with exotic carbon forests.
83. The benefits of this approach could include:
- a targeted solution with a clear scope to address the specific effects associated with exotic carbon forests
  - a distinct NES would be easier for local councils to integrate within their plans and ensure compliance
  - increased participation by Māori, iwi, hapū and communities in managing the environmental effects of exotic carbon forests
  - a nationally consistent approach across the country and reduced complexity and uncertainty for all parties that are undertaking one activity that clearly fits within one NES (or the other)

- provisions which could be included, or modified, to allow for councils to develop more stringent, and / or lenient rules, to reflect local circumstances.
84. Key risks associated with this approach include:
- difficulty determining when each set of regulations apply where foresters' intentions change over time
  - potential duplication of provisions
  - ensuring the regulatory frameworks remain aligned, especially if there are further amendments over time
  - increased regulatory burden for Māori foresters and related businesses who own or are intending to invest in carbon forests. This may have a negative impact on the continued use or enjoyment of their resources.
85. This approach was raised during the pre-consultation engagement by the forestry industry as they sought to establish clear delineation between the different types of forests, and were concerned about unintended consequences from any changes to the settings within the NES-PF.

*Option four: Amend the NES-PF to require Forest Management Plans for exotic carbon forests*

86. This option seeks to require the development of management plans for exotic carbon forests that councils could request at notification of afforestation. This requirement could be established as part of option two or three. It is noted that some industry groups have suggested that forest management plans could be developed through voluntary agreements with the industry.
87. This option includes a number of potential variables and would require additional consultation once specific proposals have been developed. It has therefore not been assessed as part of this interim RIS.

*Table 5: Impact analysis - Managing the biophysical effects of permanent exotic carbon forestry*

	<b>Option one</b> Status Quo	<b>Option two</b> Amend the NES-PF to include exotic carbon forests	<b>Option three</b> Develop a new NES for exotic carbon forests
Consistent with the Crown's Treaty obligations and supports Māori aspirations	0	+	+
Provides local authorities with effective tools	0	+	+
Improves forestry management and consistency of regulatory controls	0	++	+
Improves resource management system efficiency and effectiveness	0	+	+
Aligns with the proposed NBA and NPF	0	+	+
<b>Overall assessment</b>	0	++	+

Note: The full description of the criteria is presented in Table 4: Evaluation criteria

Key:

- |    |                                  |    |                                |
|----|----------------------------------|----|--------------------------------|
| ++ | Much better than the status quo  | -  | Worse than the status quo      |
| +  | Better than the status quo       | -- | Much worse than the status quo |
| 0  | About the same as the status quo |    |                                |

**Conclusion and recommendation**

88. It is **recommended that a combination of options two and four** is the best at addressing the problem, meets the policy objectives, and delivers the highest net benefits. As stated above, option four has not been assessed as part of this interim RIS as it would need further development.
89. Establishing a regulatory regime to manage the environmental effects of exotic carbon forestry through national direction by prescribing environmental standards for specific activities and detailing when resource consents will be required, will provide for a nationally consistent approach. Whilst this results in additional costs for operators and local councils, it is considered that the environmental benefits outweigh costs.
90. This approach also has the benefit of addressing some of issues relating to:
  - capacity and capability within the sector It is anticipated that the capacity and capability of the sector, particularly in relation to exotic carbon forests, will increase over time

- participation of Māori, iwi, hapū, and communities in the resource management system, albeit that opportunities to participate in a consenting approach are limited.
91. During our pre-consultation engagement, it was noted that one exotic carbon forester indicated that they already comply with the requirements within the NES-PF.
  92. It is noted that during pre-consultation engagement, the use of management plans was mentioned by the industry and local councils as an effective approach to manage and control the environmental effects of exotic carbon forests. This analysis, whilst it did not fully consider the forest management plans, did note that the additional system costs associated with their development. These costs will be primarily born by the forest operators to develop, implement, and update the forest management plans. While some of the monitoring and enforcing costs of local councils will be recovered from operators, there will also be some administrative and compliance costs for local councils.
  93. It was also noted that some industry participants favoured option three. This approach would deliver a sector specific solution that would be aligned with outcomes for the forest, local and regional environmental outcomes and would consider the specific activities required to manage exotic carbon forests.
  94. Whilst we have noted stakeholder preferences, options two and four are our preference at this time. This would deliver a single integrated system that is better aligned with the direction of the resource management reform, in particular, the development of the NPF.



## Part B: Controlling the location of plantation and exotic carbon afforestation to manage social, cultural and economic effects

95. The discussion document seeks feedback on two broad approaches to strengthen councils' ability to control the location of plantation and exotic carbon afforestation.
96. The options considered within this interim RIS are:

Option	Description
One	<u>Status quo</u> Maintaining the existing regulatory approach.
Two	<u>Local control – rules in regional or district plans, supported by an amended NES-PF</u> This option would make explicit that councils have the ability to make plan rules and supporting policies and objectives for matters outside the scope of the NES-PF. The stringency clause would be amended to enable councils to make more stringent or more lenient rules for the NES-PF activity of afforestation, for both plantation and exotic carbon forests.
Three	<u>National direction – consent requirement</u> This option would develop a consenting framework either under the RMA by amending the NES-PF or developing a new NES, or under the proposed new resource management legislation as part of the NPF.

### Option one: Status quo

97. Councils are already empowered to make objectives, policies, and rules for matters outside the scope of the NES-PF, including exotic carbon forests.
98. It is noted that the proposed replacement of the RMA offers opportunities to improve management of the long-term and cumulative effects of afforestation. These include the identification of regional land use issues. The best location for different types of activities could be identified at a high-level as spatial information in Regional Spatial Strategies (RSS), while NBA plans could provide the outcomes sought and then enable individual resource consent decisions.
99. Please refer to the discussion of option two below for the associated benefits and risks.

### Option two: Local control – rules in regional or district plans, supported by an amended NES-PF

100. This option is closely aligned with status quo in that it would state within the NES-PF that the social, cultural, and economic effects of afforestation are out of scope of the regulation. It would then be for each council to determine whether to make plan rules to address these matters.

101. The benefits of this approach include:

- it recognises that not all communities and regions are the same, and they may not all be affected by, or concerned about, exotic afforestation
- recognises there are cultural values such as spirituality and kaitiakitanga for Māori in forestry
- recognises the impact afforestation has on local communities, iwi and hapū (this could be both positive and negative effects such as more job opportunities in the area, but possibly also less jobs if productive land and associated value chains are replaced with carbon forestry)
- that some communities may only be concerned about certain types of forest, on certain types of land
- allows councils to prioritise the issue and develop an approach to meet local needs.

102. Key risks associated with this approach are:

- different approaches across the country adding complexity and uncertainty for all parties
- complexity of regulating these forests within the purpose of the RMA
- potential for some councils to not take adequate steps to manage the social, cultural, and economic effects of exotic carbon forests
- increased regulatory burden for Māori foresters and related businesses who own or are intending to invest in carbon forests, creating additional barriers to plantation and carbon forestry. This may have a negative impact on the continued use or enjoyment of their resources
- councils implementing solutions that discourage exotic afforestation completely, which could impact delivery of national priorities
- councils may be focused on the resource management reform causing them to delay making the necessary plan changes.

*Option three: National direction – consent requirement*

103. This option seeks to develop a consenting requirement either under the RMA by amending the NES-PF or developing a new NES, or under the proposed new resource management legislation as part of the NPF.

104. The consenting framework could:

- be applicable nationally or limited to some districts
- be time-limited or not
- address a number of variables including land type, forest type, scale of afforestation.

105. This option includes several potential variables that will require further development work as well as additional engagement. It has therefore not been assessed as part of this interim RIS.

**Table 6: Impact analysis - Controlling the location of plantation and exotic carbon afforestation**

	<b>Option one</b> Status quo	<b>Option two</b> Local control, supported by an amended NES-PF
Consistent with the Crown’s Treaty obligations and supports Māori aspirations	0	0
Provides local authorities with effective tools	0	-
Improve forestry management and consistency of regulatory controls	0	-
Improves resource management system efficiency and effectiveness	0	0
Aligns with the proposed NBA and NPF	0	0
<b>Overall assessment</b>	0	-

*Note: The full description of the criteria is presented in Table 4: Evaluation criteria*

**Key:**

- ++ Much better than the status quo
- +
- 0
- Worse than the status quo
- Much worse than the status quo

**Conclusion and recommendation**

- 106. There is **no recommended option** for this part of the interim RIS
- 107. Option two would be a significant change to the regulations that would enable councils to make more stringent or lenient rules for afforestation if they choose, subject to the requirements of the RMA. This approach will reduce certainty in the resource management system and in the longer term result in different approaches and standards across the country. There is also potential for duplication of effort as each area creates its own rules and associated policies and objectives. Guidance and support from the Government will help to reduce inconsistencies, however each plan change must be undertaken by the council.
- 108. Whilst option three has not been assessed in this interim RIS, it has been noted that creating a resource management decision-framework at a national level will be difficult to implement effectively without a suitable policy framework supporting it and may result in unintended consequences. It may also be ineffective and inefficient in managing the cumulative effects of afforestation in a region due to ad-hoc decisions through the resource consenting process.

## Part C: Improving wildfire risk management in all forests within the NES-PF

109. The options identified to improve fire management in all plantation and exotic carbon forests are:

Option	Description
One	<u>Status quo</u> Maintaining the existing regulatory approach.
Two	<u>Amend the NES-PF to require all forests over one hectare to have a Wildfire Risk Management Plan</u>  This option would require all forests covered by the NES-PF (ie, forests greater than one hectare) to prepare a Wildfire Risk Management Plan and attest to its completeness as part of their NES-PF notification or consent process.
Three	<u>A suitably qualified professional must certify a Wildfire Risk Management Plan</u>  This option is similar to the previous option, but recognises that good information enhances a plan and therefore requires oversight by a suitably qualified forest fire professional.

110. The proposals to improve fire management in all plantation and exotic forests should benefit Māori foresters and local hapū living in the area by ensuring less risk of forest fires.

111. There may be disproportionate economic effects for Māori considering the higher proportion of Māori involved in forestry as compared to the general population.

### Option one: Status quo

112. Wildfire risk management is managed by Fire and Emergency New Zealand (FENZ). They have Service Level Agreements with most large forestry companies in relation to managing risk and this covers a large part of the plantation forestry estate.

113. Councils are responsible for enforcing the NES-PF and since FENZ was stood up in 2017 most councils have had little involvement in fire response or fire planning. In general they do not have the capacity or capability to engage with foresters over wildfire risk management.

114. Key risks associated with this approach are:

- Wildfire is a risk to forests and although large companies are generally well prepared for wildfires, smaller foresters are generally unprepared and rely on FENZ to fight fires
- FENZ does not have good property level information about smaller forests and fire risks.

Option two: Amend the NES-PF to require all forests over one hectare to have a Wildfire Risk Management Plan

115. Under this option the NES-PF would require all forests covered by the NES-PF (ie, forests greater than one hectare) to prepare a Wildfire Risk Management Plan and attest to its completeness as part of their NES-PF notification or consent process.
116. The content of a Wildfire Risk Management Plan could vary according to the size of forest and would require a range of information to be addressed, such as consideration of the:
- wildfire environment (vegetation, topography, adjacent land use, and weather)
  - strategies that may be used to manage a wildfire
  - values at risk (ie, economic and environmental) and implementing appropriate measures to minimise the impacts.
117. The benefits of this approach include:
- wildfire risk reduction has general flow-on effects across the resource management system as natural hazards such as wildfire are disruptive and expensive
  - broader community benefits from increased awareness and risk management
  - increasing awareness of wildfire risk and risk management among smaller forest owners and farmers with forests
  - a potential for greater support to FENZ who have the statutory authority for fire
  - will not require councils to take on a new function for which they are not resourced or prepared.
118. Key risks associated with this approach are:
- increased costs to develop Wildfire Risk Management Plans, which will be a new cost for smaller foresters
  - information for small foresters to develop their plans is not available. Work is required to ensure that if a requirement for Wildfire Risk Management Plans is introduced to the NES-PF foresters and farmers with forests are supported with scale appropriate information.
  - councils may be unclear about their role in relation to FENZ, which has statutory responsibility for wildfire management, leading to inconsistent involvement with foresters over their plans.

Option three: A suitably qualified professional must certify a Wildfire Risk Management Plan

119. This is similar to option two but, recognising that the utility of a plan is enhanced by good information, it requires oversight by a suitably qualified forest fire professional. A qualified professional could assist a forest owner/manager to fully understand the site-specific wildfire risks, ways to mitigate those risks and write, or help to write a plan that assists with management of those risks.
120. The benefits of this approach include:
- professional advice for foresters and farmers with forests who have little or no understanding of wildfire risk and management
  - it may be more efficient for councils if certification absolves councils of liability

- large forest companies have in-house ability to prepare Wildfire Risk Management Plans.

121. Key risks associated with this approach are:

- there are insufficient rural fire professionals, particularly with knowledge of forestry, to provide plans for all forests, which may undermine outcomes
- risk is highly subjective and rural fire professionals may be reluctant to provide a plan that they must certify as addressing risk
- increased costs for foresters, in particular smaller foresters (as large companies already invest heavily in risk reduction and management)
- less efficient for applicants.

Table 7: Impact analysis - Improving fire management in all forests

	<b>Option one</b> Status quo	<b>Option two</b> Require all forests larger than 1ha to have a Wildfire Risk Management Plan	<b>Option three</b> A suitably qualified professional must certify a Wildfire Risk Management Plan
Consistent with the Crown's Treaty obligations and supports Māori aspirations	0	+	0
Provides local authorities with effective tools	0	+	0
Improve forestry management and consistency of regulatory controls	0	+	0
Improves resource management system efficiency and effectiveness	0	+	+
Aligns with the proposed NBA and NPF	0	++	+
<b>Overall assessment</b>	0	+	-

Note: The full description of the criteria is presented in Table 4: Evaluation criteria

Key:

++ Much better than the status quo

+ Better than the status quo

0 About the same as the status quo

-- Much worse than the status quo

- Worse than the status quo

**Conclusion and recommendation**

122. It is **recommended option two is taken forward**, given our key consideration is raising awareness of, and reducing risk of wildfire. This option will assess wildfire risk, provide a list of risk reduction and readiness actions that should be undertaken, and include any information that will support an effective fire response.

123. Professional forest wildfire advice (option three) is not readily available in the rural community, so we do not consider requiring professional certification of plans to be feasible.

124. Furthermore, placing a requirement of this nature onto forest owners will impose extra costs, and it is likely to disproportionately increase costs for smaller foresters. Large forest owners and managers already have comprehensive plans and share these with FENZ. The costs of developing these is offset against the potential loss from fire; investments in training and fire infrastructure are a form of self-insurance. These costs would be variable depending on the complexity of the forest being established, where it is being established, the values at risk and risk treatment options.



## Part D: Enabling foresters and councils to better manage the environmental effects of forestry

125. Te Uru Rākau - New Zealand Forest Service and the Ministry for the Environment carried out a review (the Review) of the NES-PF in 2020, focussing on specific areas set out in the Terms of Reference. The Review found<sup>40</sup> that, overall, the NES-PF is an effective framework for maintaining or improving the environmental outcomes associated with plantation forestry activities.
126. However, changes in some areas could be made to improve environmental outcomes, and further implementation support for councils and the forestry sector is required to lift performance and compliance.
127. This Part sets out options and proposals for addressing some of the findings of the Year One review of the NES-PF. The options are:

Option	Description
<b>Wilding risk</b>	
One	<u>Status quo</u> Maintaining the existing regulatory approach.
Two	<u>Amend the NES-PF to increase the notification period for a wilding tree risk score, require submission of supporting information, and reflect updates to the Wilding Tree Risk Calculator and guidance</u> The consistency and quality of the risk assessments is dependent on the research that informs the wilding tree risk calculator.
Three	<u>Reduce the resource consent threshold so that councils are managing more afforestation consents</u> This option enables councils to apply local knowledge (such as nearby wilding tree risk) to address the possibility of wilding risk from the forest changing over time.
Four	<u>Elevated wilding risk applications will be independently peer-reviewed by experts</u> This option recognises the varying capacity and capability of councils to manage forestry applications. It therefore utilises forester's expertise as part of an ongoing active management of the wilding risk.
Five	<u>Amend the NES-PF to add a new requirement for foresters to assess wilding tree risk at replanting</u> This option recognises that wilding risk changes over time and this is managed by requiring wilding risk is reassessed before replanting.

40 <https://www.mpi.govt.nz/dmsdocument/44914-Report-on-the-Year-One-Review-of-the-National-Environmental-Standards-for-Plantation-Forestry>.

<b>Slash management</b>	
One	<u>Status quo</u> Maintaining the existing regulatory approach.
Two	<u>Amendments to improve clarity and direction for foresters and council compliance staff</u> Specific changes that seek to improve clarity for the industry and compliance officers in councils.
<b>Initial alignment of the NES-PF with the NES-Freshwater</b>	
One	<u>Status quo</u> Maintaining the existing regulatory approach.
Two	<u>Minor amendments to the NES-PF relating to fish passage, definitions, and wetlands (use of machinery and vehicles)</u> A range of minor alignment amendments, which all have the same effect on our objectives and are therefore considered as a single item.
<b>Operational and technical issues</b>	
One	<u>Status quo</u> Maintaining the existing regulatory approach.
Two	<u>Minor amendments</u> The proposed changes are considered minor, and all have the same effect on our objectives so are therefore considered as a single item. The proposed changes are provided in <b>Appendix 2</b> .

128. The proposals to address the key findings of the Year One Review of the NES-PF should have positive impact for Māori foresters, landowners and businesses as they provide more clarity and better management of some aspects of forestry including wilding risk, slash management, freshwater alignment and other operational and technical issues.
129. There may be disproportionate economic effects for Māori considering the higher proportion of Māori involved in forestry as compared to the general population.

### **Wilding risk**

130. All planted trees carry a risk of spreading into areas where they are not wanted. The risk of a tree species spreading depends on how far its seed can disperse, and the potential of that seed to establish. The impact of this spread is directly associated with the potential to disrupt the use or conservation values of the land they spread to.
131. The NES-PF manages wilding risk of new afforestation. It does not regulate the management of legacy wilding conifers. The NES-PF recognises that wilding risk varies according to the characteristics of the site and species used and seeks to manage these risks. It assesses risk through the Wilding Tree Risk Calculator (the 'calculator'), and it is this assessment that underpins the regulatory controls. If a consent is required, councils have the power to refuse consent or place a wide range of conditions on an afforestation consent.

132. The Review found that preventing wilding spread from plantation forests is complex and requires a systemic approach to be effective. This system extends beyond the RMA to the Biosecurity Act and the individual approaches of councils and landowners to fulfilling their biosecurity responsibilities. Where wilding risk is low or can be managed effectively, the regulations are appropriate. When wilding risk is higher, or uncertain, changes could be made to improve management and better represent the policy intent. The changes fall into three areas:

- The Wilding Tree Risk Calculator
- The application of the Wilding Tree Risk Calculator
- Current policy settings.

#### Option one: Status Quo

133. The Review noted the difficulties to assess performance of the settings after only 18 months. However, based on user feedback, overall the NES-PF manages wilding risk where risk is low, or when a systematic approach to managing wilding spread is taken. Where there is insufficient experience or knowledge of wilding risk, the systematic approach isn't followed, or the risk is high, changes could improve management and better represent the policy intent.

134. The benefits of this approach include:

- current settings to manage wilding risk of new afforestation works well in most cases
- guidance and training could be used more effectively to improve performance where risk is not being well managed.

132. Key risks associated with this approach are:

- where risk is not managed well, there can be disproportionate wilding tree spread effects.

#### Option two: Amend the NES-PF to increase the notification period for a wilding tree risk score, require submission of supporting information, and reflect updates to the Wilding Tree Risk Calculator and guidance

135. The calculator provides the fundamental evidence of wilding risk within the NES-PF. It performs a point in time assessment, based on the species being planted and how likely seed will spread and establish in the surrounding land. The consistency and quality of the risk assessments is dependent on the research that it is based on.

136. The benefits of this approach include:

- ensuring risk assessments are being performed to the highest standard based on the most current science;
- the familiarity of the calculator and its approach to wilding risk management, therefore strengthening the tool will be the least disruptive approach for councils and foresters.

137. Key risks associated with this approach are:

- research is ongoing and needs to be incorporated regularly to ensure the calculator is performing optimally.

*Option three: Reduce the resource consent threshold so that councils are managing more afforestation consents.*

138. Over the life of a forest its wilding risk will change as the surrounding land use and climate alter. These changes can be hard to predict or control under a national instrument. When risk is at the higher end of what is currently permitted, councils may be best placed to address how to assess these risks more intimately against the surrounding land.
139. Under this option, councils will apply a set of options under a Controlled Activity consent. This option enables councils to apply local knowledge (such as nearby wilding tree risk) to address the possibility of wilding risk from the forest changing over time.
140. These requirements mean councils will need to increase their expertise on wilding assessments and controls. Where councils are stretched in these areas, forest planting activities will be negatively affected as certainty and consistency of the application of best practice between regions will decrease.
141. The benefits of this approach include:
  - stricter management of forests closer to the threshold where changing risk variables over time are likely to tip a forest over the score threshold
  - councils may be better placed to make appropriate regional management decisions where the risk level is higher, than management through a national direction instrument.
142. Key risks associated with this approach are:
  - Increased requirements on council staff to assess detailed risk will require councils to have a greater knowledge and expertise in forestry within their staff. Many councils are known to struggle with this currently.
  - Will increase the number of consent processes on the forestry sector. In some regions, such as the Central North Island Wood Region, this may disproportionately affect afforestation of plantation forests that score high, but where wilding management of the commercial species isn't a considered a problem.

*Option four: Elevated wilding risk applications will be independently peer-reviewed by experts*

143. To ensure risk is being appropriately assessed, for forests identified with an elevated risk being those with scores between 9 and 11, the score will need to be independently peer reviewed by an independent, suitably qualified person, who is registered with an institution or professional association with a code of ethics discipline committee. This would align with upcoming requirements for forestry advisers to be registered.<sup>41</sup>
144. This option recognises that surrounding land use is likely to change, similar to the previous option. It also recognises the varying capacity and capability of councils to manage forestry applications. It therefore utilises forester's expertise as part of an ongoing active management of the wilding risk.
145. The benefits of this approach include:
  - utilises existing expertise and experience within the forestry sector to confirm assessments of higher risk applications

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<sup>41</sup> Registration of log traders and forestry advisers under the Forests (Log Traders and Forestry Advisers) Amendment Act: <https://www.mpi.govt.nz/forestry/forest-industry-and-workforce/registration-of-log-traders-and-forestry-advisers/>

- does not increase the consenting burden on the forestry sector
- increases certainty for councils, the general public, and foresters in the quality of assessments.

146. Key risks associated with this approach are:

- will require earlier planning from foresters, and the peer review process will increase costs. This might affect some regions disproportionately where wilding spread risk from new plantation forests isn't deemed a problem compared to others
- peer reviewers aren't necessarily any more qualified to understand potential surrounding land use changes than the initial assessor.

*Option five: Amend the NES-PF to add a new requirement for foresters to assess wilding tree risk at replanting*

147. Under this option, changes in wilding risk over time are managed through the requirement that risk is reassessed before replanting. At present no reassessment is required because at the time the rules were developed foresters were held to have existing use rights as long as the activity is of the same scale and intensity.

148. This means all forests at replanting will be assessed and controlled under the same rules as at afforestation. We are also proposing minor amendments to ensure regulation 79(6), which sets out requirements for eradicating wildings established in Significant Natural Areas (SNAs) and wetlands, does not include any property limits as set out in regulation 11(5).

149. The benefits of this approach include:

- allows for appropriate wilding management to be in place if risk levels change over time before a forest is replanted. This captures changes in the receiving land conditions and also ensures up to date knowledge is being applied.
- simplest approach to accounting for the significant effect of changing land use on wilding risk.

150. Key risks associated with this approach are:

- reduced certainty for investing in species specific infrastructure in regions where risk may change over time.

Table 8: Impact analysis - Wilding risk

	<b>Option one</b> Status quo	<b>Option two</b> Increase the notification period for a wilding tree risk score, require submission of supporting information, and reflect updates to the Wilding Tree Risk Calculator and guidance	<b>Option three</b> Reduce the resource consent threshold so that councils are managing more afforestation consents	<b>Option four</b> Elevated wilding risk applications will be independently peer reviewed by experts	<b>Option five</b> Amend the NES-PF to add a new requirement for foresters to assess wilding tree risk at replanting
Consistent with the Crown's Treaty obligations and supports Māori aspirations	0	+	+	+	+
Provides local authorities with effective tools	0	+	+	+	+
Improve forestry management and consistency of regulatory controls	0	+	+	+	++
Improves resource management system efficiency and effectiveness	0	+	0	+	+
Aligns with the proposed NBA and NPF	0	0	0	0	0
<b>Overall assessment</b>	0	++	+	++	++

Note: The full description of the criteria is presented in Table 4: Evaluation criteria

Key:

++	Much better than the status quo	0	About the same as the status quo	-	Worse than the status quo
+	Better than the status quo			--	Much worse than the status quo

## Conclusion and recommendation

151. The Review identified that the NES-PF would benefit from improvements in how it manages wilding risk. It is **recommended that a combination of options two and five are taken forward**. These options are preferred as they have the greatest coverage in terms of addressing the issues identified in the Year One Review.
152. Alongside updating the calculator to ensure risk assessment is performed using the most up to date science, the requirement for calculations to be provided to councils in a format that can be replicated increases the certainty in the scoring accuracy. Option five ensures that when risk changes over time, this risk is appropriately reassessed and managed.

## Slash management

153. The NES-PF sets requirements for slash management to ensure that, if kept on site until it decomposes, it is managed in such a way that it is stable and will not mobilise into waterways where it can potentially cause damage to ecological values, infrastructure and downstream communities.

### Option one: Status Quo

154. The Review found that the settings for slash in the NES-PF are generally sufficient to manage risk and recognised that regulation has limited effect on managing risk. Key improvements in risk management need to come from improved practice and better enforcement.
155. The benefits of this approach include:
- current settings are largely sufficient to manage risk (if followed)
  - councils and foresters are familiarising themselves with the requirements and what they mean in practice.
156. Key risks associated with this approach are:
- in some cases the regulations could be clearer and more directive to achieve the outcomes sought
  - risk management is very site specific, so uncertainty and mismatched expectations between foresters and council compliance staff can cause delays and additional costs for foresters, and uncertainty about expected environmental outcomes.

### Option two: Amendments to improve clarity and direction for foresters and council compliance staff

157. Amendments to the following regulations are proposed:
- regulation 66 sets out the requirements for harvest plans, the detail of which is set out in Schedule 3. Include reference to slash management provisions in regulations 66 to clarify that this is one of the management requirements in a harvest plan
  - regulation 69(1) to clarify that it applies to processing slash that has been produced at or on a landing/skid site. This will remove the regulatory risk that foresters will be required to remove all slash from the forest, which is not a desirable or necessary requirement
  - regulation 69(2) to clarify that it applies to all slash piles on or around landings/skid sites, to ensure that all slash piles are managed to avoid collapse.



- Schedule 3(5) to clarify that management of slash for the whole site is required in the management plan, including as required to protect features identified in clause 3(3). This will remove ambiguous construction in the regulation
- regulations 66 and 69 to clarify that slash on the cutover must be managed to ensure it is not mobilised in heavy rainfall events (5% AEP or greater), and to avoid slope failure. The current regulations do not specifically require management of slash on the cutover. Although this material is not as risky as material left within a flood plain, in high rainfall situations there may be occasions when it mobilises and this risk should be identified and managed.

158. The benefits of this approach include:

- Improving clarity for users about the risks and the different ways in which this should be managed, including documenting that risk in management plans
- Improved environmental outcomes over time as land managers implement appropriate risk mitigations and councils enforce well understood requirements.

159. Key risks associated with this approach are:

- regulations alone cannot manage slash risk. Those who implement regulations must manage this risk, and additional tools are required to do this. There is a risk that people assume regulations alone will suffice, and additional tools are not provided.

*Table 9: Impact analysis - Slash management*

	<b>Option one</b> Status quo	<b>Option two</b> Amendments to improve clarity and direction for foresters and council compliance staff
Consistent with the Crown's Treaty obligations and supports Māori aspirations	0	+
Provides local authorities with effective tools	0	+
Improve forestry management and consistency of regulatory controls	0	+
Improves resource management system efficiency and effectiveness	0	+
Aligns with the proposed NBA and NPF	0	+
<b>Overall assessment</b>	<b>0</b>	<b>+</b>

**Key:**

- ++ Much better than the status quo
- + Better than the status quo
- 0 About the same as the status quo

- Much worse than the status quo
- Worse than the status quo

## Conclusion and recommendation

160. The Review identified that the NES-PF would benefit from improvements in how it manages slash. **Option 2 is recommended.** The proposed amendments deliver the following outcomes:

- protection of waterways and communities through good slash management; and
- improving effectiveness and efficiency through greater regulator clarity in the management of slash in cutover and at landings.

## Initial alignment of the NES-PF with the NES-Freshwater

161. The NES-Freshwater sets requirements for carrying out certain activities that pose risks to freshwater and freshwater ecosystems.

162. The standards are designed to:

- protect existing inland and coastal wetlands
- protect urban and rural streams from in-filling
- ensure connectivity of fish habitat (fish passage)
- set minimum requirements for feedlots and other stockholding areas
- improve poor practice intensive winter grazing of forage crops
- restrict further agricultural intensification until the end of 2024
- limit the discharge of synthetic nitrogen fertiliser to land and require reporting of fertiliser use.

### Option one: Status quo

163. The NES-PF includes regulations to protect freshwater bodies, developed in relation to the effects of plantation forestry activities. These mostly cover sediment and the disturbance of waterways. Regulation 7 in the NES-Freshwater allows for the NES-PF to prevail over the NES-Freshwater.

164. The benefits of maintaining the status quo include:

- certainty for foresters who have been operating according to the NES-PF for four years;
- little evidence to date that the different standards will achieve significantly different outcomes in the forestry sector;
- the NES-PF was developed for plantation forestry activities according to good practice industry standards and to ensure that, where not detrimental to the environment, forestry activities can continue. The NES-Freshwater was not developed with forestry activities in mind, and has some requirements that will disadvantage forestry activities without having considered the impacts. Recent amendments to the NES-Freshwater are proposed to provide consenting pathways for a number of activities that are not permitted under the NES-Freshwater, but no consideration was made of potential consenting pathways for plantation forestry activities, as the NES-PF sets requirements for these.

165. Key risks associated with this approach are:

- it is the intention that the NES-PF is protective of freshwater and freshwater ecology, and in general all sectors should have to comply with the same environmental standards, as long as they have been developed with all sectors in mind. The status quo does not currently allow for the same environmental standards across all sectors.
- in anticipation of the National Planning Framework that will be introduced through the Natural and Built Environments Act, determining how the two instruments can align is timely. Not aligning at this stage may cause a delay in future alignment work.

*Option two: Minor amendments relating to fish passage, definitions, and wetlands (use of machinery and vehicles)*

166. The proposed changes are considered minor alignment issues, and all have the same effect on our objectives and therefore considered as a single item. In summary the proposals are to amend:

- regulation 40(1) to allow regional councils to advise where fish passage must not be enabled
- regulation 46(1)(f) of the NES-PF to align the depth of culverts to those within the NES-Freshwater
- the definition of:
  - sediment control measures in the NES-PF to be the same as the NES-Freshwater
  - the NES-PF to align with general conditions for the use of vehicles, machinery, equipment and material within the NES-Freshwater
  - the NES-PF to align with the rules relating to the cleaning of all machinery / vehicles before entering a wetland within the NES-Freshwater.

167. There are other areas where alignment needs to be considered, such as culverts, sediment, wetlands, and further definitions. These are being considered for later alignment through the national planning framework and will require consultation.

168. The benefits of aligning the NES-PF with the NES-Freshwater will ensure all sectors are managing freshwater to the same standards (albeit sometimes requiring different pathways to meeting these).

169. Key risks associated with this approach are:

- the NES-Freshwater was not developed with consideration to the NES-PF, as regulation 7 of the NES-Freshwater allowed for the NES-PF to prevail. There may be unintended effects that we are unaware of created through aligning.

**Table 11: Impact analysis – Initial alignment of the NES-PF with the NES-Freshwater**

	<b>Option one</b> Status quo	<b>Option two</b> Minor amendments to the NES-PF
Consistent with the Crown’s Treaty obligations and supports Māori aspirations	0	+
Provides local authorities with effective tools	0	+
Improve forestry management and consistency of regulatory controls	0	+
Improves resource management system efficiency and effectiveness	0	+
Aligns with the proposed NBA and NPF	0	+
<b>Overall assessment</b>	0	+

*Note: The full description of the criteria is presented in Table 4: Evaluation criteria*

**Key:**

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| ++ Much better than the status quo | -- Much worse than the status quo |
| + Better than the status quo       | - Worse than the status quo       |
| 0 About the same as the status quo |                                   |

**Conclusion and recommendation**

170. The NES-Freshwater was developed after the NES-PF. As a consequence, there are areas where the regulations overlap, and in some cases set different standards.

171. It is **recommended that all the proposals in Option 2** relating to alignment with NES-Freshwater and the NPS-FM are taken forward. These changes are technical amendments that will improve the operability of the regulations and builds on the Review findings. The analysis noted that:

- freshwater is an important taonga and aligning the regulatory controls supports the investment Māori and iwi have made into the NPS-FM and NES-Freshwater
- aligning regulatory frameworks simplifies the regulatory landscape reducing costs for users and regulators
- there may be minor improvement in environmental outcomes as amendments are relatively minor
- it may introduce uncertainty with the new requirements into forestry operations.

**Operational implementation and technical issues**

172. The regulations were developed over nine years with significant input from the forestry industry, councils and environmental experts to ensure the regulations are sufficiently robust to meet the objectives.

173. A range of minor implementation and technical issues have emerged since the Review that should be addressed to ensure the regulations remain fit-for-purpose.

Option one: Status quo

174. The following risks have been identified with maintaining the status quo:

- failing to update regulations where problems have been identified is causing uncertainty and cost for users of the regulations. Good regulatory stewardship requires ensuring that regulations are fit for purpose and do not place unnecessary burdens on regulated parties
- good environmental outcomes require clarity of expectations and we have identified some areas where the regulations are unclear.

Option two: Minor amendments

175. The proposed changes are considered minor, and all have the same effect on our objectives and are therefore considered as a single item. The proposed changes are provided in **Appendix 2**.

176. The benefits of this approach include:

- an opportunity to seek feedback on, and evidence for proposed changes, and craft practical and effective regulations
- clarifying definitions to reduce operational and regulatory ambiguity
- explicitly enabling (with conditions) an environmentally benign river crossing that is not clearly permitted through the regulations
- enabling councils to acknowledge Treaty of Waitangi settlement areas in consenting decisions which include outstanding water bodies
- amending notification periods to improve regulatory efficiency and target council effort to environmental risk
- removing a confusing and unnecessary regulation relating to traffic management so district councils continue to control district road use equitably for all users
- clarify regulations relating to discharges and sediment management that have been interpreted differently in different part of the country
- maintaining the intent of the ESC to indicate erosion risk while removing a burdensome administrative process
- clarifying conditions under which councils can and cannot charge for monitoring permitted activities in line with amendments to the NES-Freshwater.

177. Key risks associated with this approach are:

- Acknowledging Treaty obligations in relation to an identified omission without broader consideration of Treaty of Waitangi obligations. In considering this risk we noted that this is a simple matter that can be rectified now, and broader consideration of Treaty of Waitangi obligations will be required when the NES-PF is transitioned into the NPF, once the NBA replaces the RMA.
- Risk of some stakeholders and agencies seeking to relitigate the policy and content of the NES-PF, which is not proposed in relation to the matters covered in this section.

Table 12: Impact analysis – Minor amendments to address operational and technical issues

	Option one Status quo	Option two Minor amendments
Consistent with the Crown’s Treaty obligations and supports Māori aspirations	0	+
Provides local authorities with effective tools	0	+
Improve forestry management and consistency of regulatory controls	0	++
Improves resource management system efficiency and effectiveness	0	+
Aligns with the proposed NBA and NPF	0	+
<b>Overall assessment</b>	0	+

Note: The full description of the criteria is presented in Table 4: Evaluation criteria

Key:

- ++ Much better than the status quo
- + Better than the status quo
- 0 About the same as the status quo
- Much worse than the status quo
- Worse than the status quo

**Conclusion and recommendation**

178. The objectives of the NES-PF are to maintain or improve the environmental outcomes associated with plantation forestry activities, and to increase the efficiency and certainty of managing plantation forestry activities.
179. These amendments improve the operability of the regulations and builds on the Review findings. It is therefore **recommended that the proposals in Option 2 relating to river crossings; Treaty of Waitangi settlement areas which include outstanding water bodies; notice periods; traffic management; definitions and clarity relating to indigenous vegetation and SNAs; sediment management and discharges; the ESC; and charging to monitor permitted activities are taken forward as technical amendments** to improve the operability of the regulations.

## What are the marginal costs and benefits of the options?

180. As this is an interim assessment an indicative cost-benefit analysis is provided below. A full cost-benefit analysis is being commissioned and will be published alongside the Section 32 Evaluation Report as required by Section 44(1)(b) of the RMA.
181. An indicative assessment of the costs and benefits for:
- managing the environmental (biophysical) effects of exotic carbon forestry is provided in Table 13
  - controlling the location of plantation and exotic carbon afforestation is provided in Table 14
  - improving wildfire risk management is in Table 15.
182. The costs of implementing the technical changes to the NES-PF will be minor in the majority of cases as it will require slight modification in existing activities. The benefits will predominately be better environmental outcomes and minor efficiencies.

Table 13: An indicative assessment of the costs and benefits of managing the environmental (biophysical) effects of exotic carbon forestry

<b>Affected groups</b> <i>(identify)</i>	<b>Comment</b> <i>nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks.</i>	<b>Impact</b> <i>\$m present value where appropriate for monetised impacts; high, medium or low for non-monetised impacts.</i>	<b>Evidence Certainty</b> <i>High, medium, or low, and reasoning explained in comment column.</i>
<b>Additional costs of the preferred option (Option two - Amend the NES-PF to include exotic carbon forests) compared to taking no action</b>			
Farmers, landowners and foresters	Although the NES-PF is based on a permitted activity regime, it is predicted that there will be an increase in the number of consents. This is largely attributed to certain activities in the ESC Orange and Red Zones requiring consent. These costs are anticipated to reduce over time.	<p><u>Resource consent costs:</u> \$1.0 million - \$2.0 million per year. Costs for a resource consent ranging from \$14,000 to \$17,000.</p> <p><u>Compliance costs</u> will vary depending on the activity and location of the forest. The unit cost of compliance is likely to reduce over time, however our</p>	Very low. The partial cost-benefit analysis prepared for the introduction of the NES-PF identified costs in increased number of consents, increased compliance costs, and opportunity costs. These were quantified for forests established for harvest, with some councils already establishing plans and rules to manage the effects of these forests. There are few councils that have introduced plans and rules to manage



	<p><u>Compliance costs:</u> These costs are mostly associated with compliance with resource consent conditions, permitted activity conditions and councils being able to charge for monitoring.</p> <p><u>Indirect costs</u> include delays whilst applications for resource consent are prepared and considered, as well as costs associated with uncertainty about decisions.</p>	<p>preferred options are likely to increase the total compliance cost for a given forest.</p> <p><u>Certainty costs</u> The Regulatory Impact Analysis (RIA) accompanying the NES-PF identified the certainty benefit of \$363,000 in the first year. It is assumed that this will now convert into a cost for the first year.</p>	<p>exotic carbon forest, therefore the costs are likely to be slightly higher for these new forests.</p> <p>Costs associated with a resource consent are determined by each council and service providers. These will vary by region and location of the forest.</p> <p>We also note that the Forests (Regulation of Log Traders and Forestry Advisers) Amendment Act will impact on the fees charged by some service providers to applicants.</p>
<p>All councils</p> <p>Direct cost of giving statutory effect to the changes to the regulations</p>	<p>All councils – even those with no forestry – will face a one-time cost to give effect to the change in their documentation – both statutory (plans) and public (eg, website content).</p>	<p><u>Estimated cost \$547,500</u> Based on an estimated cost of \$7,500 per council.</p>	<p>Low.</p> <p>Cost based on 50 hours of council time to prepare briefings and undertake statutory actions.</p> <p>Note that this cost only occurs once depending on what proposals are selected.</p>
<p>All councils</p> <p>Compliance and monitoring costs</p>	<p>Whilst councils are able to recover costs, these do not necessarily cover all associated costs. These costs will be high initially but should reduce slightly each year.</p>	<p><u>Estimated costs of \$4.4m - \$7.3m</u>  \$60,000 - \$100,000 per council</p>	<p>Low.</p> <p>These costs are based on the NES-PF RIA prepared in 2016, and take into account additional activity.</p> <p>Note that this cost only occurs once depending on what proposals are selected.</p>
<p>Regional council costs</p>	<p>These costs are to cover any administrative costs associated with permitted activities and / or processing consents, and training.</p>	<p>Administrative costs \$70,000 per annum Training \$70,000 for the first year, \$35,000 per year thereafter.</p>	<p>Low</p> <p>It is anticipated that some councils will wait to review their plan content as part of the reform of the resource management system.</p>

District council costs	These costs are to cover any administrative costs associated with permitted activities and / or processing consents, and training.	Administrative costs \$30,000 per annum Training \$40,000 in the first year, 20,000 per year thereafter.	Low It is anticipated that some councils will wait to review their plan content as part of the reform of the resource management system.
Participation in the resource consents by Māori, iwi, hapū, communities and NGOs	It is likely that public participation in forestry consent applications will reduce or remain constant as this is based on a national set of rules and a permitted activity regime. However, some assessments have also predicted that the NES-PF will lead to an increase in consents.	Medium Overall, the effects on public participation are likely to be limited and consistent with the status quo.	Low Participation in the resource consent is often on undertaken on a voluntary basis or part of wider interest. The level of involvement will depend on the size, scale and location of the afforestation.
Rural communities	Change in land-use may impact the local economies through changes in demographics and employment.	\$5.9 million - \$7.3 million Assuming annual afforestation at 35,000 hectares per year.	Low Tararua District Council estimated that 10,000 hectares of afforestation in 2019 resulted in a loss in local spending between \$1.7 and \$2.1 million per year for the region.
<b>Total monetised costs</b>		First year costs estimate: \$19 m - \$25 m On-going costs: \$16 m - \$22 m	Low
<b>Non-monetised costs</b>		High	Low
<b>Additional benefits of the preferred option (Option two - Amend the NES-PF to include exotic carbon forests) compared to taking no action</b>			
Farmers, landowners and carbon companies	Nationally consistent rules and standards will allow foresters to generally use the same consent application templates for each council, regardless of location.	The efficiency benefits will be greatest for larger companies operating in different council boundaries. <ul style="list-style-type: none"><li>Standardised management plan requirements will reduce the</li></ul>	Low

		<p>cost of preparing tailored management plans.</p> <ul style="list-style-type: none"> <li>• The guidance material supporting the use of the management plans and best management practices will decrease the amount of time and resources required to prepare management plans/comply with NES-PF.</li> <li>• Exotic carbon forestry would have an estimated profitability of \$25,000 to \$35,000 (NPV) per hectare depending on forest size and productivity.</li> </ul>	
Others (eg, wider government, consumers, etc.)	<p><u>Certainty</u> There will be long-term regulatory certainty benefits for both councils and Government (as well as other stakeholders) resulting from the NES-PF.</p>		While certainty can have significant efficiency benefits, certainty is difficult to quantify.
	Environmental benefits including climate change mitigation and adaptation.	High – significantly improved environmental management of exotic carbon forests	Medium. Valued at 08/07/22: \$75/unit. Carbon credit values can change rapidly in either direction.
<b>Total monetised benefits</b>		Will be determined through detailed cost-benefit analysis of preferred option	Low
<b>Non-monetised benefits</b>		High	Low

Table 14: An indicative assessment of the costs and benefits of controlling the location of plantation and exotic carbon afforestation

<b>Affected groups</b> <i>(identify)</i>	<b>Comment</b> <i>nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks.</i>	<b>Impact</b> <i>\$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts.</i>	<b>Evidence Certainty</b> <i>High, medium, or low, and reasoning explained in the comment column.</i>
<b>Additional costs of Option 2 (Local control – rules in regional or district plans, supported by an amended NES-PF) compared to taking no action</b> <u>This assumes that council rules and associated policies and objectives seek to control exotic carbon forests</u>			
Farmers, landowners and forestry companies (plantation and carbon foresters)	<p><u>Direct costs</u> include the preparation and submission of resource consent applications, that will include the preparation of an Assessment of Environmental Effects (AEE). The AEE will be dependent on the scale and significance of the potential effects. There will also be ongoing compliance and monitoring costs, charged by the local authority.</p> <p><u>Indirect costs</u> include delays whilst applications for resource consent are prepared and considered as well as costs associated with uncertainty about decisions.</p>	<p><u>Resource consent costs:</u>                      \$1.4 million - \$2.0 million per year. This assumes average forest size of 350 hectares, and an annual afforestation at 35,000 hectares per year.                      Costs for a resource consent ranging from \$14,000 to \$17,000.</p> <p><u>Monitoring costs</u> will vary depending on the activity and location of the forest.</p> <p><u>Certainty costs.</u> The RIA accompanying the NES-PF identified the certainty benefit of \$363,000 in the first year. It is assumed that this will now convert into a cost for the first year.</p>	<p>Very low.                      Costs associated with a resource consent are determined by each council and service providers. These will vary by region and location of the forest.</p> <p>We also note that the Forests (Regulation of Log Traders and Forestry Advisers) Amendment Act will impact on the fees charged by some service providers to applicants.</p>
Local councils Compliance and monitoring costs	Whilst local councils are able to recover costs these do not necessarily cover all associated costs.	\$60,000 - \$100,000	<p>Low.                      These costs are based on the NES-PF RIA prepared in 2016, and take into account additional activity.</p>

	These costs will be high initially but should reduce slightly each year.		
Regional council costs	These costs are to cover any administrative costs associated with permitted activities and / or processing consents, and training.	Administrative costs \$70,000 per annum Training \$70,000 for the first year	Medium It is anticipated that some councils will wait to review their plan content as part of the reform of the resource management system.
District council costs	These costs are to cover any administrative costs associated with permitted activities and / or processing consents, and training.	Administrative costs \$30,000 per annum Training \$40,000 in the first year	Medium It is anticipated that some councils will wait to review their plan content as part of the reform of the resource management system.
Participation in the resource consents by Māori, iwi, hapū, communities and NGOs	Ongoing costs	Medium	Low Participation in the resource consent is often on undertaken on a voluntary basis or part of wider interest. The level of involvement will depend on the size, scale and location of the afforestation.
National economic/ general public	There is an opportunity cost to the economy of not using land in the most efficient way, or generating carbon credits at the cheapest possible cost. This cost is fundamentally borne by end users (who consume energy/carbon products).	\$ unknown. Further work is being undertaken on the impact of the proposal on unit supply. Likely impact low to medium.	Low Unknown whether the regulatory impact will result in carbon forestry being displaced to other areas of the country, or slowed or prevented resulting in a higher cost to emitters.
<b>Total monetised costs</b>		First year cost estimates: \$13 m – \$16 m On-going costs: \$12m - \$16m	Low
<b>Non-monetised costs</b>		High	Low

<b>Additional benefits of Option 2 (Local control – rules in regional or district plans, supported by an amended NES-PF) compared to taking no action</b>			
Regulated groups		Exotic carbon forests have NPV of \$40,000 per hectare. The average value of harvested timber at the wharf can be around \$1,300 per hectare.	Medium Valued at 08/07/22: \$75 per tonne of carbon. Harvest timber value as at June 2022, PFOlsen. Estimates from Scion pre the large fires of the 2020 and 2021 fire seasons.
Rural communities	Change in land-use may impact the local economies through changes in demographics and employment.	\$5.9 million - \$7.3 million Assuming annual afforestation at 35,000 hectares per year.	Low
Others (eg, wider government, consumers, etc.)	Environmental benefits including climate change mitigation and adaptation, reduced soil erosion etc.	High	Low
<b>Total monetised benefits</b>		Ongoing benefits: \$5 m - \$7 m	Low
<b>Non-monetised benefits</b>		High	Low

Table 15: An indicative assessment of the costs and benefits of improving wildfire risk management

Affected groups (identify)	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.
<b>Additional costs of the preferred option (Option two - Require all forests larger than 1ha to have a Wildfire Risk Management Plan) compared to taking no action</b>			
Farmers, landowners and forestry companies (plantation and carbon foresters)	<p>Direct costs of preparing a risk management plan would be minimal if the supplied template format was utilised.</p> <p>If Resource Consent was required, the cost of a Fire Risk Management Plan would be a small component of the overall cost.</p> <p>Compliance costs: These costs are mostly associated with compliance with resource consent conditions, permitted activity conditions and councils being able to charge for monitoring.</p>	<p>Resource consent costs: \$2.8 million - \$3.4 million per year. This assumes average forest size of 350 hectares, and an annual afforestation at 70,000 hectares per year.</p> <p>Costs for a resource consent ranging from \$14,000 to \$17,000.</p> <p>Compliance costs will vary depending on the activity and location of the forest.</p>	<p>Very low.</p> <p>Costs associated with a resource consent are determined by each council and service providers. These will vary by region and location of the forest.</p> <p>Low</p> <p>The cost of Forest Fire Insurance is approx. \$10/ha/yr which is what many small forest owners currently rely on.</p>
Local councils Compliance and monitoring costs	<p>Whilst local councils are able to recover costs these do not necessarily cover all associated costs.</p> <p>These costs will be high initially but should reduce slightly each year.</p>	\$60,000 - \$100,000	<p>Low.</p> <p>These costs are based on the NES-PF RIA prepared in 2016, and take into account additional activity.</p>
Regional council costs	These costs are to cover any administrative costs associated with permitted activities and / or processing consents, and training.	<p>Administrative costs \$70,000 per annum</p> <p>Training \$70,000 for the first year</p>	<p>Medium</p> <p>It is anticipated that some councils will wait to review their plan content as part of the</p>



			reform of the resource management system.
District council costs	These costs are to cover any administrative costs associated with permitted activities and / or processing consents, and training.	Administrative costs \$30,000 per annum Training \$40,000 in the first year	Medium It is anticipated that some councils will wait to review their plan content as part of the reform of the resource management system.
Participation in the resource consents by Māori, iwi, hapū, communities and NGOs	Ongoing costs	Medium	Low Participation in the resource consent is often undertaken on a voluntary basis or part of wider interest. The level of involvement will depend on the size, scale and location of the afforestation.
<b>Total monetised costs</b>		Year one costs: \$14m – \$18m Ongoing costs: \$12m - \$16m	
<b>Non-monetised costs</b>		Medium	
<b>Additional benefits of the preferred option (Option two - Require all forests larger than 1ha to have a Wildfire Risk Management Plan) compared to taking no action</b>			
Regulated groups	Protection of forest and other values including carbon credits and harvestable timber  Reduction in annual average direct impact from rural fire on the economy.	<u>Opportunity costs</u> Exotic carbon forests have NPV upwards of \$40,000/hectare. The average value of harvested timber at the wharf can be around \$1,300 per hectare.  In 2019 the annual average cost of rural fires to the NZ economy was \$67m.  The templates will decrease the amount of time and resources	Medium Valued at 08/07/22: \$75 per tonne of carbon. Harvest timber value as at June 2022, PFOlsen. Estimates from Scion pre the large fires of the 2020 and 2021 fire seasons.

	Nationally consistent rules and standards using consistent templates allow certainty.	required to prepare management plans/comply with NES-PF	
Regulators	The ability of councils to have oversight of fire risk management plans will provide greater understanding of the level of wildfire risk across the local and regional landscape. Consistent templates will allow basic compliance with minimal cost.	The templates will decrease the amount of time and resources required to prepare management plans/comply with NES-PF.	Medium
Rural communities	Reducing the occurrence of wildfires will minimise occurrences of soil erosion and potential water pollution, both common impacts related to wildfire events.	Medium	Low
Others (eg, wider govt, consumers, communities etc.)	Reducing the occurrence of wildfires will minimise downstream health impacts, predominantly from smoke inhalation.		As a result of intense smoke and air pollution stemming from the fires, in January 2020 reports indicated that Canberra measured the worst air quality index of any major city in the world. Wildfires produce harmful smoke which can cause fatalities.
<b>Total monetised benefits</b>		Ongoing benefits: \$67m per year	
<b>Non-monetised benefits</b>		High	

## Section 3: Delivering an option

### How will the new arrangements be implemented?

183. Implementation of these proposals will require amendments to the NES-PF, or a new National Environmental Standard. Once the national direction has been Gazetted in 2023, local councils and foresters will need to abide by the standards and rules established in the instrument. The lead agency will remain MPI.
184. A comprehensive implementation approach will be developed once Cabinet has agreed to the policy direction after this consultation. The implementation plan will be developed in collaboration with Māori, industry stakeholders and local government.
185. This approach builds on the implementation plan developed when the NES-PF was introduced and will include but not be limited to identifying and taking into account lessons learnt, needs and expectations of those impacted, and development of appropriate support material.

#### Communication and training

186. A communications plan will also be developed to raise awareness of the amendments to the regulatory framework. Existing guidance and training material will be reviewed and refined to incorporate the changes as well as the development of any sector specific guidance or training identified as part of the engagement with Māori, industry stakeholders and local councils.

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

187. A monitoring and evaluation plan will be developed once a confirmed policy approach has been agreed.
188. At this stage it is anticipated that the monitoring and evaluation will be targeted and seek to address the:
- effectiveness of implementing the changes by the forestry sector and local councils
  - effectiveness of the changes in meeting the objectives with respect to:
    - ensure the environmental effects of all exotic afforestation are effectively managed in a nationally consistent manner
    - enable local councils to control the location and scale of exotic afforestation in local communities, while ensuring national objectives for afforestation are met.
189. In many cases responsibility for delivering monitoring and evaluation will rest with local councils, however information and insights from existing programmes and activities will be used where possible, for example the MfE National Monitoring System that captures high level information regarding local council resource consent activities.

## Appendix 1: Summary of options not taken forward at this stage

190. Table 16 provides a summary of the options considered but not taken forward at this stage. Many of these options are not mutually exclusive and could have been delivered concurrently.

Table 16: Summary of options not taken forward at this stage

Option	Enhances local council ability to manage afforestation	Aligned with national objectives	Cost effective	Aligned with RM system	Avoids perverse outcomes	Timing	Comment
Repeal afforestation part of NES-PF	+	+ / 0	-	+ / 0	-	> 12 months	This approach would provide councils with full control, it would require councils to update plans. Potentially ineffective as all councils would need to go through a plan change process and councils may adopt the approach within the NES-PF.  There may be reduced certainty for the forestry sector which could adversely affect investment.
Define exotic carbon forestry in National Planning Standards	+ / 0	-	+	+	+	~ 12 months	Development of a national definition for exotic carbon forestry could assist councils seeking to introduce rules to manage carbon forests. It would require councils to update plans. Should be considered if a definition for carbon forest is not included within the NES-PF.
Consider forestry within Regional Spatial Strategies	+ / 0	+	+ / 0	+	+	> 3 years	Would enable high-level local planning for suitable forest locations. If taken forward solutions will take a long time to develop and deliver.

Option	Enhances local council ability to manage afforestation	Aligned with national objectives	Cost effective	Aligned with RM system	Avoids perverse outcomes	Timing	Comment
Amend the National Policy Statement for Highly Productive Land (NPS-HPL)	-	-	-	+	-	6 – 12 months	Limited impact as very little afforestation occurs on LUC 1-3.
Ministerial directed plan change under s25A of the RMA	- / 0	+ / 0	+ / 0	+	+ / 0	~ 12 month	Interaction with NES-PF would require clarification. At present it is not clear where exotic carbon afforestation would occur as it not reliant on the plantation infrastructure.
Targeted support for councils	+	+ / 0	+ / 0	+	+ / 0	~ 6 months	Targeted investment could address council capability and capacity but does not address identified gaps within national direction.

Key:

+ Positive impact

+ / 0  
- / 0 Limited/uncertain impact

- no impact/poor outcomes

## Appendix 2: Proposals to address operational and technical issues

Issue	Description	Finding	Proposed amendments to NES-PF	
<b>RIVER CROSSINGS</b>				
D5a	<p>Ford – the definition and intent of this term is not clear in the regulations</p>	<p>A ford is a type of river crossing managed under the NES-PF. A river crossing is defined in the NES-PF as <i>inter alia</i> “a structure that is required for the operation of a plantation forest and provides for vehicles or machinery to cross over a water body”. However, the definition of a ford does not include the word ‘structure’:</p> <p><b>ford</b> “means a hard surface on the bed of a river (that is permanently or frequently overtopped by water) that allows the crossing of a river by machinery or vehicles.”</p> <p><b>Structure</b> takes the definition in the RMA: “structure means any building, equipment, device, or other facility made by people and which is fixed to land; and includes any raft.”</p> <p>NES-PF Guidance says a ford can be a graded river bed or naturally rocky bed, however this is at odds with the definition of a structure.</p>	<p>There has been some confusion about whether fords include natural crossings in rivers that have a hard natural surface, or whether it must include a manmade structure such as a concrete pad.</p> <p>The intent of the regulations is that a ford is classed as a river crossing, which is a manmade structure.</p> <p>Amendments should be made to clarify this, though there is no intent to take a more permissive approach to the construction or use of fords.</p>	<p>Clarify that the definition of a ‘ford’ includes the word structure.</p> <p>Consequent changes to the NES-PF Guidance will be required.</p>

D5b	<p>Fords – Uncertainty about interaction between construction regulations and discharge regulations</p>	<p>It is not clear how the NES-PF provisions on fords interact:</p> <p>Regulation 37 sets the permitted activity conditions for constructing, using, maintaining or removing a river crossing as long as a range of other conditions are complied with. Regulation 46(4) sets those conditions for fords and regulation 46(4)(b) sets the conditions for use.<sup>42</sup> Resource consent is required if that provision cannot be satisfied.</p> <p>Regulation 97 provides discharge conditions across a range of activities. Regulation 97(6)(a) says that vehicles using a ford to cross the wetted riverbed at a rate of up to 20 axle movements per day is not to be regarded as a disturbance of the bed or vegetation in the bed of a perennial river. This use of the term ‘ford’, in a way that seems to contradict regulation 46(4)(b), has caused some uncertainty over interpretation.</p>	<p>Regulation 46(4)(b) sets out the conditions for use of a ‘ford river crossing’, while regulation 97(6)(a) is to address the effects of crossing a ‘wetted riverbed’. Regulation 97(6)(a) is a small exemption to enable single crossings of forestry equipment or vehicles such as silviculture crews in and out of a forest. This exemption would seem to imply that any other crossing of the wetted riverbed is not covered by this regulation.</p> <p>It is not the intention of the NES-PF to permit multiple crossings of a wetted riverbed by many forestry vehicles. Crossings of more than 20 axle movements per day would be up to regional councils to manage.</p>	<p>Amend the regulations to clarify that vehicles fording a wetted riverbed by up to 20 axle movements per day is a permitted activity, and that this refers to the action of ‘fording’ the (natural) wetted riverbed.</p>
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<sup>42</sup> 46(4)(b) use of the ford must not cause a conspicuous change in colour or visual clarity beyond a 100 m mixing zone downstream of the ford for more than 30 consecutive minutes after use of the ford.



D5c	<p>The use of existing fords is permitted under regulation 37(1)(d), but they are explicitly excluded from the definition of existing river crossings in the interpretation.</p>	<p><b>Existing river crossing</b> is defined in the regulations, but exempt fords and temporary river crossings from the definition. Regulation 37(3) allows the use of existing river crossings, and regulation 37(1)(d) permits the construction, use, maintenance or removal of fords. The intent of regulation 37(3) was to ensure that existing crossings were not unnecessarily removed when the NES-PF came into force. There was no intent to constrain the use of existing fords during development of the regulations.</p>	<p>Existing fords should be included in the category of existing crossings. No case has been made for their removal and removing them could cause greater environmental effects than they currently generate. The exemption of fords from the definition of existing river crossings has caused uncertainty for users of the regulations. Intent should be clarified.</p> <p>The use of fords still requires that environmental effects be managed through regulations 39-42.</p>	<p>Amend the definition of '<i>existing river crossing</i>' in regulation 3 to remove the exclusion of fords.</p>
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D5d	Temporary structures for river crossings	<p>The NES-PF permits the use of temporary river crossings for up to 2 months. Engineered structures that can be placed in rivers and removed (for example, Naseby, Slipstream<sup>43</sup> and Blaze-It crossings) are used in some regions as an alternative to a permanent river crossing, particularly as a replacement for a permanent ford. This is a built structure that allows fish passage and can be placed in the river for an extended period (e.g. to carry laden logging trucks) and removed when no longer required for regular use.</p> <p>These crossings could be classed as a temporary river crossing, and permitted, but generally their use will be required for longer than 2 months which is the permitted activity limit for temporary river crossings.</p>	<p>A temporary engineered structure will sometimes be the best environmental option for forestry vehicles crossing rivers. At least one regional council has permitted this type of river crossing.</p> <p>Wider views on including this type of crossing in the regulations are required, particularly from river engineers and ecologists.</p> <p>Matters that must be considered include appropriate placement, term of use, maintenance conditions, fish passage, and consent status.</p>	<p>Amend the river crossing regulations to enable the use of an engineered structure for crossing a river that may be placed in the bed of a river for up to 2 years;</p> <p>AND</p> <p>Seek feedback on the conditions under which this activity may be permitted, and the conditions under which resource consent is required;</p> <p>AND</p> <p><i>Provide submitters on this provision with the opportunity to review any changes to the regulations as a result of consultation.</i></p>
D5e	Dual culverts are not covered by the river crossing regulations	<p>Regulation 46 sets out the permitted activity conditions specific to various classes of river crossings. It includes single culverts and battery culverts. Installation of two adjacent culverts is not covered. In some cases it may be desirable to install a double culvert, for example, 2 x 1200mm culverts.</p>	<p>Single and battery culvert river crossings allow the river to pass under the bridge. The regulations include requirements for ensuring they provide adequate capacity under flood conditions. The regulations have not anticipated the use of double culverts that may be larger than 800mm (a battery culvert may use one 1200mm culvert but not two).</p>	<p>Seek feedback on the practical need for permitting double culverts; the permitted activity conditions that should apply to their installation; and the appropriate threshold for resource consent;</p> <p>AND</p>

<sup>43</sup> A slipstream crossing can be seen at <https://www.nzfoa.org.nz/news/forestry-news/1546-040716foanews-2>

		Although a single culvert may be 3.5m above the river at its highest point, a battery culvert must not exceed 800mm above the river. This means there is no permitted activity rule for larger double culverts, where they don't meet the battery culvert height limit of 800mm.	Information should be sought on the practical need for including double culverts, along with advice from regional councils about a permitted activity threshold.	<i>Provide submitters on this provision with the opportunity to review any changes to the regulations as a result of consultation.</i>
D5f	Flood flow estimation methods incorporated by reference need to be updated so they represent the principal estimation methods recognised by foresters and councils.	<p>Regulation 45 requires flood flow estimations to be calculated for river crossings so they are built to withstand flood conditions. This means knowing the expected flood flow (design peak discharge) and the capacity for the crossing to pass the designed flood flow.</p> <p>The NES-PF specifies the methods for calculating flood flows, and incorporates these by reference in Schedule 2 of the regulations. Specifying the methods ensures that calculations use well-accepted, tested methods to ensure river crossings are safe in-situ and in relation to the downstream environment and communities.</p> <p>When the NES-PF was gazetted in 2017 several flood flow estimation methods were in use, and were incorporated. Since then, improved methods have been published.</p>	<p>Te Uru Rākau – New Zealand Forest Service has received feedback from users of the regulations and NIWA that <i>Henderson and Collins 2018</i> is the latest publicly available national level flood study which is an advancement over <i>McKerchar and Pearson (1989)</i> and <i>Technical Memorandum 61 (TM61)</i></p> <p><a href="https://niwa.co.nz/sites/niwa.co.nz/files/2018177C-H-Flood-Frequency-Final-Report-Part2-NIWA.pdf">https://niwa.co.nz/sites/niwa.co.nz/files/2018177C-H-Flood-Frequency-Final-Report-Part2-NIWA.pdf</a></p> <p>This allows the user to obtain an estimate for a range of flood flows of most rivers and streams in New Zealand. It uses its own digital terrain model that supports their river environment classification (REC, version 1).</p>	<p>Amend Schedule 2 by removing items 3 and 4 and inserting Henderson R; Collins D; Doyle M; Watson J (2018): <i>Regional Flood Estimation Tool for New Zealand Part 2</i>.</p> <p>Add the most recent URL link to this tool at time of drafting.</p>

D5g	Culvert diameter specifications for flow rate may restrict product choice.	<p>Clauses 31(4) and 46(1)(c) define required culvert size by internal diameter. This has reportedly restricted product choice as culverts that would allow the required flow do not meet the specifications, due to the wording of the regulations. It has been suggested that the specifications be changed from a minimum inner diameter to a minimum flow rate, as the diameter of a culvert pipe indicates its ability to carry flow.</p> <p>Regulation 31(4)(a) specifies a 325mm internal diameter, but culverts of this size are not commonly available. This could make this specification redundant and confusing.</p> <p>Regulation 46(1)(c) is unclear as it does not specify whether the diameter is internal or external.</p>	<p>Regulation 46 has a mix of technical and performance-based measures; regulation 31 is only a technical standard. The technical measure sets culvert diameter as the permitted activity threshold. A manufacturer or supplier's culvert either meets or does not meet the diameter.</p> <p>Given the complications of measuring flow rates, and the fact the calculations must be done on a case-by-case basis, this is deemed too complicated for a permitted activity standard, though it could be used to meet a consent condition.</p> <p>Engineering advice is that changes to the regulations could accommodate external diameters that would deliver the same flow but allow greater product choice.</p>	<p>Amend regulation 31(4)(b) to include 375mm internal diameter and 400mm outside diameter culverts;</p> <p>AND</p> <p>Amend regulation 46(1)(c) to include both a 450mm internal diameter or a 500mm outside diameter culvert;</p> <p>AND</p> <p>Seek feedback on whether regulation 31(4)(a) should be amended to provide any clearer direction, given the common availability of culvert products.</p>
<b>TREATY SETTLEMENT AREAS</b>				
D6a	The matters of discretion relating to outstanding water bodies do not allow for consideration of Treaty settlement areas	An outstanding natural water body under the NES-PF may include Treaty settlement areas, but the NES-PF does not allow discretion for them. Matters of discretion for a consent for doing something within or adjacent to an outstanding natural water body in the NES-PF do not allow a council discretion to consider the settlement legislation and values, but they must still apply Part 2 of the RMA.	Where resource consent is required in relation to an outstanding freshwater body, and Treaty Settlement legislation includes rights over outstanding natural water bodies, the NES-PF should enable councils to give effect to those rights.	Amend regulations relating to outstanding freshwater bodies to ensure they give effect to Treaty settlement areas.

<b>NOTICE PERIODS</b>				
<b>Notice periods may be inefficient and in some cases insufficiently calibrated for risk</b>				
<p>Permitted activity conditions in the NES-PF require foresters to give notice to regional councils and territorial authorities of the intended start dates of certain plantation forestry activities. The intent is to make councils aware of key forestry work in their area, and enable them to undertake risk-based compliance monitoring where appropriate. Five permitted activities require notice periods, setting out the location of the activity and the start and finish dates. There are also specific information requirements.</p> <p>In some cases notice is proving more complex than intended, increasing the costs for both foresters and councils, without noticeably improving environmental outcomes. We have identified 5 potential amendments. The proposed change to afforestation notifications in regulations 10 and 11(4) is set out in the section on wilding conifer control.</p>				
D7a	<p>Notice periods are the same in low- and high-risk zones</p>	<p>Many environmental controls in the regulations are based on erosion risk, as defined by the erosion susceptibility classification. Greater controls are required in high-risk zones. However, notice periods are the same for all zones. This means councils will receive a large number of notifications for low-risk activities, and foresters must provide these and juggle work around the need to harvest.</p> <p>This has placed a new (and in some cases onerous) burden on foresters and councils to provide and process documentation, and wait to begin jobs that pose very little risk to the environment. In particular, activities in green and yellow ESC zones are generally low risk.</p>	<p>Foresters and councils have told us that notifications can be a heavy compliance burden. Some foresters have hired new staff to keep up with the administrative requirements of the NES-PF, and some councils find it difficult (or impossible) to respond to notifications in a meaningful way. This is more likely with district councils, who have few responsibilities under the regulations, and principally need to ensure setbacks are correct through afforestation notifications.</p> <p>A number of forestry companies have expressed concern about delays in moving crews while they wait out a notice period, sometimes losing jobs or standing down crews. This is a significant expense, with crew costs being upwards of \$10,000 per day.</p>	<p>Notice times should focus effort where councils need to be aware of forestry work, with time to check plans and initiate monitoring if necessary. <b>We seek your feedback on where notice periods should remain or change.</b></p> <p>1. Areas where particular risks should be managed, and notice periods should remain as they are.</p> <ul style="list-style-type: none"> <li>• Earthworks, quarrying and harvesting in red and orange zones.</li> <li>• River crossings during fish spawning periods.</li> <li>• Activities beside SNAs.</li> </ul>

			<p>More relevant notice periods, with requirements that better reflect risk, will improve the process for councils and forest companies.</p>	<ul style="list-style-type: none"> <li>• Activities upstream of sensitive receiving fresh or coastal waters.</li> </ul> <p>2. The area where risks are low and notice periods could be reduced or waived:</p> <ul style="list-style-type: none"> <li>• Earthworks, quarrying and harvesting in green and yellow zones.</li> </ul> <p><i>Provide submitters on this provision with the opportunity to review any changes to the regulations as a result of consultation.</i></p>
D7b	<p>Notice periods for earthworks regulation 25 – emergency situations</p>	<p>Regulation 25 requires notification between 20 and 60 working days before earthworks begin. There is a minimum notice period of 2 days to enable salvage operations. A salvage operation is defined as the urgent extraction of trees that have been damaged by fire or wind throw. This recognises the need for rapid salvage after fire or storms to a) ensure safety and b) salvage value in a natural disaster.</p>	<p>The provision for emergency works may not be sufficient for the types of emergencies that may occur. Regulation 64(b) enables a shorter notice period (2 days) where harvesting relates to salvage. However, notice provisions have caused issues during two recent events:</p> <ul style="list-style-type: none"> <li>• During the Pigeon Valley fire in 2019, crews needed to relocate harvesting rapidly out of unsafe areas, but had to wait for the notice period (no less than 20 working days);</li> <li>• In early 2020, COVID-19 disrupted log exports, and foresters needed flexibility to move crews, to harvest forests that could fill other markets (for example, local sawmills). This was sometimes held up due to notification requirements. Some crews had to be stood down despite the efforts of companies to keep people working.</li> </ul>	<p>Amend regulations 25(2) and 64(2) to enable councils to waive the minimum 20-day notice period when unforeseen circumstances, such as fire, and economic disruption that triggers force majeure, require foresters to start an operation sooner than 20 working days after notice. This amendment would not include waiving the requirements to meet all permitted activity conditions for that activity. It would not require councils to waive the full notice period.</p>

D7c	Notice periods – joint notifications for contemporaneous activities	<p>The regulations require notifications for earthworks, harvesting and river crossings. In many cases these will be planned as part of a harvest. Council practice varies - some councils allow joint notifications but others require separate notifications.</p> <p>It would be more efficient for foresters and more useful for councils to receive a single notification setting out the activities.</p>	<p>The number of notifications received by councils can be very high, and councils have limited ability to respond. The purpose of harvest notifications is to ensure that councils are aware of harvest activities and can monitor these if required. This is generally achieved by understanding and responding to the harvest work as a whole.</p>	<p>Amend the regulations to clarify that where more than one activity is being notified at the same time for the same forest, a joint notification is allowed.</p>
D7d	Notice periods regulation 64(2)(c)– the frequency of requirements if activity is undertaken continuously	<p>Regulation 64(2)(c) allows forestry companies to notify a council annually of its harvest work if this is an 'ongoing harvesting operation'. This applies to large forests with long-term operations.</p> <p>Practice varies - some councils accept annual notifications while others require individual notifications for any harvest area that is not contiguous in the same forest.</p>	<p>The regulations do not specify what constitutes a harvest area, so it is not clear which regulations councils are relying on if they will not accept annual notifications.</p> <p>Schedule 3(2) requires that harvest plans include a map showing the harvest area boundary, so this should define the area. Schedule 3(5) says the plan must include the timing, duration, intensity and any proposed staging of the harvest. Providing individual notifications for particular areas within the mapped area, where timing is already provided, can be an unnecessary administrative burden for foresters.</p> <p>Where a harvest is ongoing and risk factors have not changed, a pro forma notification does not add value to a council's operations.</p>	<p><b>We seek your feedback on where notification periods should remain or change.</b> In particular:</p> <ul style="list-style-type: none"> <li>• Whether councils are accepting harvest plans covering large areas which may include areas which are not contiguous.</li> <li>• If councils will not accept annual plans, which environmental risks they need to manage with more regular notification (and the regulation they are relying on to require that).</li> <li>• What practical solutions exist to manage differing expectations on harvest notification.</li> </ul> <p><i>Provide submitters on this provision with the opportunity to review any changes to the regulations as a result of consultation.</i></p>



TRAFFIC MANAGEMENT				
D8a	A traffic management condition for the activity of forestry quarrying has been confusing.	Regulation 57 sets requirements for forestry quarry vehicles carrying quarry materials on public roads. The permitted activities were intended to allow for transport of material between related forestry operations that might cross district roads. However, it is the only regulation in the NES-PF that controls vehicle movements on public roads. It is not clear why this one aspect of road use by forestry vehicles is regulated and raises equity issues for forestry, compared to other commercial enterprises using public roads.	Regulation 57 carves out a small part of forestry vehicle use on public roads. Reports are that it is unclear what can be reasonably expected in consent conditions if one cannot comply with regulation 57(c). The effects of using public roads for forest quarrying are the same as for commercial quarrying. Consent conditions should not unduly disadvantage forestry quarrying. Removing this provision will clarify that district councils control district road use equitably for all users.	Amend regulation 57 by removing it.
INDIGENOUS VEGETATION AND SNAs				
D9a	Meaning of stringency for SNAs is changed by the National Policy Statement for Indigenous Biodiversity (NPS-IB).	Regulation 6(2)(b) enables councils to make more stringent rules than the NES-PF, if the rule provides for the protection of SNAs. When the NES-PF was gazetted, SNAs were identified by district councils under section 6(c) of the RMA according to locally determined criteria. The NPS-IB is introducing new criteria for significance and has specific policies for plantation forestry.	Keeping the current stringency provision for SNAs in the NES-PF means that councils can make more stringent rules than the NES-PF, potentially including any productive forest identified under the NPS-IB. The NPS-IB sets a specific management process where productive forest has been identified as an SNA. This could result in competing or doubled-up management requirements through both the NES-PF and the NPS-IB. This would be confusing and potentially burdensome for councils and foresters.	Amend regulation 6(2)(b) so it applies only to SNAs outside the productive area of the forest.  Consequential amendments may be required to other parts of the regulations.  <i>*Note that this amendment is subject to the NPS-IB coming into effect.</i>

D9b	<p>Definition of indigenous vegetation may be unclear.</p>	<p>The NPS-IB will introduce a different definition of indigenous vegetation from the NES-PF. It is not clear whether the term ‘predominantly’ in the NES-PF definition refers to composition, cover or something else. Therefore it may not be sufficiently enforceable.</p> <p><b>Draft NPS-IB: indigenous vegetation</b> means vascular and non-vascular plants that, in relation to a particular area, are native to the ecological district in which that area is located.</p> <p><b>NES-PF: indigenous vegetation</b> means vegetation that predominantly occurs naturally in New Zealand or that arrived without human assistance.</p> <p>The NES-PF definition was taken from the definition of ‘indigenous’ in the Forests Act 1949.</p>	<p>Adopting the NPS-IB definition would increase consistency between national direction instruments, and clarify what type of vegetation is indigenous, without considering composition or cover.</p> <p>For plantation forestry this may place greater reliance on rules to clarify how to manage composition and cover. Forestry occurs at a landscape scale and vegetation assemblages are generally the appropriate scale of vegetation to consider, not the individual plants in the NPS-IB definition. The definition or rules should reflect this.</p> <p>Requiring identification of vegetation based on its district-level indigeneity would require a high level of ecological knowledge which may not be common. However, it does add to the intent of wider protection for significant indigenous vegetation, which is closely linked to its natural range.</p>	<p>Consult on amending the definition of ‘indigenous vegetation’ in the NES-PF to duplicate that in the NPS-IB:</p> <p><b>Indigenous vegetation</b> means vascular and non-vascular plants that, in relation to a particular area, are native to the ecological district in which that area is located.</p> <p><b>We seek your feedback on any practical and operational issues this would raise for councils and foresters, including the specific references to ‘plants’ or ‘ecological districts’.</b></p> <p><i>*Note that this amendment is subject to the NPS-IB coming into effect ahead of amendments to the NES-PF.</i></p>
D9c	<p>Definition of vegetation clearance may be unclear.</p>	<p>In the NES-PF <b>Vegetation clearance</b> (a) means the disturbance, cutting, burning, clearing, damaging, destruction or removal of vegetation that is not a plantation forest tree; but (b) does not include any activity undertaken in relation to a plantation forest tree.</p> <p>Doubt has been raised about the wording of part (b) which may be read as enabling any vegetation clearance as long as it is associated with any activity involving plantation trees, which could potentially cover most activities in a plantation forest.</p>	<p>The need for clause (b) is not clear and provides a potentially wide exemption. Regulations 93-94 set out specific regulations for managing indigenous vegetation within the plantation forestry property; regulation 95 does this for non-indigenous vegetation clearance. The definition of vegetation clearance should not enable vegetation clearance that is otherwise precluded by the regulations. Equally, plantation trees should be harvestable, and this will require some vegetation clearance.</p>	<p><b>We seek your feedback on the need for part (b) of the definition of vegetation clearance, and any negative consequences of amending or removing it.</b></p> <p><i>Provide submitters on this provision with the opportunity to review any changes to the regulations as a result of consultation.</i></p>

D9d	Definition of incidental damage (in relation to indigenous vegetation) may be unclear.	<p>Regulation 93 sets out the permitted activity thresholds for clearing indigenous vegetation within and adjacent to the productive part of the forest.<sup>44</sup> The definition of clearance includes damage.</p> <p>Regulation 93(5) sets out three mutually exclusive elements of what is considered 'incidental damage'. Damage to adjacent vegetation can be unavoidable when felling trees in some situations. The intention is to specify a permitted level of damage. Regulation 93(5)(a) and (b) provide an ecosystem approach and a specific tree/stand measure respectively; regulation 93(5)(c) relates to SNAs.</p> <p><i>In this regulation, incidental damage means—</i></p> <p><i>(a) damage where the ecosystem will recover to a state where, within 36 months of the damage occurring, it will be predominantly of the composition previously found at that location; or</i></p> <p><i>(c) if it occurs in a significant natural area, damage that—</i></p> <p><i>(i) does not significantly affect the values of that significant natural area; and</i></p> <p><i>(ii) allows the ecosystem to recover as specified in paragraph (a).</i></p> <p>Subclauses (a) and (c) have a degree of subjectivity, and it has been noted that this</p>	<p>Often areas of indigenous vegetation within or adjacent to plantation forests, including SNAs, have grown up after the forest or (as is often the case) are indigenous forest remnants that have been deliberately left at afforestation. Even with due care there will be instances where felling trees damages adjacent vegetation.</p> <p>Setting limits signals a need to exercise care and plan felling so it causes minimal damage.</p> <p>While there is a degree of subjectivity in regulation 93(5)(a) and (c), this is almost unavoidable in practical terms. The intent is to limit damage to indigenous vegetation, but ecosystems are complex, living systems and setting precise measures is very difficult. The alternative, requiring resource consent for incidental damage to native vegetation may be disproportional to the effect.</p> <p>Additional information should be sought on how foresters are complying with this regulation and any issues foresters or councils are having in applying it as a permitted activity.</p>	<p><b>We seek your feedback on whether the wording of regulations 93(5)(a) and (c) are causing issues for users, and the nature of those issues.</b></p> <p>We also seek your views on ways in which the definition of incidental damage could be less subjective while still achieving the intent of allowing minor damage to indigenous vegetation under limited circumstances .</p> <p><i>Provide submitters on this provision with the opportunity to review any changes to the regulations as a result of consultation</i></p>
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<sup>44</sup> [https://www.legislation.govt.nz/regulation/public/2017/0174/latest/DLM7372178.html?search=sw\\_096be8ed818902bf\\_drinking\\_25\\_se&p=1](https://www.legislation.govt.nz/regulation/public/2017/0174/latest/DLM7372178.html?search=sw_096be8ed818902bf_drinking_25_se&p=1)

		definition requires a degree of judgement not appropriate for a permitted activity.		
<b>EROSION SUSCEPTIBILITY CLASSIFICATION<sup>45</sup></b>				
D10a	The process for remapping an ESC polygon is disproportionate to the risk it seeks to manage	The ESC is a national tool mapped at a 1:50,000 scale. This means it may over- or under-risk erosion susceptibility at a forest/farm scale. a process was developed for remapping ESC polygons where a party disagreed with the ESC. <sup>46</sup> The process is time consuming and expensive for all parties and requires national level changes to the ESC to be gazetted.	<p>Te Uru Rākau – New Zealand Forest Service has received only one request for changes to the ESC, and that was not taken forward. We are aware of:</p> <ul style="list-style-type: none"> <li>• companies getting resource consent for land that is not red zone when mapped at a 1:10,000 scale, to avoid the time and expense of changing the ESC.</li> <li>▪ councils agreeing that resource consent is not required once land is remapped by a suitably qualified mapper.</li> <li>▪ councils and other interested parties disagreeing with ESC zoning in specific instances, and seeking broader changes to the ESC (though any party may apply for remapping).</li> </ul> <p>Enabling discretion to waive, or require, resource consent when land has been remapped by a suitably qualified mapper will maintain the intent of the ESC to indicate erosion risk while removing a burdensome process.</p>	Amend the regulations to clarify that a council may waive resource consent, or require it if satisfied that remapping by a suitably qualified person indicates that at a 1:10,000 scale the land in question fits within a different erosion susceptibility zone to that recorded in the ESC.

<sup>45</sup> See Appendix F for more analysis relating to the Erosion Susceptibility Classification.

<sup>46</sup> <https://www.mpi.govt.nz/dmsdocument/28542-Process-to-update-the-NES-PF-ESC-on-a-case-by-case-basis>

SEDIMENT MANAGEMENT				
D11a	Some councils require separate discharge permits for activities the NES-PF permits.	Regulation 97(1) permits discharges associated with permitted forestry activities if all other activity conditions are complied with. The rest of the regulation sets specific restrictions on discharges.  Foresters report that some councils accept activities in line with this requirement, while others require separate discharge permits. Under regulation 6(1)(a) councils may require this if they have a rule in their plan that is more stringent than the activity rules, or if they develop such a rule using the appropriate process and justify it through a section 32 evaluation report.	Regulation 97(1) permits discharges as long as other requirements are met. Councils should not be requiring separate discharge consents unless they can justify this through a more stringent rule. This does not appear to be a lack of clarity in the regulations, except insofar as regulation 97 is near the end of the regulations, and may not be apparent to users if they are not aware of it.	Amend the regulations to clarify that regulation 97(1) applies to permitted activity regulations for each activity,  AND  Te Uru Rākau – New Zealand Forest Service and Ministry for the Environment to develop clear guidance on applying discharge permits to permitted activities.
D11b	2-stage regulations to manage sediment.	The term 'reasonable mixing' occurs as part of five 2-stage regulations which set requirements for sediment. The intent of the regulations is to ensure that sedimentation of waterways does not cause downstream effects that are more than minor. These effects are described in regulations 26, 56(1), 65, 74(6) and 90. They require that 'after reasonable mixing', sediment does not cause specific downstream effects. <sup>47</sup> That is, they set out the effects that must be	Guidance can clarify these 2-stage regulations, but users will still need to exercise judgement over their actions to reduce sediment (as required through other regulations), to avoid these effects.  However, minor changes to clarify the intent of the regulations could ensure users do not think the regulations are defining 'reasonable mixing' or	Amend regulations 26, 31(1)(a and b), 56(1), 65, 74(6) and 90 as required to ensure their intent is clear.

<sup>47</sup> a) any conspicuous change in colour or visual clarity; b) the rendering of fresh water unsuitable for consumption by farm animals; c) any significant adverse effect on aquatic life. These effects are the same as those covered in section 70(1)(d, f and g) of the RMA. Effects 70(1)(c) and 70(1)(e) are not caused by sediment, so do not appear in these regulations.

		<p>avoided, while allowing sediment to enter waterways.</p> <p>Feedback is that sometimes these regulations are read as meaning all sediment must be kept out of waterways.</p> <p>Regulation 31 also has two stages. It seeks to avoid the effects set out in regulation 31(1)(a and b). It can be misread to mean <i>all</i> soil and sediment must be stabilised or contained.</p>	<p>requiring 'all sediment to be stabilised or contained'.</p>	
<b>HEALTH &amp; SAFETY</b>				
D12a	<p>The Health and Safety exemption for slash removal is unclear in regulations 20(2), 69(4) and Schedule 3(5)(c)(3)</p>	<p>The regulations have a range of exemptions for removing slash where 'to do so would be unsafe'. This has led to some questions over what constitutes 'unsafe'.</p> <p>'Unsafe' is a subjective term, and operators are continually required to make judgement calls on site, and sometimes under pressing conditions. Worker safety is a crucial factor in decision-making so clarity is essential. The forestry sector has put considerable emphasis on worker safety in recent years, and in some instances environmental outcomes may be compromised by health and safety requirements.</p>	<p>Although greater clarity about the words "unless to do so would be unsafe" is desirable, in our view this cannot be achieved through a regulatory framework that applies to many different sites and forestry operations.</p> <p>The Health &amp; Safety at Work Act requires the taking of reasonably practicable steps to eliminate risk or, if it can't be eliminated, to minimise it. The Forestry Industry Safety Council was established in response to the Independent Forestry Safety Review and delivers a wide programme of safety training and resources to the sector.</p>	<p>No amendments are proposed, but <b>we seek your feedback</b> on additional information or resources that could help foresters and councils make decisions balancing environmental outcomes with worker safety when managing slash.</p>

CHARGING TO MONITOR PERMITTED ACTIVITIES				
D13a	<p>The regulations about charging for monitoring permitted activities could clarify that there is no ability to charge for receiving notifications</p>	<p>The Year One review found that some councils thought the power to charge for permitted activities did not cover all associated costs, while foresters had a range of concerns about charging practices in some councils, including failure to apply a risk-based approach in some cases.</p> <p>Guidance on regulation 106 states:</p> <p>It is the on-site monitoring of earthworks, river crossings, forestry quarrying and harvesting that should be the focus of regulation 106. Monitoring the permitted activities in regulation 106 will not cover the time spent before the activity began, such as:</p> <ul style="list-style-type: none"> <li>• Reviewing management plans to determine whether they are complete or to better understand the activity (although reviewing may inform a more focused and efficient site visit – see section 5.3 above), and</li> <li>• Determining the activity status of a plantation forestry activity (ie, checking documentation against NES-PF requirements and conditions).</li> </ul>	<p>The intent of the charging regulations<sup>48</sup> is to enable councils to charge for monitoring activities after a risk-based approach has been applied. Given the low risk of many forestry activities in lower-risk ESC zones, and the limited compliance resources of councils, it was not the intention that all forestry activities would be monitored (particularly those not monitored prior to the NES-PF coming into force).</p> <p>Proposed amendments to the NES-Freshwater (regulation 75 of the exposure draft) clarify what local authorities may and may not charge for monitoring. A similar clarification could apply to forestry activities.</p> <p>Some councils are concerned that they do not have the resources to monitor forestry activities appropriately, if they cannot charge to triage notifications. This complex issue bears continued scrutiny, but at present there is no evidence base to demonstrate that additional charging would improve environmental outcomes.</p>	<p>Amend the regulations to include a similar clarification to charging as proposed in the amendments to the NES-Freshwater:</p> <p><i>For example, “a local authority must not charge to receive or review notification of intended permitted activity work (including earthworks, quarrying and harvest management plans).”</i></p>

<sup>48</sup> See chapter 3 <https://www.mpi.govt.nz/dmsdocument/28092-Resource-Management-National-Environmental-Standards-for-Plantation-Forestry-Regulations-2017-consenting-and-compliance-guide>

