

11 August 2015

Stuart Miller
Spatial, Forestry and Land Management
Ministry for Primary Industries
PO Box 2526
Wellington 6140

Dear Stuart,

Re: Auckland Council Submission on Ministry for Primary Industries Proposed National Environmental Standard for Plantation Forestry

Please find attached Auckland Council's submission on the proposed National Environmental Standard for Plantation Forestry (NES-PF), as released in June 2015.

This submission was considered and approved by Auckland Council's Governing Body at the 6 August 2015 Regional Strategy and Policy Committee, with the following caveats:

- a) approve Auckland Council's attached submission, including any amendments sought by the committee, on the proposed National Environmental Standard for Plantation Forestry produced by the Ministry for Primary Industries, noting that Council has been unable to consult with the Council's Rural Advisory Panel due to the timeframe.
- b) request an extension to the submission period by one month to allow consultation with the Rural Advisory Panel to occur.

Auckland Council believes the proposed NES-PF will lower present environmental standards that have been identified in our current and proposed statutory plans. As a consequence, the proposed NES-PF does not sufficiently enable Auckland Council to address local environmental conditions considered of significance, within the new framework proposed.

Please direct any enquiries to Jim Quinn, Chief of Strategy, phone [REDACTED] or email [REDACTED]

Yours sincerely



Councillor George Wood
Chair of the Regional Strategy and Policy Committee

[REDACTED]



Proposed National Environmental Standard for Plantation Forestry Template for Submitters

We would like to hear your views on the proposed NES-PF.

Please feel free to use this template to prepare your submission. Once complete please email to NES-PFConsultation@mpi.govt.nz.

As stated in section 8.2 of the consultation document, your submission must include at least the following information:

- your name, postal address, phone number and, if you have one, email address
- the title of the proposed standard you are making the submission about
- whether you support or oppose the standard
- your submission, with reasons for your views
- any changes you would like made to the standard
- the decision you wish the Ministers to make.

When commenting on specific draft rules, please be as clear as possible which rule you are referring to and provide a reference e.g. to the relevant page number, heading or text.

For more information about how to make a submission, please refer to section 8 of the consultation document.

Contact details

Name:

Tyler Sharratt

Postal address:

[Redacted]

Phone number:

[Redacted]

Email address:

[Redacted]

Are you submitting on behalf of an organisation? Yes No

If yes, which organisation are you submitting on behalf of?

Auckland Council

If you are a forest owner/manager, what size of forest do you own/manage (in hectares):



N/A

Privacy Act 1993

Where you provide personal information in this consultation MPI will collect the information and will only use it for the purposes of the consultation. Under the Privacy Act 1993 you have the right to request access and correction of any personal information you have provided or that MPI holds on you.

Official Information Act 1982

All submissions are subject to the Official Information Act 1982 and may be released (along with the personal details of the submitter) under the Act. If you have specific reasons for wanting to have your submission or personal details withheld, please set out your reasons in the submission. MPI will consider those reasons when making any assessment for the release of submissions if requested under the Official Information Act.

Please indicate below if you wish your personal details to be withheld:

Please withhold my personal details where submissions are made public

Please withhold my personal details in response to a request under the Official Information Act 1982

Questions for submitters

The questions for submitters that are included throughout the consultation document are provided below. We encourage you to provide comments to support your answers to the questions below.

1. Do you think section 2.1 and 2.2 of the consultation document accurately describe the problem facing plantation forestry?

Please provide comments to support your views.

We firstly make a general but important point not directly related to to this question.

Considerable effort and resources have recently gone into developing forestry rules through the Proposed Auckland Unitary Plan process. As such, Auckland Council's regulatory environmental protection for plantation forestry is up-to-date and is specific to the Auckland context. The proposed NES-PF, even while allowing councils to be more stringent in certain areas, will still fall short of Auckland Council's desired level of environmental standard.

The proposed NES-PF will require Auckland Council to go through the plan change process which would come at a considerable cost to Auckland Council and the ratepayer, both in terms of time and money. Forestry operators will also have to dedicate further time responding to these issues.



With regard to question 1, Auckland Council does not see any significant issues in attempting to standardise rules applying to forest harvesting. However, there is a huge issue trying to standardise the rules applying to earthworks associated with harvesting when there is such a variety of soil types across NZ. The Central Plateau and Bay of Plenty's pumice soils for example, drop out of suspension with little need for large volume controls (ponds) whereas the clay soils do not drop out.

Auckland Council has identified two main issues that are not addressed:

A. The classification of Auckland soils and the associated risk of erosion and adverse environmental effects.

The proposed NES-PF discusses the Erosion Susceptibility Classification (ESC) and bases the rules and need for consent on the environmental risk of a site as determined by the ESC. The main issues we have identified with the ESC are:

- a) The assumption about the ESC stated in Box 11, with regard to forest cover being similar to pastoral cover. Box 11 states that the risk of erosion in a plantation forest is less than pasture, over the life cycle of a plantation forest. This seems to 'average out' the erosion risk within a forestry block, which does not represent the environmental risk of sedimentation directly after deforestation.
- b) Box 11 also states that the post-harvest period is the highest risk time for erosion and that is similar to the erosion risk of pasture. Given the topography of forest blocks, slash cover and timeframes involved, this seems a misguided comparison.

Overall, the concern is that the ESC has made a very large assumption with regard to the erosion risk of pasture versus forestry.

The ESC has then been used to classify areas of NZ as low, moderate, high or very high in terms of the risk of erosion. Auckland Council is concerned that the risk here does not take into account the *effects* of the erosion. Areas such as Gisborne have been identified as very high risk and this may have a lot to do with the prevalence of sand and mudstone which is easily eroded. Auckland has been largely identified as low risk, despite the high prevalence of fine particle silt and clay that dominates the region. While it may not be as easily eroded as sandstone, the adverse environmental effects of clay particles being discharged into either a freshwater stream or low energy estuarine environment are much greater than the effects of sand stone being washed into high energy marine environments on the east coast.

The Auckland experience is that the harvesting and associated earthworks phase can cause significant adverse effects when undertaken in close proximity to sensitive estuarine receiving environments. Most commercial forests in Auckland discharge to these low energy systems. As such, Auckland Council is concerned the proposed changes to managing forestry nationally will lessen the standards that have been operating in Auckland. The forest industry in Auckland have been working with Auckland Council Technical Publication No. 223, *Forestry Operations in the Auckland Region – A Guideline for Erosion and Sediment Control*, September 2007 (TP223) for 10 years. This has resulted in sediment discharges being managed to a standard that is considered appropriate in order to meet the ongoing expectations of improved water quality for the region.

B. Lack of a national guidance document to accompany the proposed NES-PF.

MPI states that environmental practices among commercial forest owners are generally good because of the voluntary adoption of industry environmental codes of practice. While this is true in some areas, it is certainly not the case in most (as in Auckland's experience). Many of



the compliance issues that councils face are as a result of the lack of a guidance document or technical publication for erosion and sediment controls.

Council is concerned that having designed a guideline (TP223) specifically for forestry in Auckland, with forestry industry input (and which has gained acceptance from the Auckland based forestry industry), that this document will now effectively become redundant.

Council's current rules require an ESC plan to be submitted and it is assessed for suitability against TP223. If the controls are not up to standard, the plan is deemed inappropriate and amended controls are suggested to the applicant. Council is concerned that without a standard, reference or any kind of minimum specification within the proposed NES-PF PA criteria, landowners/foresters will be able to implement any kind of control, regardless of efficiency, suitability or performance outcomes.

The New Zealand Forest Owners Association (NZFOA) and Rayonier's guidance documents are 'big picture' and have no specific technical advice regarding management of Auckland's clay soils. Auckland's soils require a minimum of 2% volume-sized retention ponds for the contributing catchment, in order to provide any measurable benefit regarding sediment control. Also, the NZFOA document refers the reader back to the relevant council for specific guidance regarding regional rules and/or suggests that if a harvest company has their own guidelines, then they should use them.

2. Do you consider that the conditions for permitted activities will manage the adverse environmental effects of plantation forestry?

Please provide comments to support your views.

The key element is that the ESC is a management plan and that means it has to demonstrate transparently how certain environmental objectives are met. But the PA rule itself does not set up any clear standard. Rather it only states 'assesses and addresses the operational risks to the environment.'

Other specific issues with the Earthworks PA criteria include:

- Reference to "road widening and realignment is on slopes over 35 degrees..."
 - This seems unnecessary or impractical, as heavy machinery will not be able to operate on such steep slopes.
 - This criteria is located within a PA rule which allows for works in the green, yellow and orange areas which are all supposed to be within areas that are less than 25 degrees in slope.
- How will slope be calculated?
 - The PA rules for the orange areas depend on whether the slope is ≤ 25 degrees. How will that slope be quantified? For example if only one road within a large area of works breaks that threshold, does the entire site then become subject to the rules? Will there be a percentage cut off? For example, in Auckland Council's Technical Publication 90 – Erosion and Sediment Control, 10% of a site must be over 15 degrees before this rule is triggered. A further question is what this slope refers to - is it the contributing catchment? Is it the area where the physical works are to occur? Is it the slopes either side of the works? These are all sources of ambiguity that will lead to lengthy discussions between regulators and landowners.

Please also see previous comments.



3. Are the conditions for permitted activities clear and enforceable (see appendix 3 of the consultation document)? Can you suggest ways of making the rules clearer and more enforceable?

Please provide comments to support your views.

There are too many issues that are open to interpretation, without definition and lack of clarity. For example, one permitted activity rule has the following wording:

Whenever safe and practicable to do so, remove potentially unstable slash that has the potential to mobilise under flood flows from water bodies, and:

- block or dam stream flow; or
- divert flow into stream banks in a way that is likely to cause erosion; or
- damage downstream infrastructure, property or receiving environments; or
- cause significant adverse effects on aquatic habitat

The terms 'whenever safe and practicable' and 'potentially unstable' are highly subjective and open to interpretation. This will lead to lengthy discussions between regulators and landowners/foresters.

Other specific issues include:

- The proposed riparian setbacks for planting are 5 metres for streams less than 3 metres wide and 10 metres for streams greater than or equal to 3 metres wide (except where a smaller setback is required to meet the conditions of a regional pest management strategy).

The proposed setbacks are for perennial rivers or streams only and many of the streams in the Auckland region are not only less than 3 metres wide, but are also intermittent (flowing only at certain times of the year). Research has shown that these streams have significant biodiversity value and the Proposed Auckland Unitary Plan (PAUP) specifies a minimum 5 metre riparian setback for intermittent streams. This should be reflected in the proposed NES-PF.

There also needs to be a much tighter definition of what that perennial rivers or streams means, as currently it includes '...a series of discrete pools that provide habitats for the continuation of the aquatic ecosystem,' but provides no indication as to the size of these pools. Further to the above, the operation section of the earthworks PA rule gives some protection to ephemeral streams, which is not carried through in any of the other relevant PA rule areas.

The general conditions for vegetation clearance and disturbance state that "Indigenous vegetation may be damaged, destroyed or removed provided it ... is incidental damage to riparian vegetation that will readily recover within five years." The term 'incidental damage' is considered ambiguous and is not defined. The stated period of five years will still allow for significant adverse effects to occur.

Please also see previous comments.

4. Are the matters where local authorities can retain local decision-making appropriate (summarised in Table 2 and Table 4 and provided in detail in Appendix 3 of the consultation document)?

Please provide comments to support your views.



Auckland Council feels that there needs to be some more ability for local regulators to have control over PA criteria, with regard to the risk of adverse environmental effects and that reflect local conditions.

Councils ability to apply greater stringency is not only tightly constrained by the proposed NES-PF limiting the areas where councils can be more stringent, but will also require a plan change process at considerable cost to Council, with no added value

The rules in the proposed NES-PF need to consider differences in soil types. This is especially important for Auckland, particularly north Auckland and areas in Northland. This is because the predominant soil order in these areas is referred to as Ultic soils, according to the New Zealand Soil Classification (NZSC) system (Hewitt, 1998, Molloy, 1993). The word 'Ultic' implies ultimate soil formation and the Ultic soils are the oldest soils in New Zealand. The parent material of the Ultic soils are dominated by Waitemata Group sediments and Mudstone which form highly weathered and leached Ultic soils (formerly known as northern yellow-brown earths) (Taylor, 1954). The soils are therefore predominantly clay-rich with low permeability, particularly when wet. While few Ultic soils are classed as being well-drained, the majority are imperfectly to poorly drained and are susceptible to compaction when disturbed (Curran-Cournane et al., 2013). That said, the topsoils of Ultic soils are far more permeable and better structured than the subsoils, which emphasises the importance of minimising topsoil disturbance. The high clay content of the soils can cause relatively high amounts of fine sediment to be generated by surface erosion.

The sediment yields generated from harvesting activities on Ultic soils have been quantified in Auckland across several catchments. For example, in Redwoods Forest (Mahurangi), sediment yields were reported as 172 t/km²/yr and 241 t/km²/yr pre and post-harvesting activity, respectively (Hicks et al., 2009). In contrast, at Weiti Forest (Okura), sediment yields totalled 34 t/km²/yr across the full pre and post forest harvesting period (Curran Cournane et al., 2013, Hoyle, 2015). Differences in sediment yields can be attributed to various sediment generating influencing factors, such as geology, slope and rainfall. The former attributes are particularly important in Auckland which experiences high rainfall levels and is known to have more erodible lithology with its clay-rich soils and challenging terrain. All of these characteristics result in the generation of significantly higher sediment yields (Hicks et al., 1996).

The loss of sediment from land to water is arguably the most significant adverse pollutant entering water bodies and fine sediment loss from clay soils is far more detrimental as it takes longer to settle out of suspension (McDowell et al., 2008, Hughes et al., 2012). Considering that Auckland is a very thin isthmus and no mainland location in the region is greater than 20km from the coast, the activities on land can have varying consequences to the receiving environment if not well managed. Fine clay particles can smother feeding and spawning habitats, reduce visibility for in-stream biota, affect oxygen levels in waterways, alter temperature and clog the gills of fish. Consequently, greater protection of areas susceptible to sedimentation with clay needs to be considered.

As a solution, Auckland's TP223 guideline for erosion and sediment control for forestry operations exists to suit the challenges that meet the region's requirements to manage, amongst other things, these clay-rich soils during harvesting activity (ARC, 2007).



5. **Will the environmental risk assessment tools (the Erosion Susceptibility Classification, the Wilding Spread Risk Calculator, and the Fish Spawning Indicator) appropriately manage environmental effects as intended (see section 3.5 of the consultation document)?**

Please provide comments to support your views.

Please see previous comments above regarding the ESC.

6. **Do you have any comments about any particular activity or draft rule (see appendix 3 of the consultation document)?**

Please include reference to the rule you are referring to.

Earthworks:

Within the PA rules for earthworks there is reference to a slope of <25 degrees. However, there is no guidance on how this is measured or calculated. For example, if one track within a large forestry area is over that slope, does the whole site need consent or just that one portion? In the Auckland Council's Sediment Control Plan, the current cut off is 15 degrees. The definition states that 10% of the site must be over that slope for before the need for consent is triggered. Some guidance on that would be useful to avoid ambiguity during discussions on whether consent is or is not required.

There is a requirement for an ESC to be submitted to council if it is requested. It should be a requirement to submit it with the notification. That will save councils time in chasing the ESC and ensure that one has been drafted by the landowner/forester. Further, as stated earlier there are no guidelines to measure an ESC against or any standard to meet. Therefore, any plan (once submitted) is meeting the PA criteria regardless of whether or not it is appropriate or will control erosion and sedimentation.

The definition of perennial rivers or streams needs to be tightened further, e.g. guidelines of the size of qualifying pools currently referred to in the definition.

Further to the above, in the operation section of the earthworks PA, the criteria gives some protection to 'ephemeral' streams. This is not defined and leaves a gap for intermittent streams, that are not defined or referenced either.

Road widening:

The PA criteria discusses road widening on slopes over 35 degrees. Why is that a PA limit when it is only a PA if the works are on a slope under 25 degrees?

River crossings:

The PA criteria for river crossings is incredibly complicated, numerous, ambiguous and confusing to understand.

Threatened species:

The proposed general conditions to identify and protect threatened or at risk species are considered to be insufficient. Currently, the general conditions require that "Where indigenous bird species with a classification of Nationally Critical or Nationally Endangered (from the Department of Conservation's Conservation Status of New Zealand Birds, 2012



(Robertson et al, 2012)) are known to nest in areas where forestry operations are planned or under way, forest owners must have procedures to...”

This not only excludes any threatened species that is not a bird that may inhabit plantation forest or rely on plantation forests for feeding/roosting/nesting (such as lizards, bats and invertebrate species), but also excludes all species that are categorised as Nationally Vulnerable.’ Further, it excludes all categories that come under ‘At Risk’ species, which includes declining and relict populations.

There are plantation forests in the Auckland region where bats are known to inhabit or rely on the area for feeding (e.g. Riverhead) and there are likely to be other populations inhabiting or using plantation forest areas which are yet to be identified.

There are a number of lizard species which are known to inhabit plantation forests including pine forest, both in Auckland and nationally. The majority of these lizards are either Nationally Threatened, At Risk and/or regionally threatened in Auckland.

Numerous bird species that are either threatened or at risk both regionally and nationally will be excluded by confining the general conditions to apply to only Nationally Critical or Nationally Endangered bird species.

It is recommended that the general conditions should be extended to require that where a site is known to, or is likely to provide habitat (either for roosting/nesting or as a reliable feeding source) for Threatened or At Risk species that:

- a) survey and monitoring is implemented to confirm the presence and/or abundance of a species, and identify requirements to protect the species and its habitat (where habitat protection is appropriate); and,
- b) that the necessary measures are implemented to protect these sites from disturbance either by avoiding susceptible areas or by undertaking the activity outside of the nesting season.

Fish Spawning Indicator:

Protection for native fish needs to extend to more than just reproductive life stages. The removal of plantation forests and damage of riparian cover has the potential to cause substantial damage to native fish habitat.

7. Is the NES–PF the best option to meet the assessment criteria (in Box 13 of the consultation document)?

Please provide comments to support your views.

No comment.

8. Have the expected costs and benefits of the NES-PF been adequately identified (see section 4.3 of the consultation document)?

Please provide comments to support your views.

It is difficult to predict the costs associated with the proposed changes, mainly due to a lack of knowledge as to whether a Land Use Capability trigger will be used. This may result in some smaller harvest areas requiring consent which are currently able to be harvested under



PA rules. Many of the smaller harvest sites could then become too costly to harvest, however Auckland Council does not have enough information to work that out at present.

9. Are there any issues that may affect the successful implementation of the NES-PF (such as decision-makers applying the permitted baseline test more frequently)?

Please provide comments to support your views.

Please see earlier comments relating to soils in Auckland. It may result in there being no adequate sediment control measures for clay soils, which will have negative implications for Auckland's environment.

10. Please describe any risks or opportunities that you consider have not been identified or addressed in the proposal.

There is a gap between the NPS-FM (potentially more stringent) coming on line (implementation due December 2025) and the proposed NES-PF that may result in significant adverse effects on sensitive receiving waters in the interim 10 years.

11. Will the proposed NES-PF support regional councils to implement the NPS-FM (see section 6.1 of the consultation document)?

Please provide comments to support your views.

Please see earlier comments regarding the ESC and Auckland's soils. The provision to apply more stringent rules will be allowed where:

- a limit has been set for a freshwater management unit that is not being met and forestry activities are a source of the contaminant within that freshwater management unit;
- significant values of an outstanding water body that have been specified (for example, in a Water Conservation Order or a regional plan) and forestry activities would have an adverse effect on those values.

This does not carry through to the table on page 98 of the consultation document – matters where councils can apply more stringent rules. This table needs to be updated to include all the areas where councils can be more stringent.

12. What resources or other implementation activities would help you to prepare for and comply with the proposed NES-PF (see section 7 of the consultation document)? How should these activities be delivered (for example, training, online modules, guidance material)?

No comment.



13. Are there any other issues that you would like to raise?

Please see above.

References

- ARC 2007. Forestry operations in the Auckland region. A guideline for erosion and sediment control. Technical Publication 223. Auckland Regional Council- September 2007.
- Curran-Cournane, F., Fraser, S., Hicks, D. L., Houlbrooke, D. J. & Cox, N. 2013. Changes in soil quality and land use in grazed pasture within rural Auckland. *New Zealand Journal of Agricultural Research*, 56, 102-116.
- Curran Cournane, F., Holwerda, N. & Mitchell, F. 2013. Quantifying catchment sediment yields in Auckland. Auckland Council Technical Report. TR2013/042.
- Hewitt, A. E. (ed.) 1998. *New Zealand Soil Classification*: Manaaki Whenua Press: Lincoln, New Zealand.
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- Hicks, D. M., Hoyle, J. & Roulston, H. 2009. Analysis of sediment yields within the Auckland Region. Prepared by NIWA for Auckland Regional Council. Auckland Regional Council Technical Report TR 2009/064.
- Hoyle, J. 2015. Weiti Stream sediment yield trends: Pre- versus post-harvest. Unpublished NIWA report.
- Hughes, A. O., Quinn, J. M. & Mckergow, L. A. 2012. Land use influences on suspended sediment yields and event sediment dynamics within two headwater catchments, Waikato, New Zealand. *New Zealand Journal of Marine and Freshwater Research* <http://dx.doi.org/10.1080/00288330.2012.661745>.
- McDowell, R. W., Houlbrooke, D. J., Muirhead, R. W., Muller, K., Sheperd, M. & Cuttle, S. P. (eds.) 2008. *Grazed pastures and surface water quality. Chapter 3 Sediment*: Nova Science Publishers, Inc., New York.
- Molloy, L. (ed.) 1993. *Soils in the New Zealand Landscapes: The Living Mantle*, *New Zealand Society of Soil Science*: New Zealand Society of Soil Science, Lincoln University, Canterbury, New Zealand.
- Taylor, N. H. 1954. *General survey of the soils of the North Island, New Zealand. Soil Bureau. Bulletin (n.s.) 5*, New Zealand Department of Scientific and Industrial Research.

Your ref:
Our Ref: A2124975



11 August 2015

Ministry for Primary Industries
NES-PFConsultation@mpi.govt.nz

Dear Sir/Madam

Bay of Plenty Regional Council's submission to the Ministry for Primary Industries – National Environmental Standard for Plantation Forestry

Thank you for the opportunity to comment on the above submission. The Bay of Plenty Regional Council does not wish to be heard on this submission.

For matters relating to this submission, please contact Kataraina Belshaw at [REDACTED] or [REDACTED]

Our Organisation

The Bay of Plenty Regional Council is responsible for the sustainable management of resources within the Bay of Plenty region. Our role is determined by Central Government through statutes such as the Local Government Act and the Resource Management Act, and is different from that of territorial authorities (district and city councils). Some of our key roles are:

- Regional planning for land, water quality and air quality;
- Setting environmental management policies for the region;
- Allocation of natural resources;
- Flood control;
- Natural hazard response;
- Soil conservation;
- Pest control / biosecurity;
- Public transport;
- Strategic transport planning;
- Regional economic development; and
- Strategic integration of land use and infrastructure.

Bay of Plenty Regional Council

BOPRC ID: A2124975

Working with our communities for a better environment

Summary

Just over 17% of New Zealand's plantation estate is in the Bay of Plenty. At almost 300,000 ha, it covers more than 50% of the land used for primary production in the region, making it a significant land use. Council supports the intent to provide more certainty to the forestry sector to undertake their activities, as forestry is regarded as a sound land use in many parts of the Bay of Plenty.

It is the view of Council that the standard is a pragmatic and workable mechanism that supports forestry as a land use. Council would like to comment on specific elements of the standard as currently drafted and seeks that these matters be considered further before the NES is progressed.

Please find our detailed comments attached. We trust you find them constructive.

Yours sincerely



Fiona McTavish
General Manager Strategy

THE BAY OF PLENTY REGIONAL COUNCIL'S SUBMISSION TO THE MINISTRY FOR PRIMARY INDUSTRIES – NATIONAL ENVIRONMENTAL STANDARD FOR PLANTATION FORESTRY:

Reference	Position	Recommendation
General support for proposed standard	Council generally supports the proposed approach taken in the development of the National Environmental Standard for Plantation forestry. Council has the following feedback in regards to specific elements of the standard.	Support.
Question 1 in NES consultation document. Do you think section 2.1 and 2.2 of the consultation document accurately describe the problem facing plantation forestry?	Council acknowledges the intent of the NES PF to resolve industry concerns relating to variation in planning documents and uncertainty for the industry whilst also seeking to secure improved environmental outcomes and to encourage development of the forestry sector.	Support.
Question 2 in NES consultation document. Do you consider that the conditions for permitted activities will manage the adverse environmental effects of plantation forestry?	The permitted activity conditions variously provide for the preparation of erosion and sediment control plans (ESCPs), harvesting plans (HPs), and quarry management plans (QMPs) and engineering plans for river crossings. These generally need to be provided to local authorities within certain timeframes before activities start, or on request. However, there is no requirement for local authority approval or certification of the plans. Similarly, there is no express ability for a local authority to compel someone to amend a plan that is deemed to be inadequate, so long as it satisfies the minimum requirements set out in the relevant permitted activity conditions.	Consideration should be given to adding additional mechanisms in the NES PF which provide for the approval or certification of engineering and management plans, including verification of actual maps used to determine permitted status. The requirement to submit the various plans should be a requirement, rather than upon request, and should be supplied at the same time as the notification of works requirements of the NPS PF.
Question 3 in NES consultation document.	Many of the NES PF's permitted activity conditions involve elements of subjective evaluation; this is a significant issue in relation to many of the NES PF's draft rules that means:	Remove subjective discretion from permitted activity conditions

Reference	Position	Recommendation
<p>Are the conditions for permitted activities clear and enforceable (see appendix 3 of the consultation document)? Can you suggest ways of making the rules clearer and more enforceable?</p>	<ul style="list-style-type: none"> - they are not sufficiently certain to determine if an activity is permitted (or not) - they are not sufficiently certain to practically assess compliance and subsequently this impacts on enforceability. <p>Additionally the lack of a clear charging power poses some very difficult issues for local authorities when evaluating the compliance and monitoring requirements arising from the NES PF. There is currently no ability under the RMA for Councils to charge for permitted activity monitoring, nor does s.150 of the LGA provide clear ability to do so. Therefore costs associated with assessment and monitoring would be paid for by the general ratepayer.</p>	<p>Consideration should be given to how local authorities recover the costs associated with the NESPF.</p>
<p>Question 4 in NES consultation document.</p> <p>Are the matters where local authorities can retain local decision-making appropriate?</p>	<p>It is Councils view that the matters identified where councils may apply more stringent rules although appropriate would benefit from further refinement in terms of consistency of language across these matters.</p> <p>For example, currently significant natural areas must be mapped while outstanding freshwater bodies and outstanding natural features and landscapes must be defined or identified rather than explicitly mapped.</p>	<p>That final drafting of these matters focus on tightening and consistency of language used to ensure clarity of meaning. This will be particularly important for implementation purposes. Extra guidance in this area would be beneficial.</p>
<p>Question 5 in NES consultation document.</p> <p>Will the environmental risk assessment tools (the Erosion Susceptibility Classification, the Wilding Spread Risk Calculator, and the Fish Spawning Indicator) appropriately manage</p>	<p>Environmental risk assessment</p> <p>Council is comfortable with the tools provided and emphasis on environmental risk assessment and agrees that this approach will provide more focus on what are the key forestry management issues. The use of environmental risk assessment tools will only be effective at managing environmental effects if they are appropriately managed. Mechanisms for how this will be achieved should be incorporated into the NES PF. This should include a formal</p>	<p>There needs to be a clear mechanism for the assessment of currently 'undefined' land under the ESC, with the process incorporated directly into the NESPF</p> <p>A transparent and formally recognised process for the review and adjustment of land status under the ESC needs to be incorporated directly into the NESPF</p> <p>Consideration should be given to adding additional</p>

Reference	Position	Recommendation
<p>environmental effects as intended?</p>	<p>process for the review and adjustment of environmental risk assessment tools. ESC Tool Council notes that the ESC (Erosion Susceptibility Classification) is based on LUC (land use capability) derived from the NZLRI (New Zealand Land Resource Inventory Classification) which was mapped at original scales of 1:50,000 or 1:63,360. Council is concerned that using the raw 1:50,000 NZLRI mapping data is not appropriate when interpreting at forest or farm scale, (commonly 1:10,000 or finer scale). The 1:50,000 NZLRI maps can only be correct at their native 1:50,000 scale, and therefore should not be used to interpret mapping boundaries at a finer scale. Council notes that electronic data is easily manipulated. It is common for 1:50,000 maps to be “reproduced” at a finer scale, particularly in the absence of any other mapping data being available. However, unless this process is carried out in a robust manner, the result is corrupted and easily misinterpreted data. The process of remapping the LUC / ESC at a finer scale needs to be well managed and follow established and robust protocols to be fit for purpose. This should involve ground-truthing of the mapping units and final audit and sign off by the Regional Council / Unitary Authority, who have the in-house expertise to ensure accuracy and consistency within their region. This information can then be correlated across regions to provide for a national picture which is valid for use at a finer scale.</p> <p>A substantial proportion of the Bay of Plenty Region has volcanic soils. Council is concerned that the Erosion Susceptibility Classification does not address specific problems associated with surface erosion and some fluvial erosion on volcanic soils under a forestry land use. Council experience in the central and eastern Bay of Plenty</p>	<p>mechanisms in the NES PF which provide for the approval or certification of management plans, including verification of actual maps used to determine permitted status.</p> <p>The NESPF should clarify the implications for activities that have commenced under previous versions of the risk assessment tools</p> <p>If the , Fish spawning Indicator is to have standing in evaluating the status of an activity then it needs clear reference within the NESPF</p> <p>Amend the NESF to include provision for regional councils to make more stringent rules for the management of wilding conifer species that are priority risks in a region/district as identified in Regional Pest Management Plans.</p> <p>Amend the Wilding Spread Risk Calculator to align with decisions made to implement the Wilding Conifer Management Strategy and the National Policy Direction for Pest Management.</p> <p>Consider the inclusion of an additional environmental risk assessment tool such as the use of archaeological databases or other broader mechanism such as consulting with relevant iwi to protect areas of significance that are not currently captured on maps or in planning documents.</p> <p>That the NES recognises surface erosion as being a problem particularly on volcanic ash and pumice soils. and considers additional restrictions within the permitted general activity conditions across the NES.</p>

Reference	Position	Recommendation
	<p>shows that current practice for weed control (following harvesting and before replanting), includes exposure of bare ground by blanket desiccant spraying – often on moderately steep to very steep slopes. When this practice is carried out on raw volcanic soils, there is a significantly higher potential for sheet and rill erosion problems, which may continue until there is canopy closure following replanting. This period of increased risk of surface erosion can range from 2 to 5 years following harvesting. Council is concerned that this is not recognised in the ESC which effectively ignores surface erosion as being a problem within a forestry land use context, particularly on volcanic ash and pumice soils.</p> <p>Explanatory note: <i>Within the forestry industry in the 1980s and early 1990s, the practice of establishing a ground cover using grass and legumes (following harvesting and prior to replanting) on steep volcanic soils, was common in the Bay of Plenty region. This resulted in excellent control of surface and fluvial erosion problems for the critical period following harvesting. This practice has been discontinued, and the current practice of blanket desiccant spraying has become accepted as normal for plantation forest establishment. It is understood that the reasons for discontinuing surface protection related to problems associated with the use of the legume, Lotus pedunculatus. There is no reason why forest establishment should not include surface protection of ash and pumice soils using a range of other ground protection grass and legume species. Council considers that the current forestry establishment practice of blanket desiccation on moderately steep to very steep volcanic ash soils to obtain a good seedling bed for new plantings of Radiata pine is poor environmental practice. As the ESC does not take surface erosion problems into</i></p>	

Reference	Position	Recommendation
	<p><i>account, then this poor environmental practice will continue under the NES for Plantation Forestry.</i></p> <p>Undefined land There is currently no clear mechanism for the assessment of undefined land.</p> <p>Fish spawning There does not appear to be any specific reference made to the Fish Spawning Indicator in the draft rules.</p> <p>Wildling risk The NESPF will rely on the Wilding Spread Risk Calculator (WSRC) and best practice guidelines to address the risk of wilding spread. The proposal is that Territorial Authorities will administer the WSRC even though biosecurity is a function of regional councils. The WSRC score will be the critical threshold for determining activity status. It is noted that the WSRC is untested and will be potentially inconsistent with the regulatory measures that will be necessary under the NZ Wilding Conifer Management Strategy and councils' RPMPs. Where a regional council has identified a species as being particularly invasive, tools are needed to enable more stringent provisions to be developed.</p> <p>Additional tools There does not appear to be consideration of archaeological assessments as part of the environmental risk assessment process. The proposed permitted activity status to the forest harvest activities (including mechanical land preparation and earthworks) may exasperate the loss of sacred sites not identified on maps or in planning documents. This may also be an issue in afforestation.</p>	
Question 6 in NES consultation document.	<p>General Conditions General conditions currently commence with the following statement:</p>	Consider the intent of the general conditions and adjust the language of the opening statement to correctly reflect the application and significance of

Reference	Position	Recommendation
<p>Do you have any comments about any particular activity or draft rule?</p>	<p>'Notwithstanding specific activity rules, all forestry activities are permitted, provided the following conditions are met ...' This suggests that compliance with specific activity rules is not required, if the general conditions are satisfied. However, the presumed intent is that compliance with the general conditions is required in addition - rather than as an alternative - to the activity specific conditions Setbacks Current drafting says approval required, it would be difficult to ascertain whether approval has actually been provided or not under this condition. The condition should state that written approval is required. Earthworks There is no maximum volume or area control within the permitted activity (everything up to Orange zone >25%).</p>	<p>the general conditions. Amend drafting of setback conditions relating to seek written approval. Consider the addition of a maximum volume or area control condition within the earthworks rules.</p>
<p>Question 11 in NES consultation document</p> <p>Will the proposed NES-PF support regional councils to implement the NPS-FM?</p>	<p>Councils view is that the ability to make more stringent rules to meet the requirements of the National Policy Statement for Freshwater Management (NPS-FM) is adequate to enable Council to manage its responsibilities relating to the NPS-FM. The emphasis on environmental risk assessment within the NES PF will support the outcomes Council is seeking in relation to the NPS-FM.</p>	
<p>Question 12 in NES consultation document.</p> <p>What resources or other implementation activities would help you to prepare for and comply with the proposed NES-PF (see section 7 of the consultation document)? How</p>	<p>Council supports the development of a toolkit of resources to assist with implementation of the NES-PF.</p>	<p>As part of the implementation process for this standard, Council strongly recommends a focus on building a collaborative environment between the forestry industry and councils through mechanisms such as the establishment of forestry forums or other such processes that allow for open dialogue and the early identification of and constructive solutions to issues. Implementation should also incorporate a strong focus on upskilling forestry companies with the</p>

Reference	Position	Recommendation
<p>should these activities be delivered (for example, training, online modules, guidance material)?</p>		<p>support of councils on the NZ land resources inventory and land use capability classification systems. Additionally Council notes that accreditation schemes for forestry operators, such as implemented in the Bay of Plenty and supported by the forestry industry, should be actively encouraged by the Ministry.</p>
<p>Question 13 in NES consultation document. Are there any other issues that you would like to raise?</p>	<p>Council notes that the general drafting of the standard is quite loose with inconsistencies in language throughout the document. Council acknowledges that changes to the standard are likely to occur through the drafting process and that such inconsistencies may therefore be addressed as a matter of course. Council would like to reiterate the importance of tightening the language used as such inconsistencies may have significant impacts on interpretation and can be particularly problematic if presumed to be deliberate.</p>	<p>Ensure consistency of language is used throughout the standard and that language generally be tightened to avoid doubt in interpretation. Align terms and definitions throughout the standard with those used under the RMA.</p>

11 August 2015

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Dear Stuart

Environment Canterbury submission: Proposed National Environmental Standard for Plantation Forestry

Thank you for the opportunity to comment on the proposal to establish a National Environmental Standard for Plantation Forestry. Environment Canterbury's submission is attached.

We appreciate the opportunity to provide these comments and to explain the particular needs and priorities of the Canterbury region. We would be happy to contribute to a dialogue process with local government, the two Ministries, relevant experts and forestry sector representatives, to help develop appropriate refinements to the proposal to ensure that it will reflect the concerns and practical requirements of councils and other interested parties.

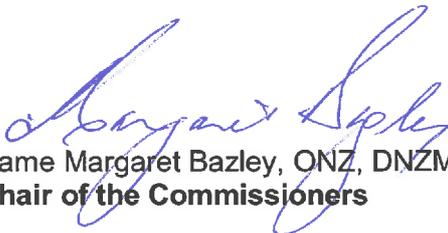
For further information, please contact:

Dr Ronnie Cooper, Senior Strategy Advisor – Policy

Phone: 

Email: 

Yours sincerely



Dame Margaret Bazley, ONZ, DNZM, Hon DLit
Chair of the Commissioners

Encl: *Environment Canterbury submission: Proposed National Environmental Standard for Plantation Forestry*

SUBMISSION to the MINISTRY FOR PRIMARY INDUSTRIES and MINISTRY FOR THE ENVIRONMENT

PROPOSED NATIONAL ENVIRONMENTAL STANDARD FOR PLANTATION FORESTRY

11 August 2015

1. Environment Canterbury thanks the Ministries for the opportunity to comment on the proposed National Environmental Standard for Plantation Forestry (NES-PF).
2. The following submission is offered on the basis of Environment Canterbury's roles, functions and responsibilities under the Resource Management Act 1991 (RMA), the Local Government Act 2002 and the Biosecurity Act 1993.
3. Environment Canterbury acknowledges the intent of the proposed NES-PF, as articulated in the proposal documentation and *Regulatory Impact Statement*, and in statements by the Associate Minister for Primary Industries Hon Jo Goodhew – to resolve industry concerns about variation in controls in regional, district and unitary plans, to reduce compliance costs and operational uncertainty for the industry, to secure improved environmental outcomes and generally to encourage development in the forestry sector as a significant export industry for New Zealand.
4. Environment Canterbury also acknowledges that existing planning systems in some areas of New Zealand have created complications for all parties, including regional and district councils and communities as well as the forestry sector. The intent to simplify processes and provide national consistency via the proposed NES-PF is understandable. Nevertheless the issues and challenges facing different regions, and appropriate systems to provide the necessary management of impacts and risks of such activities as plantation forestry, do vary considerably through the country.
5. Environment Canterbury's view is that the establishment of an NES-PF may be more of a priority for other regions and districts, particularly in the central North Island. However the current proposal, as outlined in the *Consultation document* and *Regulatory Impact Statement*, does not adequately provide for the planning and management needs of the Canterbury region. Without amendments as specified in our recommendations below, the current proposed NES-PF would significantly compromise our ability to fulfil our statutory responsibilities, strategic objectives and community commitments as a regional council.
6. Therefore Environment Canterbury is not able to support the proposed NES-PF in its current form, unless the recommendations made in the following submission – and the matters raised in the submissions of other councils and Local Government New Zealand (LGNZ) – are satisfactorily addressed. This would need to be undertaken through a process involving

the local government sector, specialist environmental, planning and biosecurity expertise, central government agencies and the forestry industry, as indicated in our closing recommendation at paragraph 59 below.

7. Environment Canterbury's analysis of the implications of the proposed NES-PF for our region has identified a number of matters of concern. The following submission will focus on these issues:

- the risks of wilding conifer spread
- implications for the Canterbury Water Management Strategy (CWMS)
- high country landscape values
- flood protection scheme plantings
- resources required to review council plans, and timeframes
- ambiguities and subjectivities in the proposed NES-PF
- local government decision making.

8. We also note the concurrent proposals for changes to the Permanent Forest Sink Initiative (PFSI), with the intent of encouraging the establishment of forestry cover, particularly in lands described as "marginal" in the hill country.

Wilding conifer spread risks

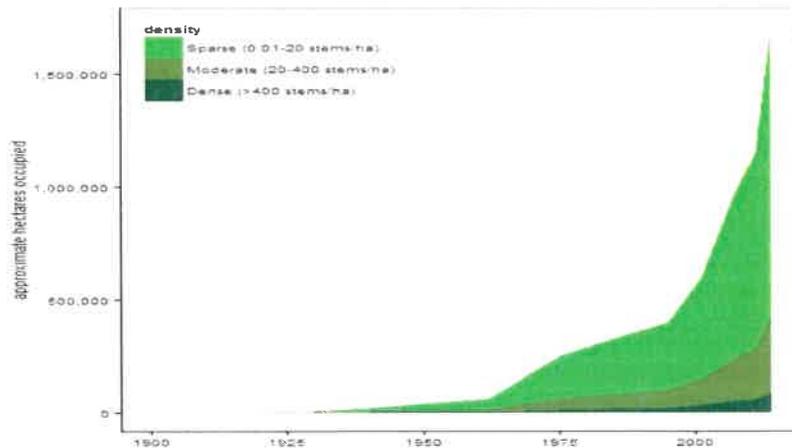
9. Environment Canterbury has statutory responsibilities, like all regional councils, to manage the risks of pest species, both the spread of existing pests and the risks of new incursions, via Regional Pest Management Plans (RPMP) under the Biosecurity Act 1993.
10. The new Canterbury RPMP is currently in development. Environment Canterbury is working closely with councils, other agencies and landholders in our region to ensure appropriate and effective measures are established in the RPMP. We are also working closely with other councils across New Zealand to develop nationally consistent rules for wilding conifer management that would be incorporated in our respective RPMPs.
11. We also note the recent Environment Court decision (*Re Mackenzie Branch of Federated Farmers of New Zealand (Inc)* [2015] NZEnvC 56) which found that the spread of wilding pines, or 'the growing of self-sown trees', comes within s9(3) of the RMA, on the basis that this is 'a way of using land' even if a 'passive' use. Therefore councils also have RMA responsibilities in relation to the spread of wilding conifers and management of this problem.
12. The Canterbury Regional Policy Statement, Policy 5.3.13, requires avoidance or minimisation of the risk of wilding tree spread and requires territorial authorities to include provisions in their district plans which minimise the spread of wilding trees.

The burdens of wilding management

13. Wilding conifers are the Number One pest species in our region. The expenditure is significant – approximately \$1.1 million for 2014/15 for Canterbury,¹ one of the most severely affected regions with approximately one-third of the national burden.

¹ This includes Environment Canterbury and external funders.

14. New Zealand's current wilding control programmes, the funding available to deal with these pests, and the combined efforts of councils, the Department of Conservation, Land Information NZ and landholders, have been assessed as 'well short' of what is required to manage legacy plantings and subsequent wilding spread. Wilding conifer expansion is exponential, as shown in the graph below:



Source: Department of Conservation

15. However provisions in the proposed NES-PF for managing the risks of wilding spread would be a significant constraint on the future Canterbury RPMP, and would have serious implications for the effective future management of wilding conifers in our region.
16. Under the proposed NES-PF the majority of landscapes in the Canterbury region are classified as low and moderate erosion risk (green and yellow areas, p 25, *Consultation document*). Unless there are other risk factors as specified in the proposed NES-PF, afforestation would be a permitted activity in these areas. Given the challenges of managing wilding spread from historical forestry plantings, the effects of expanded forestry activity in the region could exacerbate existing management problems and create additional costs for Environment Canterbury and our partner agencies, other organisations and landholders.

Alignment with other wilding management initiatives

17. Environment Canterbury notes that the NZ Wilding Conifer Management Group (WCMG) released the non-statutory *NZ Wilding Conifer Management Strategy 2015-2030 (WCMS)* in December 2014. The WCMS is the result of extensive work by the biosecurity sector. It establishes an agreed vision for wilding conifer management, promotes a consistent policy approach and identifies objectives, actions and best practice to address critical issues. The implementation of the WCMS is intended to align with finalisation of the National Policy Direction for Pest Management (NPD) so that consistent provisions for wilding conifers may be incorporated into councils' RPMPs and regulatory arrangements as they are reviewed in response to the NPD.

18. Environment Canterbury supports and has been closely involved in the ongoing work of the WCMG and a range of biosecurity experts and environmental managers – from central, regional and local government agencies and the industry – working collaboratively for implementation of the WCMS. We note that this work has been led by the Ministry for Primary Industries.
19. Therefore we are concerned to note that the *Consultation document* for the NES-PF does not mention the WCMS in its discussions of wilding risks (pp 27-28) and of the risks of adverse environmental effects (p 38). However the proposed NES-PF would potentially override the policies, objectives, rules and actions being proposed for implementation of the WCMS, and so negate the comprehensive work and commitment of the many professionals involved in this process.
20. The proposed NES-PF would also create complications for councils' ability to fulfil their statutory responsibilities for biosecurity, for their review work for RPMPs and the integration of regional and local pest management priorities in relation to the NPD. Councils and foresters would need to consider carefully the implications of the proposed NES-PF, and the new afforestation activities that might be undertaken under its provisions, for the effectiveness of regulations and other mechanisms (such as industry-based responsibility) for managing wildings and their infestation of our landscapes.

The Risk Calculator

21. Environment Canterbury notes that the proposed NES-PF would rely on the Wilding Spread Risk Calculator (DSS 1) and best practice guidelines, yet to be developed by the Ministry for Primary Industries, to address these risks. The Calculator score would be a crucial threshold for determining whether consent would be required for Afforestation activities.
22. The new proposed Calculator is untested, and is potentially inconsistent with the regulatory measures that will be necessary under the WCMS and councils' RPMPs. The following example will illustrate some of the questions and uncertainties about the effectiveness of this tool. The proposed WCMS Implementation Programme includes a recommendation, supported by biosecurity managers, that certain particularly invasive species be formally classified as pests:² larches (*Larix decidua*), *Pinus Muga*, *Pinus uncinata*, *Pinus sylvestris* and *Pinus contorta* (this last species is already classified as a pest in the Canterbury *Regional Pest Management Strategy*). Without additional issues relating to the siting of new plantings or downwind land uses and vegetation, the proposed Calculator would score these species below the threshold for a resource consent to be required (*Consultation document*, p 62). In such circumstances, under the proposed NES-PF these invasive species could be widely established as a permitted activity.
23. Environment Canterbury also notes that the proposed NES-PF would only allow wilding spread risk to be considered in relation to afforestation activities, and would not provide for these risks to be considered for any of the other forestry activity categories for which national standards would be established. Three of these categories could potentially

² This specification in a RPMP would trigger statutory obligations and would effectively prevent new plantings of these species, as well as enable regulatory control requiring removal of these species in situations where they are planted but pose a wilding conifer spread risk.

increase wilding risks: replanting, and pruning/thinning and harvesting via the general spread of material in these processes including from vehicles creating new pest pathways.

Recommendations:

24. Environment Canterbury recommends that:

- *The proposed NES-PF is amended to include provision for regional councils to make more stringent rules for the management of wilding conifer species that are priority risks in their region or in a district, as identified in Regional Pest Management Plans.*
- *The Wilding Spread Risk Calculator is amended to align with the decisions to be made by the Wilding Conifer Management Group for appropriate rules and actions to implement the Wilding Conifer Management Strategy and the National Policy Direction for Pest Management.*

Canterbury Water Management Strategy

25. The CWMS is one of Environment Canterbury's three overarching priorities, endorsed by our Commissioners in our *Strategic Directions* documents and the new *Long Term Plan 2015-25*.³ There is agreement across Canterbury that having communities working collaboratively is the best way to address the water management issues facing the region. The CWMS is driven by community-based Zone committees, which have invested enormous time and effort to develop agreed priorities and targets for water management in each Zone. The CWMS commits Environment Canterbury and our partners, communities and stakeholders to making parallel progress on ten target areas: ecosystem health/biodiversity, natural character of braided rivers, kaitiakitanga, drinking water, recreational and amenity opportunities, water-use efficiency, irrigated land area, energy security and efficiency, regional and national economies, and environmental limits.
26. The proposed NES-PF would create considerable uncertainties and potentially constrain Environment Canterbury's ability to fulfil CWMS objectives and targets. These problems would largely arise in relation to the matters for which the proposed NES-PF would allow councils to make more stringent rules to manage the impacts of forestry activities.
27. The proposed NES-PF provides for councils to set more stringent rules to manage effects on freshwater and groundwater in tightly defined circumstances:⁴
- to meet the requirements of the National Policy Statement for Freshwater Management (NPS-FM) and to meet Freshwater Management Unit (FMU) limits
 - to prevent adverse effects on the significant values of an outstanding water body that have been specified in a Water Conservation Order (WCO) or regional plan
 - to establish appropriate setbacks for outstanding freshwater bodies as defined in the NPS-FM and identified in an RPS, regional plan or district plan
 - to manage impacts on the significant values of wetlands as identified under the NPS-FM and specified in a regional plan or other relevant document

³ The other two overarching priorities are supporting the earthquake recovery and rebuild, and our Tuia relationship with Ngāi Tahu.

⁴ These provisions are outlined in the *Consultation document* (pp 23, 42-43) and in the associated *Regulatory Impact Statement* (pp 24-25), but only those for outstanding freshwater bodies and shallow aquifers are included in the *Consultation document's* list of "Matters where councils can apply more stringent rules" in Appendix 3: Draft rules of the proposed NES-PF. This may be an oversight in the drafting process, but should be addressed to avoid confusion.

- to manage risks to groundwater systems, specifically only in relation to quarrying activities occurring over a shallow aquifer less than 30m below ground level within a drinking water protection zone identified in a regional plan.
28. This would potentially allow Environment Canterbury to establish appropriate measures in relation to the potential impacts of plantation forestry for many of our major water bodies (for example, Te Waihora/Lake Ellesmere). It could potentially allow appropriate measures to be established to ensure the effective implementation of some CWMS objectives, where they have been formalised in a sub-regional plan.
29. However the provisions by which councils would be allowed to set more stringent rules under the proposed NES-PF apply only to specific values, water bodies and locations recognised in official plans. Unless something is listed in a regional or district plan or has other formal protected status such as a WCO, its values and importance can not be justification for a council to set more stringent rules to protect it from adverse impacts of forestry.
30. The CWMS objectives and targets cover a much wider range of freshwater-related values than are provided for in the categories specifically listed in the proposed NES-PF. The CWMS Zone Implementation Programmes (ZIPs) consider water management at the larger catchment level and taking an holistic mountains-to-sea overview (ki uta ki tai). The proposed NES-PF provisions are constrained to fairly narrowly defined areas and sites, and the wider contexts, ecological connections, and effects on downstream receiving environments may not be able to be given meaningful recognition.
31. In particular, Environment Canterbury notes:
- **Wetlands outside areas currently specified for more stringent council rules:**
 - a. The *Regulatory Impact Statement* includes provision for councils to establish more stringent rules in relation to activities that impact on the significant values of wetlands, noting however that the circumstances will be relatively specific and that significant values must be identified and agreed through the NPS-FM processes and specified in a regional plan or other relevant document. However many wetland areas may not necessarily rank highly enough to warrant 'significant' classification but nevertheless have importance for a range of values. The CWMS Zone Implementation Programmes now being actioned include a wide range of objectives and targets relating to wetlands. It is not clear what protection councils might be able to ensure for such wetlands under the proposed NES-PF.
 - **Groundwater outside areas currently specified for more stringent council rules:**
 - b. The proposal specifies that councils may establish more stringent rules in relation to quarrying activities occurring over a shallow aquifer (less than 30m below ground level) within a drinking water protection zone identified in a regional plan. However in the Canterbury region, groundwater resource sensitivities may need to be evaluated and managed across a very wide area and including many inter-related factors. It is not clear what protection councils might be able to ensure for such groundwater resources.
 - c. Forestry activities other than quarrying may also impact upon drinking water resources, including mechanical land preparation, afforestation, earthworks, river crossings and harvesting. The proposed NES-PF relies on operators' plans (eg the

ESCPs and Harvest Plans outlined at pp 66 & 71 of the *Consultation document*) to assess and address environmental risks. However there would be no opportunity under the proposed NES-PF for councils to require amendments to such plans to ensure adequate provisions for the management of particular resources with local or regional importance such as drinking water. The protection of Canterbury's drinking water resources is, as noted above, one of the top priority target areas for the CWMS.

- **Impacts on water quantity:**

- d. The proposal specifically excludes water yield matters as out of scope of the NES-PF, noting the impacts of forestry on total water yield and low flows in low-to-moderate rainfall areas, and specifying that councils would continue to have the ability to manage afforestation in catchments that have been assessed as being water sensitive and identified in district or regional plans. However it is not clear what controls might be possible to limit the effects of forestry on water quantity in other areas and more widely in landscapes. Many of the objectives and targets of the CWMS Zone Implementation Programmes address questions of water flows across entire catchments and ecosystems, and establish management frameworks agreed through considerable investment by communities in collaborative processes that reflect local priorities.
- e. It is worth noting that the NPS-FM does not include any provisions relating to water quantity.

32. Environment Canterbury notes that the proposed NES-PF makes more generous provisions for councils to make more stringent rules in relation to the potential impacts of forestry on biodiversity. The specific matters that may generate a requirement for more stringent rules include similarly constrained definitions – for designated (mapped) areas of significant indigenous vegetation and significant habitats of indigenous fauna as identified in a regional statement, regional plan or district plan. However the proposal does also acknowledge that in some cases there will be valuable indigenous vegetation that has not been specifically classified as 'significant' in plans, and goes on to state that:

'Setting levels for the clearance and conversion of such indigenous vegetation for plantation forestry activities is most appropriately determined at a local level, as values, including habitat values, vary from case to case.' (*Consultation document*, p 98)

33. It is not clear in the *Consultation document* how this might apply in relation to the degree of formally recognised significance of indigenous biodiversity for which councils might make more stringent rules. However it would seem to acknowledge that there are important values, resources, sites and ecological connections that may not necessarily rank highly enough to warrant definition as 'significant' classification but nevertheless deserve recognition and appropriate protective measures as determined by regional or local councils.
34. If there is such acknowledgement of sub-'significant' biodiversity values in the proposed NES-PF, it would only be consistent for other freshwater-related matters, as outlined above in paras 26 and 27, to be accorded the same status as justification for councils to be able to set more stringent rules.

Recommendations:

35. Environment Canterbury recommends that:

- *The proposed NES-PF is amended to include provision for regional councils and territorial authorities to make more stringent rules for the management of potential adverse environmental effects of plantation forestry on regionally and locally determined freshwater management priorities.*
- *The proposed NES-PF is amended to clarify that regional councils and territorial authorities may make more stringent rules for the management of potential adverse environmental effects of plantation forestry on regionally and locally determined management priorities for indigenous biodiversity.*

High country landscape values

36. The proposed NES-PF would allow councils to set more stringent rules to manage forestry's effects on outstanding natural features, landforms and landscape areas, as identified in district or regional plans. The Canterbury Regional Policy Statement sets out a comprehensive outline of the kinds of landscapes and qualities to be considered 'outstanding' and given recognition in district plans.
37. However in Canterbury the increased intensive agriculture across the plains has meant that forestry is now moving inland to the hill and high country. These unique, stunningly beautiful environments are among our most sensitive and iconic ecosystems, with high biodiversity, landscape, heritage and cultural values. The hill and high country is also of crucial importance for the tourism and film industries, which showcase New Zealand and the Canterbury region to the rest of the world.
38. The potential effects of increased forestry activities in the hill and high country will need to be evaluated and managed across very wide areas and including many inter-related factors. The pressures of forestry expansion in these landscapes will need careful management.

Recommendation:

39. Environment Canterbury recommends that:

- *The proposed NES-PF is amended to include provision for regional councils and territorial authorities to make more stringent rules for the management of potential adverse environmental effects of plantation forestry on regionally and locally determined hill and high country management priorities.*

Flood protection scheme plantings

40. The Canterbury region is unique in New Zealand in having many large, complex braided river systems which, while valued iconic landscape features, also create considerable risk of flooding for our communities and rural businesses. Flood protection and control works infrastructure is therefore the focus of Environment Canterbury's *30-year Infrastructure Strategy*, required under the Local Government Act and approved by the council alongside the *Long Term Plan 2015-25*. Environment Canterbury manages 64 river and drainage schemes that collectively cover over 2,000 km of rivers. This infrastructure has an overall asset value of \$691 million. In 2009 the value of assets on the floodplain protected by the largest scheme, the Waimakariri-Cust-Eyre scheme, was estimated at \$75 billion.

41. For Canterbury's rivers, including the Waimakariri, Ashley, Ashburton, Rangitata, Rakaia and Opihi, the nature of these volatile systems requires planting right to the river's edge, to prevent erosion of the riverbank and consequent damage to essential stopbanks. This planting includes a range of mostly exotic species, some of which would be covered under the definition of 'forestry' that frames the proposed NES-PF.
42. The proposed NES-PF would impact upon our ability to fulfil our statutory responsibilities for this essential flood protection work in relation to the required setbacks for forestry plantings and replanting from riverbanks, specified as 10m for rivers where the bank full channel width is greater than 3m (pp 63 & 81, *Consultation document*). We note however that the proposed setback rule includes an exception 'where a smaller setback is required to meet the conditions of a regional pest management strategy'.

Recommendation:

43. Environment Canterbury recommends that:
 - *The proposed NES-PF is amended to include an additional exception to the proposed permitted activity conditions for Afforestation and Replanting to allow a setback smaller than 10m from the bank of a perennial river or stream where this is required to meet the requirements of a flood protection scheme.*

Review of council plans

44. Most of the activities that would be controlled by the proposed NES-PF are currently controlled by councils via district and regional plans. An initial review of the region-wide rules in Environment Canterbury's proposed Land and Water Regional Plan has identified rules that control such matters as plantation forestry in flow-sensitive catchments, river crossings, and forestry activities in river beds, riparian areas and erosion-prone areas.
45. The work that will be required to understand the degree of consistency between these rules and the proposed NES-PF, to draft the necessary amendments (including matters where the council requires more stringent regulations) and to process these through to operative status (including public and stakeholder consultation as necessary) would be considerable.
46. Environment Canterbury notes that it will also be necessary to consider the implications of the proposed NES-PF for other land uses, particularly in relation to impacts on water quality and the requirements of the CWMS. In CWMS Zones where forestry activities may have a significant impact on water quality, it is possible that reliance on the minimum controls in the NES-PF may result in other land uses (eg pastoral farming) having to 'carry the weight' of changing their activities to achieve desired freshwater outcomes for the overall catchment. This and other implications for neighbouring and downstream land uses would need careful evaluation and discussion with local communities, landholders, district councils and CWMS Zone committees.
47. Environment Canterbury also notes that the proposal includes provision for councils to address inconsistencies at the time of scheduled plan reviews, rather than by a particular date (*Consultation document*, p 40). This is supported.
48. However there is a lack of clarity in the *Consultation document* and other documentation for the proposal, regarding any interim provisions between the introduction of a new NES-PF and the scheduled review times for the various plans, which might be up to ten years in

- future. Environment Canterbury was advised by Ministry for Primary Industries staff that until councils' schedules 'catch up', the provisions of the proposed NES-PF would prevail.⁵
49. This could create major confusion and significant inconsistencies until councils' planning cycles work through the various plans that would be affected by the proposed NES-PF. There could also be the potential for legal challenges.
50. If a council signals that changes to its plans (including more stringent rules) are necessary to accommodate the requirements of the new NES-PF, and signals that it intends to undertake such amendments in due course in its planning review cycles, for the sake of consistency the existing plan rules should continue to apply through the time period until a scheduled plan review allows the council to make the necessary adjustments.

Recommendation:

51. Environment Canterbury recommends that:
- *The proposed NES-PF is amended to provide certainty that, once the NES-PF is introduced, a council's existing plan provisions will continue to apply until a scheduled plan review allows the council to make the necessary changes to accommodate the requirements of the NES-PF.*

Ambiguities and subjectivities in the proposed NES-PF

52. A major concern with the proposed NES-PF are the instances where the current wording would create ambiguity in interpretation and/or relies on subjective assessments. Environment Canterbury notes that, if such loosely-framed provisions were carried forward into the rules and standards set under the proposed NES-PF, there is significant doubt that these wordings would meet the legal tests for a valid permitted activity rule as established by the Courts. Ambiguous and subjective provisions would also create complex enforcement issues, which would potentially be costly and time-consuming for both local authorities and the forestry sector, and counterproductive to achieving the intended aims of the proposed NES-PF.
53. Examples of the kinds of wordings that could generate such confusion include:
- provisions being made conditional upon unquantified, unspecified criteria: for example, 'as soon as practicable', 'as far as possible', 'if unavoidable', 'except where topographical constraints leave no alternative'
 - provisions based on potential future states or processes: for example, 'where the deposition of spoil could lead to reactivation or exacerbation of the earthflow...', 'vegetation 'that will readily recover within five years'.
54. Environment Canterbury endorses the concerns of Local Government New Zealand about the risks of these kinds of wordings in the proposed NES-PF, as expressed in their submission.
55. There is also the potential for confusion created in the current proposal with the attribution of roles and responsibilities to regional councils and territorial authorities respectively. There is a lack of clarity around such matters as the responsibility for issuing consents for forestry activities that do not meet the permitted activity thresholds of the proposed NES-PF. In a number of areas, such as biodiversity management, both levels of local government have

⁵ Christchurch information meeting, Riccarton Race Course, 27 July 2015.

statutory responsibilities. The proposed NES-PF provides no particular guidance as to how the responsibilities for monitoring and compliance are to be divided or shared. Environment Canterbury endorses the concerns raised by Local Government New Zealand on these matters in their submission.

Recommendations:

56. Environment Canterbury recommends that:
- *The proposed NES-PF is reviewed to address areas of ambiguity and subjective interpretation in the wording of the proposed rules and standards.*
 - *The proposed NES-PF is reviewed to align the allocations of responsibilities to regional councils and territorial authorities with sections 30 and 31 of the Resource Management Act.*

Local government decision making

57. The proposed NES-PF is intended to address reported inconsistencies between councils' plans and rules, and to provide greater certainty for the forestry sector. However the matters for which councils may establish more stringent rules under the proposed NES-PF provide for considerable variation despite the objective of achieving national consistency.
58. The subsidiarity principle of local decisions for local issues, circumstances and communities needs to be recognised and provided for, and the importance of local knowledge and the powers of local decision-makers appropriately protected. To be effective and efficient for all parties involved in the forestry sector and the management of its activities, the eventual NES-PF will need to achieve a careful balance between national consistency and the particular community-based priorities and values of local areas. Environment Canterbury would be pleased to contribute to an appropriate process to address this.

Recommendation:

59. Environment Canterbury recommends that:
- *A wide range of regional and local government representatives – including Local Government New Zealand, the regional Resource Managers Group, the Biomanagers Group and the Wilding Conifer Management Group – is included in the process of reviewing the feedback from this consultation on the draft proposed NES-PF, and making appropriate changes to the draft to reflect the concerns and practical requirements of councils and other interested parties.*

For further enquiries:

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Environment Southland submission on the “A National Environmental Standard for Plantation Forestry”

Contact details: Environment Southland

s 9(2)(a)

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Environment Southland does wish to speak in support of its submission.

If others make a similar submission, Environment Southland would be prepared to consider a joint case with them.

This submission is to be read on a without prejudice basis as Environment Southland's Council has not had the opportunity to peruse it. The Council will consider the submission for approval on 12 August 2015. We will advise you if there are any changes to the submission as a result of this meeting as soon as possible.

Section	Comment
General comments	<p>Environment Southland (ES) supports the intent of the National Environmental Standard in that it seeks to provide less variation, more certainty and better outcomes for New Zealand as a whole. ES believes the proposed National Environmental Standard for Plantation Forestry (proposed NES-PF) provides a good starting point for managing the effects of forestry activities however we are seriously concerned about how the implementation will effect our management of regionally significant issues, such as implementing the National Policy Statement for Freshwater Management 2014 (NPS-FM), and the potential further loss of biodiversity values. There is also potential risk of new wilding conifer spread in future which could result in landscape scale issues such as those currently being dealt with by the Mid Dome Wilding Trees Charitable Trust (refer below for specific details).</p>
Proposed NES-PF as a maximum standard instead of a minimum standard	<p>Table 4 and section 6.1.1 of the proposed NES-PF consultation document summarises matters where councils may apply more stringent rules to support the objectives of the NPS-FM. In particular, greater stringency will be allowed where:</p> <ul style="list-style-type: none"> (a) a limit has been set for a freshwater management unit that is not being met and forestry activities are a source of the contaminant within that freshwater management unit; (b) significant values of an outstanding water body that have been specified (for example, in a Water Conservation Order or a regional plan), and forestry activities would have an adverse effect on those values. <p>ES is concerned how this will affect its implementation programme for the NPS-FM, and the effective Southland District Plan provisions, in relation to forestry activities.</p> <p><u>Background</u></p> <p>Southland's land use has intensified over the last 150 years and this has had implications for our water quality. Scientific monitoring and investigations confirm that Southland has both water quality and quantity issues. Results show that nutrients (particularly nitrogen and phosphorus) as well as sediment and bacteria are having an adverse effect on water quality.</p> <p>On top of this, all regional councils in New Zealand must meet the Government's National Policy Statement for Freshwater Management, which requires ES to maintain and improve water quality and quantity overall. Maintaining water quality in Southland cannot be done without everyone playing their part. District and city councils will have an important part to play in meeting these standards. In addition, industries including forestry need to play their part to meet these standards.</p> <p><u>Implications for Environment Southland's implementation programme for the NPS-FM</u></p> <p>The <i>Water and Land 2020 & Beyond</i> project includes a range of measures aimed at halting the decline of Southland's water quality, including promoting good management practices, and developing a water and land plan that updates and brings together existing policies and rules.</p> <p>Catchment limits will also be set for water quality (discharges) and quantity (extractions), a process which is scheduled to start in late 2016. One of the key elements of ES's catchment limit setting process is we are undertaking the science and economic work up front, to ensure a robust response and understanding of the constraints for Southland are understood before the limit setting process commences. These programmes of work will build on the physiographic zone work recently undertaken which provides the Council with greater understanding of the spatial variability to water quality. This work will help us all to better understand communities' objectives and values, Southland's natural water systems and the potential impacts of limit setting.</p>

	<p>The working draft for Water and Land, released 31 July 2015 for feedback, includes a rule about cultivation on sloping ground, with cultivation meaning “the felling, clearing or modification of any vegetation (including existing pasture) by cutting, mechanical crushing, spraying, burning and any activity causing disturbance to the soil”. The proposed rule as drafted captures forestry harvesting and directs certain buffer distances from the outer edge of the bed of a lake, river, modified watercourse or artificial watercourse depending on the slope of the land. This will assist ES in managing and reducing sediment in waterways. This is important as sediment discharges to waterways in Southland’s catchments enter the region’s estuaries, causing a major shift from sandy/silty bottom sediment to muds, resulting in a reduction in plant and animal diversity. The muddy sediment contains key contaminants such as phosphorus, faecal material and heavy metals. Add this to the increased levels of nutrients in the sediment and water (particularly nitrogen) entering the estuaries from the above catchments and we have conditions for the spread of nuisance large algae species and a loss of highly valued seagrass.</p> <p>ES is seriously concerned the proposed management under the <i>Water and Land 2020 & Beyond</i> project would not be able to be applied to forestry activities. As a consequence, there is potential for the proposed NES-PF to fail to address sedimentation issues as thoroughly as is intended within Southland. ES’s concern is that there may be wide stretches of beds of rivers that are being disturbed, and resulting in sedimentation mobilisation and such activities may not be captured under the proposed NES – PF. ES would like to see the NES – PF account for all potential in-stream effects resulting from forestry.</p> <p>ES is also concerned that the NES-PF does not account for, or link to NPS-FM as it relates to water quantity. Plantation forestry can significantly reduce downstream flows within catchments due to increased plant uptake and the removal of forestry blocks can significantly change downstream water yields. ES would like to see the NES – PF specifically address this issue in order to achieve a robust and cohesive interaction with the NPS – FM.</p> <p><u>Southland District Council District Plan provisions</u></p> <p>ES considers that the existing Southland District Council land use rules that manage the impact of wilding conifers in the high country in Southland is an effective means of managing the threat of wilding spread. ES is seriously concerned that the proposed NES-PF will make these rules null and void. ES would like to ensure that, as far as practicable, the NES – PF allows for regional and district rules to be retained where these are more stringent than the NES- PF provides. This ensures that local issues can be dealt with appropriately.</p> <p>ES has concerns that the proposed NES-PF grants the ability to forestry operators/developers to clear indigenous vegetation as long as it is not deemed significant within a regional policy statement, regional plan or district plan. Within a Southland context, this identification and mapping of areas of significant indigenous vegetation is nowhere near complete, this means that there are potentially areas that have yet to be mapped or identified within Southland that could have significant indigenous vegetation. The Southland District Council District Plan is based on specific local and regional issues, and therefore more appropriate than trying to apply a national framework to the level of detail sought. ES would like to ensure that the NES – PF allows regions to impose more stringent controls where mapping of significant indigenous vegetation has not yet occurred.</p> <p>Relief sought</p> <p>ES seeks the proposed NES-PF be amended to:</p> <ul style="list-style-type: none"> (a) refer to a minimum standard instead of a maximum standard to be achieved. In particular allow Councils to have the ability to be more stringent in regards to; <ul style="list-style-type: none"> i. wilding conifer – refer below for further details; ii. ensure it does not impact on its implementation programme for the NPS-FM, in particular the working draft for Water and Land Plan currently being developed to halt the decline in Southland’s water quality while the limit setting process information is being collated. (b) ensure rules in relation to sedimentation management relate to buffer distances from the bed of a lake, river, modified watercourse or artificial watercourse, instead of only the water body; and (c) acknowledge that regions that have not completed mapping/understanding areas of significant indigenous vegetation are at risk of losing more indigenous biodiversity. Because of this, the NES – PF needs to allow more stringent controls to be imposed by those regions to ensure indigenous biodiversity is not further compromised. (d) .
Matters outside of scope of the proposed NES-PF	<p>Table 2 of the proposed NES-PF consultation document lists the matters that are outside the scope of the NES-PF.</p> <p>ES is concerned that the aim of the NES-PF which seeks less variation, more certainty and better outcomes for New Zealand will not be achieved with multiple matters still remaining outside the scope of the NES-PF.</p>

	<p>This type of approach seems piece meal and will create multiple documents that will need to be referred to by the forestry sector, such as the NES-PF, district and regional plans.</p> <p>Relief sought ES seeks the proposed NES-PF be amended to refer to a minimum standard instead of a maximum standard to be achieved.</p>
<p>Implementation of plans governing forestry operations.</p>	<p>The requirement for Erosion and Sediment Control Plans and Harvesting Plans to be submitted for review by Councils before these operations take place is viewed as a positive step forward in managing effects of forestry operations. However ES questions the ability Council would have in being able to comment or critique both Plans and the lack of supporting schedule or template that outlines minimum information required within such plans. Furthermore ES questions why the proposed NES-PF doesn't require the need for a Plan during the afforestation phase of operations, as this phase of operations can have as much as an effect as harvesting and can result in significant threat of erosion.</p> <p>ES is supportive of setbacks proposed for afforestation, earthworks, mechanical land preparation and replanting operations in relation to water bodies. However ES considers that these setbacks should include ephemeral waterways that have an active bed and that the setback for these intermittently flowing waterways should be 5m for the operations outlined above.</p> <p>Relief sought ES seeks the proposed NES-PF be amended to:</p> <ul style="list-style-type: none"> (a) include ephemeral waterways that have an active bed into the setbacks stipulated for afforestation, earthworks, mechanical land preparation and replanting operations and for that setback be set 5 metres; and (b) require a Plan for the afforestation phase of operations;
<p>Environmental risk assessment tool 2 – Fish Spawning Indicator</p>	<p>Although ES considers the establishment of a rule that seeks to minimise the adverse effects of forestry activities on fish breeding habitats a step in the right direction, it is concerned about the effectiveness of the proposed rule. Reliance on the Freshwater fish data base appears to be flawed because it is a database which records observations of a species presence at a location, rather than actual spawning sites. Given the climatic variation over the whole country, the tool doesn't allow for any possible variance regionally in spawning times. An example in a Southland context is the spawning period of Rainbow Trout differs substantially (July-October) than the one in the proposed NES-PF (April-May). Another example of regional variations in spawning time is for a Gollum galaxias which actually starts spawning at the start of August rather than September.</p> <p>ES is also concerned at the limited number of species included within the proposed rule. There are a number regionally important species not present in the list, for example short jawed kokopu, torrentfish, bluegill bully, upland bully, giant bully, banded kokopu, smelt, lamprey, long-finned eel, short-finned eel, inanga and non-migratory galaxiid species. Additionally ES is concerned that the proposed rule does not consider the fact that a number of freshwater species are migratory and any operations that coincided with their migratory periods could affect this important part of their lifecycle.</p> <p>Relief sought ES seeks the proposed NES-PF be amended to grant the Council the ability to impose stricter rules regarding operations in proximity to the bed of waterways, which could result in greater positive gains for freshwater fish species through protection of habitat. This also links with the earlier submission point to ensure rules in relation to sedimentation management relate to buffer distances from the bed of a lake, river, modified watercourse or artificial watercourse, instead of only the water body. ES also seeks that the NES – PF provides flexibility to accommodate regional variations in spawning times to ensure effects of forestry activities are adequately avoided.</p>
<p>Environmental risk assessment tool 3 – Wilding Spread Risk Calculator</p>	<p>ES is supportive of the intent to manage the threat that Wilding Conifers present to the New Zealand landscape and considers the use of the Wilding Spread Risk Calculator a step in the right direction. However it has concerns about the standalone use of this highly subjective tool to determine the potential wilding risk that a specific potential forestry development may pose. ES feels that it would be rather easy to manipulate the tool so that it could produce a favourable outcome. Any mistake may take a decade or two before the adverse effects of this mistake are recognized. For instance, one of the variables considers the land use adjacent to the potential development (i.e. the grazing pressure it faces). The tool doesn't allow for the fact that the land use could change over the life time of the forest (25-60 years), an example being potentially less intensive grazing occurring into the future than was present during the time at which the assessment was conducted.</p> <p>While the wilding risk calculator is an excellent orientation tool for assessing general risk it would be unwise to rely on it providing accurate and objective predictions of unwanted spread over a the life of a commercial forest. For example in Southland, Douglas fir presents the greatest risk in terms of wilding spread and the Council is concerned at the arbitrary scoring mechanism that can either be given a score of 1 or 4 in species growth category which could easily result in the species being underscored. ES also questions what auditing</p>

measures would be put in place to assess the correct use of the wilding spread risk calculator.

ES is concerned that the tool only applies to new forestry developments and is not mentioned as a consideration when harvested forests are replanted. In some instances historic plantings could have been located in areas with high risk of wilding spread and this risk will be on going if wilding risk is not considered during replanting.

Background

Mid Dome in northern Southland is an example of how wilding trees can spread from planted sources and can threaten vast areas of vulnerable land over a time frame of a few decades. It demonstrates that ill-considered decisions to plant trees made in the past can create major legacy problems for later generations.

Lodgepole pines (*Pinus contorta*) were planted by the Government on 250 ha of Mid Dome between the 1950s and 1980s for erosion control. Strong prevailing nor-westerly winds make Mid Dome a perfect take off point for the up to 1.5 million seeds these wildings produce per hectare every year. Offspring from these very light, winged seeds have been found 40km downwind of Mid Dome and up to altitudes of 1400m. As a result over 68,000 hectares of land has been affected. Of this 360 hectares is very dense (closed canopy) and a further 1,990 hectare is high to medium density infestations (refer to Figure 1). The impact of wilding conifer from Mid Dome threaten an area of at least 215,000 hectares to the downwind the east of the seed sources. (Refer to Figure 2).

Figure 1: Evidence of Rapid Increase in Spread and Density of wilding trees at Mid Dome

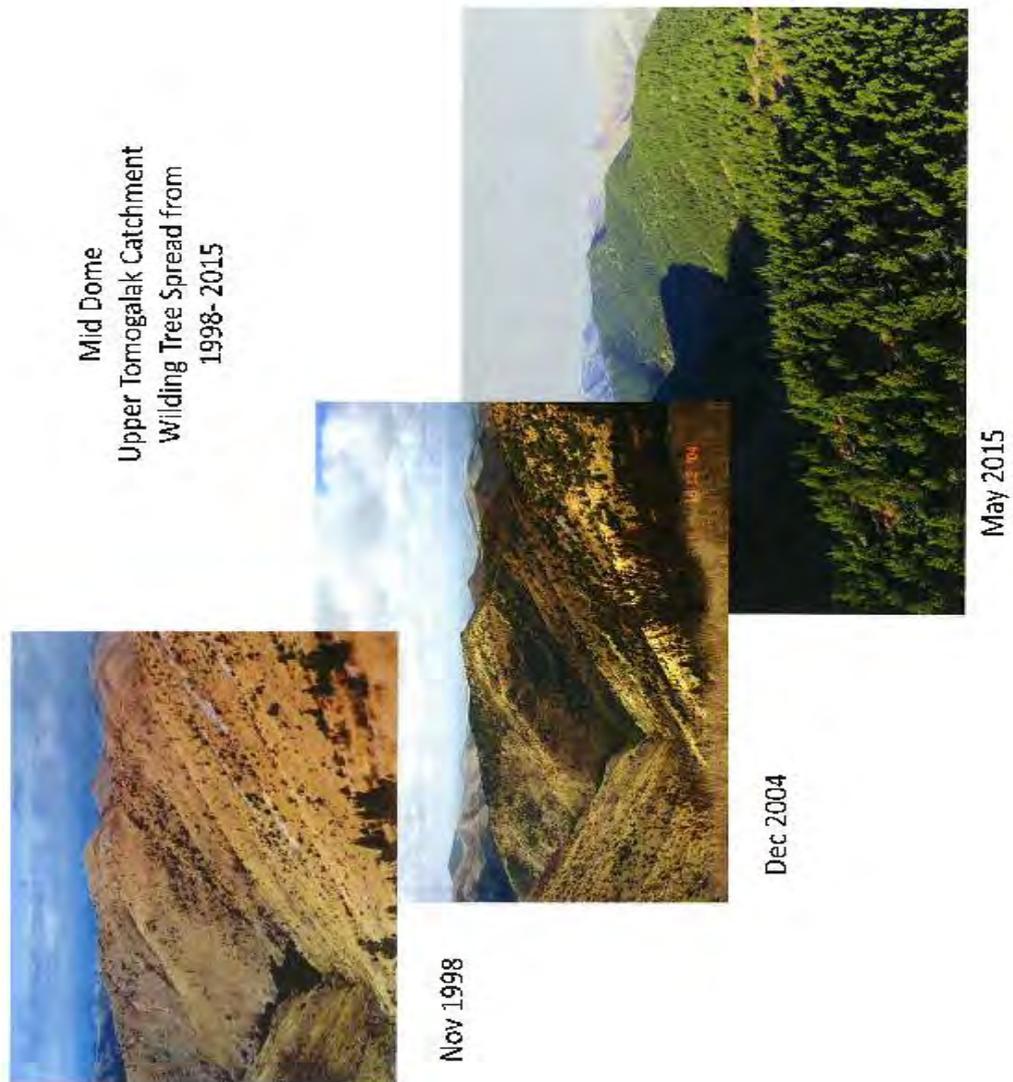
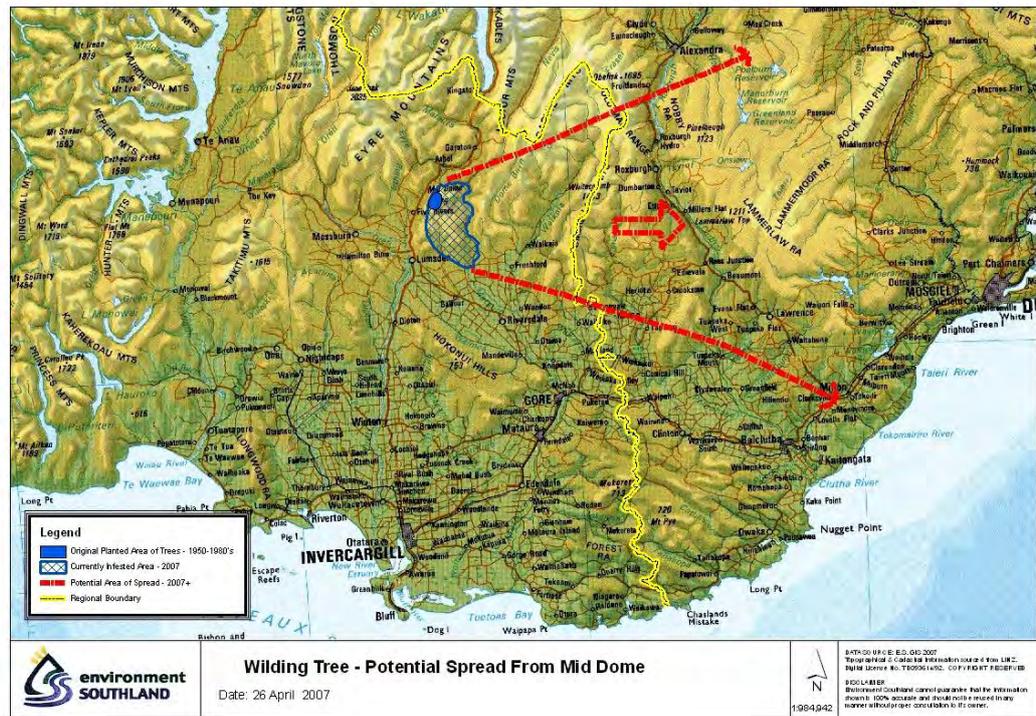


Figure 2: Wilding Tree potential spread from Mid Dome



The increasing costs of Wilding Tree control at Mid Dome

Date	Study	Estimated Total Cost	Time to achieve the eradication goal
1999	Ledgard	\$1.0M	
2008	Mid Dome Trust/DOC	\$8.56M	2018/19
2014	Mid Dome Trust Strategy review	\$8M+?	2024

Implication's for the work of the Mid Dome Wilding Trees Charitable Trust

The situation at Mid Dome clearly illustrates the unintended externality impacts of planting exotic conifers at sites where they can spread onto adjacent land.

Clearly no serious consideration was given to offsite spread effects at the time of planting by the Government agencies responsible in the 1950s. However at the time this issue was raised by a number of concerned local land owners whose predictions have come to reality some 40 years later. Recent studies have also shown that the erosion benefits of tree planting at Mid Dome were negligible.

The Southland community and the Government are now faced with a major environmental problem at Mid Dome which is likely to cost in excess of \$10M to resolve over at least another 10 years. This cost will increase exponentially unless sufficient funding is secured to eliminate the wilding pine seed sources there within this period.

It is essential that effective planning measures exist to prevent planting of exotic species in sites from which they will cause unwanted spread. In addition it is critical that these are backed up by effective regulatory tools to deal with any externality issues caused by the failure to predict unwanted spread.

Relief sought

ES seeks the proposed NES-PF be amended to:

- (a) grant Councils the ability to set more stringent rules regarding wilding conifers in areas where there is vulnerable land at risk from unwanted wilding spread;
- (b) the Wilding Spread Risk Calculator is not relied on and only used as a guide;
- (c) make a wilding risk a consideration during replanting; and
- (d) require and enable Regional Councils to implement a set nationally consistent externality rules in Regional Pest Management Plans to make forestry owners effectively liable for impact of wilding conifers on neighbouring land owners.

River Crossing Rules	<p>ES has serious concerns regarding the rules associated with river crossings within the proposed NES-PF. The proposed Rules differ markedly to current rules regarding river crossings within the operative Regional Water Plan for Southland 2010 and are in fact, less stringent. For example, the proposed NES-PF includes the following:</p> <ul style="list-style-type: none"> (a) temporary crossings – concerns over materials not removed; (b) single culverts – the total height of the crossing crest is no more than 4 metres above the bed (measured from the downstream outlet) corresponds to the large dam definition for height/cover. Concern contradicts another legislation; (c) battery culverts – concerns over no generic design for such structures; (d) drift deck – concerns over no downstream drop allowed, and no generic design for such structures; and (e) single span bridges – concerns over lack of catchment size restriction as flood flows highly variable post harvesting. <p>There are concerns that if the Council were to relax rules associated with river crossings for any one particular user (i.e. forestry operators) it would in turn create conflict between other users who would face more stringent requirements.</p> <p>Relief sought ES seeks the proposed NES-PF be amended to allow the Council to manage river crossings under its existing legislation (i.e. the Regional Water Plan for Southland 2010) which is more robust and better suited for conditions within Southland.</p>
Sustainable Harvest of Native Forest	<p>ES questions whether the NES-PF seeks to include the sustainable harvest of native forests. Currently in Southland there are operations that harvest native timber under the Schedule 2 of the Forest Act 1949.</p> <p>Relief sought ES seeks the proposed NES-PF be amended to clarify whether the harvest of native forest would be included within the NES-PF and if not mention that these operations were in fact excluded and not captured under NES-PF going forward.</p>
Cost Recovery	<p>ES has concerns that there will be significant costs to bear in assessing regulatory compliance with the NES-PF and no viable mechanisms to recover the costs of this assessment work. The costs associated with permitted activity monitoring are borne by ratepayers, rather than the specific person undertaking the activity, and the provision for significant forestry activities to be permitted imposes a significant additional cost to the ratepayers of Southland</p> <p>Relief sought Elevating the permitted activity framework to a controlled activity would provide certainty, consistency and a mechanism for council to assess applications and recover associated costs. This also ensures that there is no additional burden on ratepayers.</p>
Clarification of the 1ha trigger	<p>ES would like clarification around when the NES – PF applies as it relates to the 1 hectare size requirement. It is unclear if the 1 hectare trigger refers to a discreet area of forestry, or if it also includes cumulative assessments. For example, if a property had 3 blocks of 0.7 hectares, are they exempt from the NES – PF and therefore subject to local rules?</p> <p>Relief Sought ES would like the NES – PF to provide clarity around the use of the 1 hectare trigger requirement.</p>

Ref: A590973



11 August 2015

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SUBMISSION: PROPOSED NATIONAL ENVIRONMENTAL STANDARD FOR PLANTATION FORESTRY

Gisborne District Council has undertaken an analysis of the implications of the proposed NES-PF for our region, and our ability to fulfil our statutory responsibilities as a unitary authority and have identified a number of significant matters of concern. The following submission will focus on these issues:

- Status of Forestry Activities on land identified as "Orange" under the ESC categorisation
- Implications for Gisborne District Council's implementation programme for the NPS-FM
- The risks to sensitive receiving environments
- The general approach to Permitted Activities
- Implications of urban forestry on amenity
- Hearing of submissions and review periods

This submission is in opposition to the proposed standard and seeks a number of changes to be made. Existing rules in Council's statutory RMA plans have been developed in recognition of the particular care needed in harvest and associated forestry activities to manage adverse effects. They are operative rules that have been agreed by the community, including forestry interests. There has been large scale forest harvesting undertaken across the district over the last five years, and the negative impacts of forestry harvest are now frequently being felt by the district and the community.

The Council considers the benefit of removing both "unwarranted variations" between plans and the opportunity for plan changes is more than offset by negative regional impacts on present environmental standards.

The Council is concerned that the Plantation Forestry NES removes the ability for Council to ensure forestry harvesting is managed in a robust way that reflects the challenging terrain and climate that is unique to the Gisborne area.

In essence the Council does not believe an evidential case for a Plantation Forestry NES has been made and is concerned about it lowering present environmental standards. It would prefer that the NES not proceed.

1. BACKGROUND

Gisborne has a nationally recognised erosion problem. The district is home to the largest concentration of the most erosion-prone land in New Zealand. This land is more sensitive to inappropriate land use on a scale greater than any other district in the country. In recognition of this there have been longstanding projects funded by the Government and the Council to address eroding land. Initially many of these programmes focussed on planting *Pinus radiata* on the most severely eroding land, and plantings accelerated post Cyclone Bola. Primarily as a result of these programmes Gisborne District now has 160,000 ha of plantation forest in the district; 47% of the land area in the Gisborne District falls under either the orange or red categories in the ESC – although we note that the terminology in the NES-PF understates this situation by describing this erosion risk as “high” or “very high” rather than severe and extreme as described under the LUC.

Harvest of these forests has accelerated in recent years as the first rotation forests reach maturity, and the District has now gained a good understanding of the negative environmental effects of clear-fell forestry harvest, particularly on locations where, with hindsight, *Pinus radiata* may not have been the wisest of afforestation species. Inherent erosion risk (based on LUC classification) is accentuated by Gisborne's rainfall patterns. On land where rainfall is 1500-2500 mm/year (much of the District) and greater than 2500 mm/year (most of the hill country –and in particular most of the “orange” and “red” ESC areas) the risk of erosion is further exacerbated due to the likelihood of heavy rainfall events.

In recognition of this the Erosion Control Funding Programme (formerly the East Coast Forestry Project) has been amended to now support indigenous reversion and manuka plantings, as well as more explicitly supporting species which can be coppiced, or where high value timbers mean selective felling operations may be economically viable in the future.

The Gisborne District Council and MPI have been working closely together to try and put in place appropriate planting mechanisms for severely eroding land – the NES for Plantation Forestry cuts across this and will undermine this work.

The Gisborne District Council has also been working to develop a Freshwater Plan for the Region, which implements the National Policy Statement for Freshwater Management (NPS-FM). This is due to be publicly notified on 29 August 2015. As part of that Freshwater Plan, detailed investigations have been undertaken in relation to water quality and quantity issues and options for management, aquatic ecosystem health, community and iwi values for freshwater environments. The Freshwater Plan contains provisions around river crossings and other activities which could impact on the beds of rivers, lakes and wetlands and water quality. The NES-PF proposed standards contradict these provisions and will create an uneven playing field for forestry impacts on freshwater when compared to other activities. The river crossing provisions in particular will create a Permitted baseline which undermines consent requirements for river crossings for other land uses.

The following pictures illustrate the type of offsite environmental effects experienced following heavy rainfall events in the “orange” ESC areas, where forestry harvest has been undertaken three to five years ago.

These photos were all taken following a 25-year rain intensity event in the Wharerata Range on 23 May 2015. Similar events and effects are now seen annually in other parts of the district where "orange" land has been harvested.



Substantial mobilisation of forestry slash and sedimentation – blocking streams and destroying native fish habitats.



Damage to infrastructure – this is one of 5 SH2 bridges over the Maraetaha River – farm culverts, bridges and fences are also frequently affected by forestry slash mobilisation from slopes.



Blockage of rivers and flood control schemes causing widescale inundation of farmland and damage to property – this is the Kopuawhara Stream following the 23 May 2015 event in the Wharerata Range.



Deposition of large quantities of forestry slash on beaches. This affects amenity values and blocks access to nests of blue penguins. Large amounts of debris and sediment has also been deposited on coastal reefs following the 23 May event.



Substantial quantities of forestry slash moving along the Gisborne coastline after the 23 May event. Three months later this debris is still washing up on beaches – blocking stream mouths and causing damage to coastal infrastructure.



Sedimentation of waterways. Approximately one metre of sediment has been deposited in this stream which previously had significant aquatic ecosystem values. In the distance of this photo more woody debris and slash is visible upstream, awaiting future mobilisation in the next heavy rain event.

2. STATUS OF FORESTRY ACTIVITIES ON LAND IDENTIFIED AS "ORANGE" UNDER THE ESC CATEGORISATION

Orange Zone Harvesting

The NES provides for harvesting on all of the Orange Erosion Susceptibility Class (ESC) as a permitted activity. This is opposed. Orange land includes a number of Land Use Capability (LUC) units that are steep to very steep on erosion prone soft geology prone to soil slipping that removes the entire soil layer down to bedrock that is then unable to sustain trees of any type. This land is found in areas known to be "hotspots" for cyclonic storms. It is the source of woody debris that has been recently deposited onto river flats, into river channels and on beaches in large quantities (as evidenced in the photos in the background section).

Under the Gisborne Combined Regional Land and District Plan harvesting requires a consenting process to give the flexibility to develop and put in place site specific preventative and mitigation measures such as re-planting requirements.

The NES permitted activity conditions are inadequate and rigid and are opposed.

It is unacceptable that such land is afforded permitted activity status given the risks involved. Section 43 A (3) (b) RMA 1991 does not allow an NES to state that an activity is a permitted activity if it has significant adverse effects on the environment. This is such an activity.

Relief Sought:

That the NES accords restricted discretionary status for harvesting on steep to very steep erosion prone LUC units of Orange ESC, for the Gisborne district these being LUC units 7e2, 7e3, 7e4, 7e14, 7e15, 7e16, 7e17, and any combinations of these with higher level units (e.g. 7e15 + 8s1).

Orange Zone Afforestation

Linked to Orange ESC harvesting issues is afforestation (of new forests) on Orange being a permitted activity. This would prevent any new planting restrictions as a method to mitigate woody debris or sedimentation of waterways from future harvesting. This is opposed.

Relief Sought:

That the NES accords restricted discretionary status for afforestation on steep to very steep erosion prone LUC units of Orange ESC, for the Gisborne district these being as above.



“Orange” ESC land in the Wharerata Ranges and inland Tolaga Bay. The inherent eroding and landsliding risk, particularly in heavy rain events in these types of locations means that any afforestation needs to be carefully controlled. This land is not suitable for afforestation or harvest as a Permitted Activity.

3. IMPLICATIONS FOR GISBORNE DISTRICT COUNCIL'S IMPLEMENTATION PROGRAMME FOR THE NPS-FM

Water Quality Limits and the NPS for Freshwater Management

Many of the proposals in the draft NES cut across the NPS-FM Objectives 1 and 2, and the requirements for the Council to manage water quality set out in that NPS-FM. While the "Ability to be more stringent" section of the NES (p97) identifies that this is "where required to meet the Objectives of the NPS-FM", the consultation document (p40) identifies this as where a limit has been set that has not been met, and forestry activities are the source of the contaminant.

Based on this explanation, this would seem to cut across the NPS-FM requirement for councils to "maintain and improve" water quality – as council could only be more stringent if the water quality was degraded.

Limiting the ability for the councils to be more stringent to only where a water quality limit has been exceeded is opposed.

Relief Sought:

That the NES allow Councils to have the ability to be more stringent in relation to all water quality limits set in order to enable them to maintain and improve water quality as required by the NPS-FM.

Outstanding Waterbodies

The consultation document (p40) identifies that councils can be more stringent "where significant values of outstanding waterbodies have been specified and forestry activities would have an adverse effect on these values" yet the rules set a number of permitted and controlled activity rules for outstanding waterbodies –including setbacks, river crossings and installation of slash traps.

This contradicts the carefully considered rules around Outstanding Waterbodies in Gisborne Regional Freshwater Plan and is opposed.

Relief Sought:

Delete references in the NES to outstanding waterbodies in the rules and allow councils the full ability to put in place appropriate rules (not just setbacks) for activities which could affect the values of outstanding waterbodies.

Wetlands

The NPS-FM specifically requires the protection of the significant values of wetlands and this is reflected in the Gisborne Regional Freshwater Plan. The discussion document does not specifically identify wetlands and their riparian areas as being a matter over which councils can be more stringent.

All of the forestry activities identified within the rule tables have the ability to affect the significant values of wetlands. For example In relation to setbacks the NES rule tables reference wetlands only greater than 2500m². In many instances the setbacks proposed may insufficient to protect a wetland's significant values – for example by altering the water table. The provisions for wetlands in the NES are opposed.

Relief Sought:

Delete the rules in the NES in relation to wetlands in their entirety and councils retain the ability to be more stringent around the management of wetlands and their riparian areas across all activities.

Timing of Earthworks

Timing of earthworks and activity within riverbeds is a significant issue both in terms of generation of sediment and avoidance of impacts on aquatic ecosystems and riverine birdlife. No provision for an earthworks “shut down” season is provided for in order to protect the values of sensitive receiving environments including outstanding waterbodies and wetlands.

Relief Sought:

Councils have the ability to be more stringent around the timing of earthworks and activities within the bed of a river or lake in all zones where this is required to protect sensitive receiving environments.

Fish Species Spawning, Migration and Riverine Birds

The General Conditions provide for fish spawning but only relate to a small number of mostly non-migratory species. Only 5 of these species are found in the Gisborne region, and many are not found in the North Island. It does not include a number of nationally critical and nationally endangered species as species such as inanga which are a substantial component of the whitebait fishery.

The General Conditions list periods of time when beds of rivers cannot be disturbed in order to protect the spawning of the fish species. These dates however do not align with local spawning dates of species in different parts of New Zealand. Fish will spawn at a different time in Invercargill to Northland – or Gisborne.

The Gisborne District Council has prepared a detailed fish migration and spawning calendar for native fish and trout which reflects both the species present and their lifecycle in this district. These are included within the Gisborne Regional Freshwater Plan and the rules for work within rivers in that Plan relate to these periods. The application of an edited list and nationally derived spawning periods is opposed.

The General Conditions provide for protection of nesting sites from disturbance for Nationally Critical or Nationally Endangered species. This does not provide for regionally threatened species or stronghold populations and has the ability to impact significantly on biodiversity values at a regional level.

Relief sought:

The fish spawning list be amended to include: long finned eel, short finned eel, short jawed kokopu, torrentfish, Crans bully, bluegill bully, upland bully, giant bully, inanga, banded kokopu, lamprey and smelt.

Allow councils to identify the local spawning times for fish species in their region through their regional plans.

Allow councils to identify important migration periods for native fish in their regions and be more stringent in relation to activities in the beds of rivers during these periods.

Allow councils to be more stringent where they have identified regionally threatened species or stronghold populations.

4. THE RISKS TO SENSITIVE RECEIVING ENVIRONMENTS

The ESC classification is based on LUC which is then used to determine activity status. This is a very good process to assess risk on the sites where the forestry activities are being carried out, but takes no account of variations in downstream receiving environments which demand site specific measures to avoid or mitigate adverse effects. Where the activity status includes a resource consent requirement this imparts the flexibility to provide for differing receiving environments and this is supported for this reason. However where permitted activity status applies, supported by generic permitted activity conditions only without allowance for variations in downstream receiving environments, this is opposed.

This provision also breaches the Section 43A (3) (b) RMA 1991 stipulation and appears to be in contradiction to the National Coastal Policy Statement which specifically requires the consideration of natural character, water quality and other matters in relation to vegetation clearance. Policy 22 of the National Coastal Policy Statement requires "*Control the impacts of vegetation removal on sedimentation including the impacts of harvesting plantation forestry*".

Relief Sought:

The inclusion of sensitive receiving environments such as estuaries, coastal marine areas, water intakes, significant aquatic ecosystems, recreation and amenity features into the matters where councils can apply more stringent rules. (It is noted an earlier Plantation Forestry NES proposal included an exception for sensitive receiving environments).

5. THE GENERAL APPROACH TO PERMITTED ACTIVITIES

General Approach of Using Permitted Activities

The proposal, for this district would mean fewer forestry activities would be subject to resource consent processes. Instead there would be more permitted activities subject to NES permitted activity conditions. The cost of monitoring resource consent conditions is recoverable from consent holders. The cost of monitoring permitted activity conditions is not. This would amount to a shift in cost from those carrying out forestry activities to the wider rate-paying community. This is estimated to be \$120,000 per annum. For Gisborne District Council this would equate to a 0.2% increase in rates across all landowners.

Resource consent processes involve pre-application discussions, requiring further information and formulating clear activity based conditions that will lead to required environmental outcomes. These are proactive processes by which forestry activities are able to be shaped before they begin. They enable useful advice to be conveyed to contractors not used to local conditions. Forestry activities such as earthworks, quarrying and harvesting are irreversible and are often large in scale and happen very quickly. Where activities are permitted they are able to proceed without council approval. How the activities are carried out is unable to be influenced. Council involvement is limited to compliance monitoring and enforcement. These are reactive in nature, occurring after activities have occurred.

Relief Sought:

Use of resource consent requirements where the potential exists for significant adverse environmental effects. This includes for example Orange zone harvesting and where there are sensitive receiving environments. These are areas of the NES where environmental risks are high and intensive compliance monitoring would be required.

Uncertainty of Conditions

The proposed permitted activity conditions frequently use uncertain language such as "as far as is practicable", "if unavoidable", "except where unsafe or impracticable to do so". Such language results in conditions that are litigious or unenforceable.

The glossary definition of forestry/plantation forestry requires certain knowledge that the purpose of planting was commercial. A permitted General Condition for vegetation clearance and disturbance requires knowledge that riparian vegetation will readily recover within five years. Neither will always be known with the certainty required for enforcement.

A rule that is unenforceable has little effect. Use of uncertain language and criteria that require judgement throughout permitted activity conditions is opposed. The NES proposal explains further analysis and drafting is envisaged and the rules as they are amount to drafting instructions. There is no obvious clear and certain language for many of the rules that would suitably manage adverse effects across all circumstances.

Relief Sought:

That if permitted activity status is retained the relevant conditions err on the side of caution, alternatively a consents regime should be required.

Ability to be More Stringent

The listed NES activities covered by rules encompass all major within forest activities. The ability for councils to be more stringent is tightly constrained. This is opposed. To properly apply sustainable management and give effect to their statutory responsibilities councils need the ability to be more stringent than allowed for in the NES. Mapping areas of significance is expensive and takes considerable time to collect and collate the required data. Good outcomes can be achieved through setting out key parameters and using site specific assessments.

Relief Sought:

That unmapped wahi tapu sites, unmapped significant indigenous flora and fauna, other than outstanding but still significant freshwater bodies and natural features and landscapes (as well as sensitive receiving environments as above) all be included as matters where councils can apply more stringent rules.

Management Plans

Harvest Plans, Quarry Management Plans and Erosion and Sediment Control Plans are required to be prepared for harvesting, quarrying and earthworks respectively. These provisions are opposed in their present format. The contents required of these plans is broadly described and could be satisfied with a somewhat cursory response of little help in achieving required environmental outcomes. In any case the role of councils is restricted to being advised when activities will begin and having the Plans made available to them. Under a permitted activity, there is no ability for councils (or any other body) to certify the Plans as adequate.

Relief Sought:

That management plan content be made more specific but management plans not be considered as setting environmental standards. Where site specific measures are essential, the mechanism for this should be through a resource consent process.

Mechanical Land Preparation – Root Raking

Root raking is permitted in the Orange and Red Zones on slopes >25° if the activity does not affect the subsoil. This would allow the total removal of the topsoil and is opposed. Top soil removal would severely limit plant growth of any kind and is a practice not regarded as sustainable land management. Without topsoil and plant cover land is subject to soil erosion. Topsoil disturbance should be kept to a minimum.

Relief Sought:

Root raking in the Orange and Red Zones on slopes >25 ° should only be permitted if the soil A horizon is not removed. The A horizon should be defined as “the surface soil layer consisting of surface mineral horizons with maximum organic matter, usually dark in colour”.

6. IMPLICATIONS OF URBAN FORESTRY ON AMENITY

The Gisborne District has a number of plantation forests established within the urban and peri-urban areas of the city. The harvest of these forests can have significant effects on urban amenity. While we note that nuisance issues such as dust, noise and traffic generation are out of scope (p94). In the afforestation and harvest of plantation forests can result in significant impacts on amenity – through shading, loss of views, loss of visual amenity and allergy issues around pine pollen. In addition pollen can foul rainwater tanks which are used in peri-urban areas for drinking water supply. The Council does not consider that the NES deals with these matters sufficiently in relation to the permitted activity standards. In particular the buffer distances and permitted activity standards around shading are inadequate to deal with matters of urban health and amenity.

Relief Sought:

That where plantation forestry is established or proposed within an urban area, that councils retain the ability to be more stringent with regard to matters which deal with urban amenity.

7. HEARING OF SUBMISSIONS AND REVIEW PERIOD

Hearing of Submissions

The Council notes that there appears to be no provision for a verbal submission to support these written submissions and seeks that a verbal submission process be provided for – and that these submissions be heard by either a Select Committee or a panel of independent commissioners with expertise in RMA matters.

NES Review

A review of the NES after five years if it proceeds is supported given the wide reaching impact it would have on present controls on plantation forestry and the potential for significant adverse environmental effects. An open ended NES would be difficult and cumbersome to change even when the need is clear.

Council's plans have been formed from much more detailed community consultation, submission and appeal processes than has been the case with this NES proposal, yet they are still required to be reviewed every 10 years.

Relief Sought:

That Council and other submitters be able to present their submissions verbally to a Select Committee or a panel of independent commissioners with expertise in RMA matters.

That should this NES proceed, it is reviewed five years after taking effect.

For further enquiries please contact:

Lois Easton,

Shared Services Science Manager

Phone s 9(2)(a) [REDACTED]

Email: s 9(2)(a) [REDACTED]

7 August 2015

File Ref: X/26/20/04

NES-PF Consultation
Attn: Stuart Miller
Spatial, Forestry and Land Management
Ministry for Primary Industries
PO Box 2526
Wellington 6140

For: Stuart Miller

Dear Stuart

Submission on Proposed National Environmental Standard for Plantation Forestry

Please find enclosed Greater Wellington Regional Council's submission on Proposed National Environmental Standard for Plantation Forestry

Please feel free to contact me on s 9(2)(a) if you have any questions or concerns.

Yours sincerely

Paul Denton

s 9(2)(a)

Encl: Submission

s 9(2)(a)

www.gw.govt.nz

Greater Wellington Regional Council: Submission

To:	Stuart Miller
Submission on:	NES-PF

1. Greater Wellington Regional Council (GWRC) wishes to make a submission on the Proposed National Environmental Standard for Plantation Forestry (NES-PF).
2. GWRC is a regulator of forestry activities through the requirements of the Resource Management Act 1991 (RMA) – regional policy statement, regional plans, and is also an owner of forests in the Wellington Region.
3. The new proposed Natural Resources Plan for the Wellington Region (proposed Plan) (publicly notified on 31 July 2015) will replace the regional soil plan and the regional freshwater plan for the management of forestry operations in the region.
4. This submission from Greater Wellington Regional Council is based on submissions supplied by Local Government New Zealand (LGNZ), and Environment Canterbury (ECAN).
5. The following submission points have been collated from various GWRC groups and organised into the following sections:
 - a) Drafting – permitted activity conditions
 - b) Permitted baseline implications
 - c) Review of regional plans
 - d) Management plans
 - e) Policy framework and the NPS-FM
 - f) Environment assessment tools
 - g) Ecological considerations

Drafting - permitted activity conditions

6. Greater Wellington Regional Council endorses the submissions made by Environment Canterbury and Local Government New Zealand about the drafting of the permitted activity conditions in the consultation document.
7. The draft conditions contains wording that would only confuse the management of forestry in New Zealand and create difficulties with the implementation of the NES-PF for forestry companies and councils alike.
8. Officers from the Ministry for Primary Industries (MPI) have made assurances that the drafting will be addressed when the Parliamentary Counsel Office (PCO)

considers the draft NES-PF. These comments are reassuring; however, there is some caution nonetheless over the process from here, and the lack of any final draft document becoming available before the NES-PF becomes regulation.

Recommendations:

9. Greater Wellington Regional Council recommends that:
 - *The proposed NES-PF is reviewed by a selection of local authorities before it becomes a regulation to address any areas of subjective interpretation in the wording of the proposed rules and standards.*

Permitted baseline implications

10. Greater Wellington Regional Council notes the concerns raised by LGNZ in their submission on the permitted baseline. These concerns are valid and local authorities will have to be comfortable with draft permitted activity conditions in the NES-PF.
11. Greater Wellington Regional Council manages section 13 activities as permitted activities with specific conditions. If these rules are breached the activity requires a discretionary resource consent. As noted by LGNZ, river crossing rules in regional plans are imperfectly linked to forestry activities.
12. Greater Wellington Regional Council bundles the consent requirement for forestry operations, to provide efficiencies for operators and managing the effects if section 13 permitted activity rules are breached. This in-effect this means that the forest operation for the activities in question would require a discretionary consent. For example, if the forestry operation breached the earthworks rules in the regional soil plan. A similar situation would arise and the consent becomes discretionary, whereas the regional soil plan permits vegetation clearance on erosion prone land if the land is replanted. It is not clear from reading the consultation documents what would happen if a permitted activity rule is breached for two different activities, only one of which is controlled by the NES-PF. For example, if one condition is breached for harvesting and a general condition is breached for river crossing the consent could become restricted discretionary or controlled depending on the activity.
13. Conditions for section 13 activities are designed around the effects of known activities in the beds of lakes and rivers, regardless of the operators. The NES-PF is in-effect setting up a new set of standards for one industry over others. This has equity implications and raises questions of natural justice in the implementation of the RMA.

Recommendation:

14. Greater Wellington Regional Council recommends that:
 - *The proposed NES-PF conditions for section 13 of the RMA - pertaining to the beds of lakes and river are further examined to ensure a higher compatibility with regional plans.*

- *The proposed NES-PF will need to be clear about the situation where two or more conditions are triggered and whether the overall consent for the activity is bundled-up or bundled down, or are each part to be dealt with separately.*

Review of regional plans

15. We note concerns in the LGNZ submission and the Environment Canterbury submission regarding the requirement for major plan re-drafting to be undertaken by councils so plans are compatible with the NES-PF and identify situations where the NES-PF does not apply.
16. Greater Wellington Regional Council supports the Environment Canterbury recommendation that the proposed NES-PF is amended to provide a transition period allowing operative (and proposed) regional plans to continue to apply until the changes to accommodate the requirements for the NES-PF are made.

Recommendation:

17. Greater Wellington Regional Council recommends that:
 - *The proposed NES-PF is amended to provide a period of time to allow councils to make changes to plans to accommodate the requirements of the NES-PF.*

Management plans

18. The main vehicle to deliver environmental outcomes in the NES-PF is through management plans. Management plans are currently used extensively in sediment and erosion control for earthworks in the Wellington Region.
19. Greater Wellington Regional Council notes that the implementation of an effective management plan to minimise sediment is a learned process, and has taken the industry some considerable time to master. Further, this has only occurred through intensive council support and involvement in management planning, usually through a consent process and extension work.
20. The management plan approach intended in the NES-PF is that the forest industry will produce management plans without any direct council input. The plans will be based on a set of criteria to be addresses, rather than being constructed through a relationship and incorporated into a working plan. Greater Wellington Regional Council considers this a weakness of the NES-PF, and may not result in the outcomes anticipated from the NES-PF.
21. Greater Wellington Regional Council is particularly concerned that while many of the conditions of the permitted activity rules point towards standard good management practices (e.g. undertaking earthworks in accordance with an erosion and sediment control plan), there are no tests provided to ensure such practices are appropriately addressing the potential adverse impacts of forestry activities. For example, the permitted activity rule for earthworks contains conditions requiring erosion and sediment control plans (ESCP) that outlines the devices and methods to be used on site, but does not set an objective(s) that must be achieved by this ESCP. Objectives of an ESCP may be standards for the suspended sediment content or

clarity of discharges leaving a site, or may be standards for the construction and maintenance of ESC devices, such as set out in guidelines for ESCPs (which many if not all regional councils have or use).

22. Besides lacking clarity on the potential adverse environmental effects of each activity, this approach means that regional councils will find enforcement of some of the permitted activities very difficult, as there is no test/outcome for when an activity is having too great an environmental impact. Currently the draft earthworks rules simply require an ESCP to be in place, regardless of how effective it is at mitigating the adverse effects of sediment generation on water quality.

Recommendation:

23. Greater Wellington Regional Council recommends that:
 - *The proposed NES-PF is amended to strengthen the management plan process to allow council more involvement in the plan making process for a better environmental outcome.*

Policy framework and the National Policy Statement – Freshwater Management

24. The ‘objective’ of the NES-PF appears to be to ‘remove unwarranted variation’ between regional plans around the country. This objective is not written in the sense of an objective that would be written as part of a regional plan, and is about a notion of national efficiency – making improvements in the ‘process’ of plantation forestry to what would appear as a national benefit.
25. There are no environmental, social or cultural objectives in the NES-PF.
26. The links between the aims of the NES-PF and other higher level policy documents are unclear. In particular, it is unclear how the NES-PF is consistent with the NPS-FM requirement to maintain or improve water quality (Objective A2 of the NPS-FM).
27. There are no policies to guide decision makers. It is assumed then that plan policies will be a surrogate policy platform in the NES-PF. This is not clear from the consultation document.
28. The National Policy Statement for Freshwater Management (NPS-FM) does provide a vehicle to influence the forestry industry on water quality. The actual mechanism of how this would work in practice is not clear from the consultation document.
29. While the discussion document indicates that the NES-PF allows for greater stringency where a limit in accordance with an NPS-FM freshwater objective is not met (see p42 of the consultation document), this direction is not evident in the draft rules. This includes that this matter is not identified in the tables named ‘matters where councils can apply more stringent rules’ (p98 of the consultation document).

Recommendation:

30. Greater Wellington Regional Council recommends that:

- *The proposed NES-PF is amended to provide more policy direction for the management of forestry consents and the relationship to the NPS-FM.*

Environmental assessment tools

31. Greater Wellington Regional Council considers that the Erosion Susceptibility Classification (ESC) and the Fish Spawning Indicator (FSI) tool are useful in assisting local authorities to manage the effects of plantation forestry on freshwater fish (noting that it is still a tool under development), and for recognising erosion susceptibility in the hill country.

32. However, we note in the consultation document that it is not made clear why these two tools (ESC, FSI) have been chosen. The assumption appears to be that the spread of wilding pines and effects on fish species are the three most important environmental effects of forestry that need to be managed. If this is the case it should be made clear in the analysis of the policy. We note that the ESC has been in earlier drafts of the NES-PF and is integral to effective management of forestry in the hill country.

33. The effects of forestry activities on indigenous flora and fauna can be significant and should not be overlooked. Other tools may be necessary, such as an indicator to determine the likely locations of the habitats of nesting birds. Plantation forests can also form the habitat of other Threatened or At Risk species other than birds.¹

Recommendation:

34. Greater Wellington Regional Council recommends that:

- *The proposed NES-PF is expanded to include the development of other tools that may address effects on other species not recognised in the proposed standard.*

Ecological considerations

35. Greater Wellington Regional Council agrees that planting forests can be more beneficial for the environment than other land uses (e.g., pasture) – by reducing erosion, and sediment and nutrient losses while the forest is intact. However, clear-felling can negate these benefits if hillsides are exposed for several years, especially if the period of exposure coincides with severe weather events². Denuded slopes can release significant pulses of sediment and nutrients into waterways and coastal areas. If harvesting debris blocks waterways it can create a risk of flooding and slips from destabilised soil (which can be exacerbated as old roots rot and create channels for water ingress). These effects could be reduced by recognising the importance of re-planting slopes as soon as practicable.

¹ Pawson, S.M., Ecroyd, C.E., Seaton, R., Shaw, W.B., Brockerhoff, E.G. 2010. New Zealand's exotic plantation forests as habitats for threatened indigenous species. *New Zealand Journal of Ecology*, Vol. 34, No. 3, 2010.

² Marden, M., Rowan, D. 2015. The effect of land use on slope failure and sediment generation in the Coromandel region of New Zealand following a major storm in 1995. *New Zealand Journal of Forestry Science* 45: 10, <http://www.nzforestryscience.com/content/pdf/s40490-015-0036-9.pdf>

36. Greater Wellington Regional Council supports the proposed requirements for afforestation setbacks from water bodies. However, there does not seem to be any good evidence supporting only a 5m setback for streams less than 3 metre wide and wetlands larger than 0.25ha. The Scion environmental impact assessment³ contains evidence largely supporting a 10m minimum setback. Both small streams and wetlands often contain significant indigenous biodiversity values⁴ the protection of which would benefit from a 10m minimum setback. An additional advantage to increasing these setbacks would be the simplicity of enforcing a uniform minimum 10m buffer around all water bodies (except in the coastal marine area).
37. In order for setbacks to provide effective environmental buffering against the effects of forestry activities the rules should include a requirement for setbacks to be planted with appropriate vegetation that will provide services for streams such as shading and intercepting sediment and nutrients.
38. In line with our comments on afforestation setbacks, we would not support anything less than 10m minimum setbacks for streams when carrying out earthworks. However, we support the exceptions for constructing water-body crossings or debris traps.
39. The definition of harvesting should not include ‘damage to indigenous vegetation adjacent to the plantation forest where necessary to remove the production crop’ or ‘riparian vegetation disturbance’. These impacts should instead be identified as ‘risks’ to better convey the understanding that damage and disturbance to riparian and indigenous vegetation should be avoided or remediated wherever possible.
40. Greater Wellington Regional Council recommends that the riparian disturbance rule requires the operator to make plans to avoid using harvesting machinery within 10m of a water body where possible, in addition to prohibiting machinery within 5m of a water body (which we support). This is in line with our comments on afforestation setbacks.
41. Greater Wellington Regional Council supports the requirement of a harvest plan that includes environmental risk assessments. We recommend the matters to be included in the harvest plan should also include risk assessments relating to nesting bird species (and other native species if relevant in the context of the site) as specified in the general permitted activity conditions, and the identification of any impacts on significant natural areas.
42. Greater Wellington Regional Council requests the opportunity to review a draft of the ‘prescribed template’ for the harvest plan (as mentioned on page 71 of the consultation document). As harvesting will be a permitted activity, local authorities will not have the opportunity to determine whether plans have been made to a

³ Monge, J.J., Baillie, B.R., Paul, T.S.H., Harrison, D.R., Yao, R.T., Payn, T.W. 2015. Environmental impact assessment of the proposed national environmental standard for plantation forestry. The New Zealand Forest Research Institute Limited (Trading as Scion). <http://www.mpi.govt.nz/document-vault/7986>

⁴ These values can include the fact that biodiversity is representative of its type in a given region, rare, particularly diverse, or serves important ecological functions such as buffering, connectivity, or creating habitat for protected or threatened indigenous species. Biodiversity can also be valuable to tangata whenua. See policy 23 of the Wellington Regional Policy Statement: <http://www.gw.govt.nz/assets/Plans--Publications/Regional-Policy-Statement/RPS-Full-Document.pdf>

satisfactory standard. Therefore, it will be important for local authorities to comment on the adequacy of the template before the NES-PF is brought into force. We recommend that when MPI/MfE is designing the harvest plan template they refer to the recently released EIANZ Ecological Impact Assessment (EIA) guidelines for use in relation to managing New Zealand's terrestrial and freshwater ecosystems⁵.

43. Greater Wellington Regional Council supports the requirement for replanting to take place no closer to significant natural areas than the previous stump-line.
44. Greater Wellington Regional Council suggests that setbacks for replanting should be determined and fixed at the afforestation (i.e., first planting) stage wherever possible. In many areas, plantation forests significantly affect the local water table⁶, meaning that streams and wetlands are likely to reduce in size and extent over time in these areas. For example, streams that originally have a width of 3m may reduce to 2.8m and wetlands that are 0.25ha in size may contract to 0.23ha under plantation forests. Clearly, given the current differences in setbacks between different sized waterbodies and watercourses, this could mean that setbacks will significantly reduce in length (or disappear) between the afforestation phase and subsequent replanting phases. We believe that this would be a poor environmental outcome and suggest that policy wording should be adapted to prevent this.
45. Greater Wellington Regional Council supports the intention for local authorities to retain the ability to create more stringent rules in their own plans when indigenous vegetation clearance, associated with plantation forestry harvesting, occurs within areas of significant indigenous vegetation or the significant habitats of indigenous fauna.
46. Greater Wellington Regional Council does not agree that general conditions which allow incidental damage to riparian vegetation, or vegetation at the edge of a significant natural area (SNA) that is likely to recover in five years, will adequately manage the effects of activities on these areas.
47. Greater Wellington Regional Council recognises that the proposed condition is a practical consideration as it is unlikely that operators will be able to completely avoid damage to sites adjacent to harvest zones. However, the definitions of damage being 'incidental' and able to 'readily recover within five years' are too vague and open to interpretation. This ambiguity could result in damaging environmental consequences if operators do not seek the guidance of ecological experts or the local council (which is currently not required in the proposed rules). In addition, it will be difficult for councils to enforce this condition given its lack of clarity.
48. Greater Wellington Regional Council therefore recommends setting a maximum percentage of riparian area and/or SNA vegetation that can be affected in any given site. Calculations of the expected affected areas for each site could be made by the

⁵ <http://www.eianz.org/resources/publications/ecological-impact-assessment-guidelines-for-new-zealand>

⁶ Fahey, B. 1994. The effect of plantation forestry on water yield in New Zealand. *New Zealand Journal of Forestry*, pp 18-23, http://www.nzjf.org/free_issues/NZJF39_3_1994/023DE35E-1180-4500-BA7A-C635D220B96D.pdf

operator and reported to the council. If the operator cannot operate below the threshold they would need to apply for consent for a discretionary activity (in line with the proposed discretionary activity classification criteria).

49. Greater Wellington Regional Council supports the inclusion of requirements relating to the identification and protection of indigenous bird species because this highlights the importance of plantation forests as potential habitats for these species. We have three recommendations in regards to this proposed condition:
 - a) Greater Wellington Regional Council recommends that operators are made aware of their existing legal obligations under the Wildlife Act 1953 and be encouraged to survey for, and take steps to avoid harm to, any native bird species that may be killed or have their nests disturbed during any forestry activities. We note that, regardless of the rules made under the final NES-PF, under the Wildlife Act 1953 it is an offence to kill, or disturb the nests of, most New Zealand bird species, not just those that are Threatened or At Risk (as listed under the New Zealand Threat Classification System⁷). If this proposed condition remains, we recommend that all Threatened and At Risk bird species should be included in the condition.
 - b) Greater Wellington Regional Council suggests stronger wording in place of ‘must have procedures to...’, such as ‘must demonstrate procedures have been followed to...’. With the current wording there is no guarantee that operators will actually take steps to identify and protect sites of nesting birds. We believe the proposed alternative wording above is not likely to add a significant reporting burden.
 - c) Greater Wellington Regional Council recommends that a process or tool is outlined in the NES-PF for determining whether birds are likely to be nesting in any given area (which would need to be similar to the Fish Spawning Indicator). An identification system needs to be established or else councils will not be able to enforce this permitted activity condition. Operators and councils need to be able to determine in advance of the activity occurring if birds are likely to be nesting in the area. If it is to be left to councils to create spatial tools this will need to be resourced with the introduction of this NES-PF. The Atlas of Bird Distribution in New Zealand 1999-2004⁸ or similar databases could provide a basis for creating a spatial database (noting this publication is now over 10 years out of date and its data is not publicly available).
50. Greater Wellington Regional Council supports the inclusion of conditions related to fish spawning. However, we recommend that in condition 3 the term ‘suitably qualified person’ be more clearly defined in the final regulations.
51. Greater Wellington Regional Council supports the proposed provisions relating to river crossings as a permitted activity, particularly the requirement to provide passage for fish. However, we recommend the description of the activity clarifies

⁷ <http://www.doc.govt.nz/nature/valuing-nature/threatened-species-categories/>

⁸ Robertson, C.J.R., Hyvonen, P., Fraser, M.J., Pickard, C.R. 2007. *Atlas of Bird Distribution in New Zealand 1999-2004*. The Ornithological Society of New Zealand, Wellington.

that it is referring to rivers and streams (alternatively ‘watercourses’). The way the activity is described seems to only refer to larger rivers. Streams also contain important biodiversity values that should be safeguarded. All previous activities have referred to rivers and streams and it is important that this activity description is consistent.

52. The permitted activity conditions will need to provide clear, detailed parameters to ensure fish passage will be provided and ensure councils will be able to enforce this condition. Structures constructed in watercourses should reflect (as far as possible) the existing width, streambed character, gradient and water velocity and turbulence, and can include the use of baffles, rock dams, or rock ramps. Greater Wellington Regional Council provides a guide for creating fish-friendly culverts and rock ramps in small streams⁹. The Department of Conservation has also gathered a range of national and international resources to inform the management of fish-passage¹⁰. These would be useful to refer to when refining these conditions.

Recommendation:

53. The Greater Wellington Regional Council recommends that:
- *That the ecological considerations mentioned above that support the NES-PF, and make recommendations for improving the ecological effects of forestry, are taken into account for the final version of the regulations.*

.....
Jonathan Streat
Manager, Environmental Policy

Address for service:

Paul Denton
s 9(2)(a) [redacted]
s 9(2)(a) [redacted]
[redacted]
[redacted]
[redacted]
[redacted]

⁹ <http://www.gw.govt.nz/assets/council-publications/fishfriendlyculv.pdf>

¹⁰ <http://www.doc.govt.nz/nature/habitats/freshwater/fish-passage-management/resources/>

11 August 2015

Stuart Miller
Spatial, Forestry and Land Management
Ministry for Primary Industries
Wellington 6140

Dear Mr Miller,

SUBMISSION ON PROPOSED NES FOR PLANTATION FORESTRY

Introduction

1. Thank you for the opportunity to submit on the Proposed National Environmental Standard for Plantation Forestry discussion document (the Proposed NES).
2. The principal Hawke's Bay regional planning documents that the Proposed NES would relate to is the Hawke's Bay Regional Resource Management Plan (RRMP) and the Hawke's Bay Regional Coastal Environment Plan (RCEP).
3. We are aware of many other submissions prepared by Local Government New Zealand, regional councils and unitary authorities. We share much of the same concerns. In this submission, we have chosen to highlight our key concerns by first providing the strategic context for forestry in the Hawke's Bay region, then commenting on some specific areas of concern.

Forestry in a strategic Hawke's Bay context

Economic contribution

4. According to the 2014 National Exotic Forest Description (NEFD) survey, the total estimated exotic plantation forestry area is 133,324 hectares or 9.3% of the Hawke's Bay region. The target population for the 2014 NEFD survey was all known forest owners and managers with at least 40 hectares of planted production forest.
5. Sixty four percent (approximately 900,000ha) of the region's rural land is classed as erodible to highly erodible hill country; of that approximately 300,000ha is under a land use that is likely to exceed the sustainable capacity of the soil.
6. According to the 2010 Hawke's Bay Annual Economic Profile the forestry sector generated \$21 million in economic outputs in 2010. The sector contributed 0.5% to the region's economy in 2010 up from 0.1% in 2000. Hawke's Bay's forestry sector grew by 11.9% in 2010 compared with growth of 14.9% in the sector nationally. Growth in the sector in Hawke's Bay has averaged 17.8% pa up to 2010, varying from a low of -7.9% in 2002 to a high of 62.2% in 2001.
7. The forestry sector employed 69 persons in Hawke's Bay in 2010 which was down from 70 in 2009. Employment growth in the sector averaged 15.6% up to 2010 compared with total employment growth in the region of 1.6%. Growth in the sector peaked at 91.9% in 2001.
8. Approximately 240 business units were in operation in the forestry sector in Hawke's Bay in 2010, which was down from 242 in 2009. The number of business units peaked at 271 in 2006.

9. PanPac is one of the largest integrated forestry, sawmilling and pulp operations in New Zealand and has been operating from its Whirinaki site since 1973. PanPac has a workforce of over 350 permanent staff and over 450 people contracted to assist in forestry, harvesting and transport operations. According to a 2005 BERL report, PanPac makes significant economic and social contributions to the region. For example, through generating 1,683 full-time equivalent (FTE) jobs or about 2.7% of employment in the region. This total includes 787 FTEs employed in PanPac's own operations and 896 FTEs employed in other industries across the region.

Hawke's Bay Land and Water Management Strategy and Long Term Plan 2015-25

10. The Hawke's Bay Land and Water Management Strategy (LAWMS) provides direction and a common focus for the management of land and water for improved economic and environmental outcomes. It recognises that development potential and pressures vary across the region as do the values associated with the land, rivers, lakes and wetlands and therefore different responses are required.
11. Pertinent to the NES-PF is the sustainable land use objective:
- The future viability and resilience of Hawke's Bay's land and landscapes is enhanced and water quality is improved through appropriate land management and land use practices.*
12. Relevant policies include:
- Re-vegetation of erosion prone hill country pasture with trees and bush species is incentivised; and*
- Research and development investment is aligned to support long term potential including preparing for climate change.*
13. In addition, Council's Long Term Plan 2015-25 (LTP) contains a two relevant strategic goals:
- Profitable farming systems that adapt to pest threats, greater weather extremes and take advance of new opportunities;*
- Smart management links biodiversity, land, freshwater and our coastal marine areas.*
14. Our comments on the proposed NES are made in the light of this strategic context.

Forestry as a resource management tool

15. HBRC considers forestry is an effective resource management tool to manage water quality and sedimentation across the landscape.
16. Forestry provides multiple benefits to ecological services in, for example, the retention of water in the landscape, the control of sedimentation in erosion prone landscapes, the alleviation of some of the impacts of climate change and other biodiversity functions.
17. HBRC is currently undertaking work towards an East Coast Hill Country Strategy which will address in part the environmental and economic sustainability of further development or retirement of the East Coast's hill country, and forestry is likely to be a significant element of that strategy.
18. HBRC uses plantings of willow and poplar in its flood control and bank retention asset management of rivers and streams. It is not clear by the definition of "Plantation Forestry" in the proposed NES whether such plantings are excluded from the NES.
19. HBRC does not wish to discourage forestry as we consider the positive benefits that are associated with the industry balance potential adverse outcomes.

20. HBRC seeks assurance that the proposed NES does not have unintended consequences in terms of discouraging forestry and reducing its use as a resource management tool. HBRC also seeks clarification on whether planting for flood control purposes is excluded from the definition of "plantation forestry" and requests that the definition be revised to remove uncertainty.

National Consistency

21. HBRC supports the implementation of a nationally consistent framework and process to manage plantation forestry. This national framework should have the flexibility to adapt and respond to local/regional variation such as sensitive downstream receiving environments. Where possible, the process councils may adopt to address local variation should also be nationally consistent to provide certainty for the industry.

Erosion Susceptibility Classification and Erosion and Sediment Control Plans

22. HBRC acknowledges that the Erosion Susceptibility Classification (ESC) is broad and is probably the best available national scale information to use to promote an NES which achieves national consistency. We accept that it is appropriate to use this broad scale to determine the activity status of an activity i.e. permitted, controlled and restricted discretionary. However it is not considered appropriate to rely on this spatial representation of susceptibility as a guide for managing the specific risks on any particular property. HBRC considers that Erosion and Sediment Control Plans (ESCP) are the key tool and regulatory mechanism for managing specific risks/effects of the various plantation forestry activities.
23. The content and complexity of the ESCPs prepared must reflect the actual risks that are present on the ground. For example an ESCP for a property that has been bundled based on the lower or dominant Erosion Susceptibility Classification (ESC), must still address the actual risk irrespective of whether they are in a green, yellow, orange or red zone in order for the ESCP to be effective in terms of environmental outcomes.
24. HBRC recognizes that there are parallels between ESCPs and Farm Environmental Management Plans (FEMPs) that are now being incorporated into regional plans. These FEMPs generally include both pastoral and forestry activities and their content and scope often reflects the risks associated with the property and the location within the catchment.
25. There is the potential for ESCPs to replace FEMPs at a regional or national scale and this would be efficient from a regulatory perspective, particularly when FEMPs might be imposed on a catchment by catchment plan change basis.
26. Where regional plans currently include FEMPs, councils are having to develop systems in order to ensure that they are prepared to an adequate standard, are implemented and are audited in order to ensure that the environmental benefits will be achieved.
27. A similar process will be required for the ESCP in order for them to be effective. However the current drafting of the permitted activity rules only requires that the plans are prepared and submitted; there is no ability for Council to assess or approve the plans as being adequate or fit for purpose. The requirement for preparing and submitting plans may be nationally consistent but they also need to be effective in terms of environmental outcomes.
28. HBRC requests that the proposed NES includes a framework for approving and auditing ESC plans and as well as the other plans that the NES requires to be prepared.

Costs of implementation

29. While it is clear that regional councils can recover costs where a resource consent is required, there is still no clear mechanism for councils to recover costs associated with administering, monitoring and enforcing permitted activity conditions.

30. It is acknowledged that this situation occurs in our recent Tukituki Plan Change 6 and HBRC has included a regional targeted rate for rural properties to meet some of these costs.
31. However, HBRC requests that options for cost recovery are considered more carefully before the NES-PF is finalised.

Genetically modified tree stock

32. The Proposed NES proposes that

“Afforestation or replanting using genetically modified tree stock is permitted where the treestock has gained the appropriate approval for deployment from the Environmental Protection Authority (EPA), and is subject to conditions imposed by the EPA”.

33. HBRC acknowledges that the Environmental Protection Authority has the best scientific resources to evaluate the risks of GMOs. However the permitted activity status has been applied without an overall national policy direction being signaled on the role of GM products in New Zealand.
34. It is requested by HBRC that the NES remain silent on the issue of ‘genetically modified tree stock’. (i.e. is beyond the scope of the NES)

National Policy Statement for Freshwater Management

35. HBRC notes that the proposed NES provides for circumstances where councils can impose more stringent requirements on forestry related activities in order to give effect to the National Policy Statement for Freshwater Management (NPSFM).
36. The NPSFM is an important policy framework for councils and communities and despite the inclusion of stated circumstances where more stringent requirements might be imposed, there is a risk of the NES-PF cutting across Objective CA1 and Policy CA2 of the NPSFM i.e. providing a nationally consistent approach to establish freshwater objectives that recognizes regional and local circumstances.
37. The situation might arise where an activity which complies with permitted activity conditions still have effects that impact on achieving an objective for a particular water body. That activity is, in effect, being given a higher priority over other activities that might have the same effect, yet councils would be limited to placing more stringent controls on those other activities.
38. HBRC requests that central government considers whether councils should be allowed to impose more stringent controls in order to give effect to any aspect of the NPSFM related policy – not just those relating to outstanding waterbodies and wetlands.

Summary

39. The Hawke’s Bay Regional Council supports the intent of the National Environmental Standard for Plantation Forestry. However it relies heavily on the preparation and monitoring of various plans for different activities without providing councils with the ability to assess whether such plans adequately address the risks and to not approve them where they don’t. The NES needs to provide a nationally consistent framework for approving and auditing these plans, along with a clear mechanism for recovering costs.
40. A well executed ESCP process at a national level has the potential to remove the need for their consideration and inclusion in catchment based plan changes and that would be efficient.
41. There is a risk that the NES-PF might restrict council’s ability to give effect to the NPSFM.

42. Once again, thank you for the opportunity to make this submission on the Proposed NES for Plantation Forestry.

43. The Regional Council's address for service in relation to this submission is:

Hawke's Bay Regional Council
159 Dalton Street
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Attn: Esther-Amy Powell
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44. If you have any queries on this submission, in the first instance please contact Esther-Amy Powell using the details above.

Yours sincerely



FENTON WILSON

Chairman

Phone:

Email:



11 August 2015



www.horizons.govt.nz

NES-PF Consultation
Attention Stuart Miller
Spatial, Forestry and Land Management
Ministry for Primary Industries
PO Box 2526
Wellington 6140

File ref: ROA 05 01
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BY EMAIL ONLY
NES-PFConsultation@mpi.govt.nz

Dear Stuart

SUBMISSION ON PROPOSED NES FOR PLANTATION FORESTRY

Thank you for the opportunity to make a submission on the Proposed National Environmental Standard for Plantation Forestry. Please find Horizons Regional Council's submission **attached**.

If you wish to follow up any of the matters presented in the submission, please contact Barry Gilliland on freephone [REDACTED] or email: [REDACTED]

Yours sincerely



Nic Peet
GROUP MANAGER STRATEGY & REGULATION

Kairanga

Maniototo

Palmerston North

Tairāhapa

Taumarunui

Wanganui

Woodville

Horizons Regional Council

Submission on the Consultation Document for the Proposed National Environmental Standard for Plantation Forestry – June 2015

Introduction

1. The following submission outlines Horizons Regional Council's (HRC) view of the proposed National Environmental Standard for Plantation Forestry (NES). It is strongly influenced by the resource management policy in HRC's combined Regional Policy Statement and Regional Plan known as the *One Plan*.
2. HRC is supportive of the submission of Local Government New Zealand. HRC's submission addresses matters of particular concern for the Manawatū-Wanganui Region.

Overview

3. Approximately 60% (1.3 million hectares) of the Manawatū-Whanganui Region is hill country, a high proportion of which is subject to accelerated erosion. The bulk of this erosion occurs during major storm events; the region having experienced its fair share of these over the last 100 years. The consequences of accelerated erosion in the Region are property damage, loss of top soil, dirty rivers, damaged transport networks, and reduced flood protection for lowland communities due to river siltation.
4. HRC is addressing accelerated erosion through its Sustainable Land Use Initiative (SLUI). Forestry is an important method for addressing erosion issues and appropriately placed and managed forestry is a significant part of the SLUI programme.
5. HRC supports well managed forestry, particularly where it provides long-term stabilisation of land subject to elevated erosion. If the NES provides for well managed forestry then it is supported.
6. Most of core forestry activities dealt with in the NES are dealt with as a single Permitted Activity for the whole Region in the *One Plan*, provided 17 activity standards are complied with (Annex A).
7. Forestry in the *One Plan* is defined as "...activities associated with all soil conservation forestry, forestry planted for carbon sequestration purposes, or production forestry including tracking, earthworks, land preparation, planting, pruning, thinning, clearing understory (indigenous and exotic species), and harvesting." The Permitted Activity does not include new river crossings or quarrying, although depending on the scale these activities may be covered by Permitted Activities for these activities.

Farm Forestry Stakeholder Representation

8. The NES deals with the core forestry activities and provides a rule cascade for each activity. Assuming that the burden of proof rests with the forestry industry, it appears that the NES will result in more work for the industry to assess activity status. This will potentially be a concern for small non-corporate foresters who make up more than 70% of the Region's forestry activity and are unlikely to have in-house expertise to do the work. It is understood that farm forestry is also a significant industry sector nationally.

9. HRC observes that farm forestry is poorly represented on the corporate forest sector dominated NES-PF Stakeholder Group. This appears to be inconsistent with ensuring the proposed NES-PF will be workable for farm forestry interests and this is a matter for concern in a Region using farm forestry as an erosion mitigation tool.
10. Relief sought
HRC encourages Ministry for Primary Industries to change Stakeholder Group membership to strengthen representation from the farm forestry sector in any future work on preparing the NES.

Uncertainty of Permitted Activity conditions

11. The consultation document states that: "...draft rules are intended to convey the policy intent." This foreshadows the fact that many of the conditions for rules in the NES need redrafting if they are to provide certainty for the industry and enforceable conditions for local authorities.
12. It is understood that the policy intent will be turned into regulation by the Parliamentary Counsel Office, so the policy intent appearing in the discussion document will be amended during that process. Legal redrafting will not automatically lead to enforceable conditions and it is impossible to know how practicable the final rule standards will be when applied to real-life situations.
13. The discussion document makes it clear that local authorities will be responsible for giving effect to and enforcing the requirements of the NES. HRC considers that those charged with this responsibility must have an opportunity to road test any near final NES rule cascade and provide feedback. This could be achieved by providing a further opportunity to give targeted feedback once the activity standards are closer to their final form. It would improve the final NES product and enhance implementation..
14. Relief sought
That further targeted consultation on near final activity standards is carried out before the NES is finalised.

Biodiversity – mapping versus One Plan schedule

15. The NES appears to assume that controls relating to significant indigenous vegetation lie solely with district councils and that the basic approach for protection is to map them as significant natural areas. This is not the case in the Manawatū-Whanganui Region.
16. HRC has taken responsibility in the One Plan for indigenous biological diversity in the Manawatū-Whanganui Region and has objectives, policies and rules to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna.
17. Significant habitats are not mapped, but described in words in a schedule in the Plan. This approach was thoroughly tested during the formal RMA planning process and was found to be an acceptable alternative to mapping. The NES in its current form would provide no protection for indigenous biological diversity in the Manawatū-Whanganui Region.
18. HRC submits that the approach taken to manage indigenous biological diversity in the One Plan must be provided for in the NES.

19. Relief sought

- (i) That the rules are amended to acknowledge that both regional councils and district councils have jurisdiction for indigenous biological diversity;
- (ii) Where the text "...significant natural area (SNA)..." appears in the proposed regulations they be replaced by "...significant natural area (SNA) or identified in a rule in a regional or district plan..."; and
- (iii) Any consequential amendments required to the rules cascade.

Biodiversity setbacks

- 20. The draft NES rules provide setbacks from perennial waterways, wetlands, lakes, coastal marine areas, and water bodies subject to water conservation orders, but do not appear to provide for setbacks from other significant indigenous biological diversity habitats. Instead, there is a "General Condition" that allows incidental damage, destruction or removal of indigenous vegetation during forestry activities.
- 21. HRC has taken a more precautionary approach in the One Plan and its Permitted Activity for forestry contains a 5 m setback for earthworks and new tracking from indigenous biodiversity habitats, unless special circumstances apply. Harvesting of existing forestry within setbacks is allowed, but any new planting or replanting of forestry trees must adhere to the 5 m setback condition. HRC considers this approach provides for better indigenous biological diversity outcomes than the approach proposed in the NES.
- 22. Relief sought
 - (i) That the NES be amended to include an appropriate setback from indigenous biological diversity habitats; and
 - (ii) Any consequential amendments required to the rules cascade.

Afforestation and replanting – red zone disconnect

- 23. The NES makes afforestation in the erosion susceptibility classification (ESC) red zone a restricted discretionary activity. Red zone land is classified as having a very high erosion susceptibility risk and afforestation is not always the best erosion management tool. HRC agrees there are benefits in requiring a resource consent for afforestation on red zone ESC, but it appears inconsistent and counterproductive that replanting in the red zone ESC does not have the same consent status. Permitting replanting where it may have caused adverse effects during the previous rotation seems unwise environmental management.
- 24. Relief sought

That replanting on land with an red zone ESC is made a restricted discretionary activity.

Alternatives to replanting

- 25. The NES addresses replanting. It appears to assume that replanting will always occur after harvesting existing forestry. HRC's experience is that it may be replanted, left to regenerate naturally, or in some cases sown in pasture species.
- 26. Returning land to pasture is sometimes an attractive option for landowners after farm forestry is harvested, but can be undesirable where the intent of forestry was to address accelerated erosion. It would be helpful if the NES

addressed that as an activity requiring consent. This would allow HRC and the landowner to have a mutually beneficial conversation about aftercare.

27. Relief sought

That the NES be amended to take into account that forestry is not always replanted following harvesting and provides for replanting in pasture species as a consented activity.

Management Plans

28. The NES requires preparation of management plans for earthworks, harvesting, and quarrying. These plans are made available to the local authority on request.

29. HRC has a similar requirement as a condition in its Permitted Activity. In our experience the standard of these plans is highly variable. In some cases there appears to have been no genuine evaluation of the best options for mitigation of environmental effects for the site, which does not inspire confidence the forestry operation will be able to comply with the activity standards.

30. It is assumed that a requirement for plans to be approved by the consent authority would not provide the certainty needed for a condition in a Permitted Activity. HRC considers one way to provide more certainty is for the management plan to describe how the operator intends to meet the activity standards. This would allow local authority to assess the plan and provide feedback if it had any concerns that the methods in the plan may not be adequate to achieve Permitted Activity compliance.

31. This would provide an opportunity for HRC and forestry operators to have a mutually beneficial conversation as well as laying the early groundwork for enforcement should it be necessary at a later date.

32. Relief sought

That the content of erosion and sediment control plans, harvest plans and quarry management plans be amended to include "*Methods demonstrating how the activity standards in this rule will be complied with.*"

Genetically modified tree stock

33. The NES seeks to make afforestation and replanting using genetically modified tree stock a Permitted Activity where the tree stock has gained the appropriate approval for deployment from the EPA. This a new addition to the permitted activity rules for these activities and comes hot on the heels of an Environment Court decision in *Federated Farmers of New Zealand v Northland Regional Council* (2015 NZEnvC 89) which determined that local authorities can make provision for control of genetically modified organisms in regional policy statements and plans.

34. Permitted activities are generally appropriate for commonplace activities likely to have no more than minor adverse effects on the environment provided that specified conditions are met. They are used where the environmental effects are known and the measures to avoid remedy or mitigate them have a good track record.

35. HRC considers that inclusion of planting of genetically modified tree stock as a Permitted Activity is presumptuous. Use of genetically modified tree stock is not a commonplace activity, most local authorities have not determined how they will respond to the Environment Court decision and there is likely to be

significant public interest where planting of genetically modified tree stock is proposed.

36. Relief sought

HRC seeks deletion of all references to deployment of genetically modified tree stock from the NES-PF.

Submission: A National Environmental Standard for Plantation Forestry (NES-PF)

Introduction

Thank you for the opportunity to submit on the discussion document “A National Environmental Standard for Plantation Forestry” (NES-PF).

In its previous submission to the Ministry for the Environment in October 2010 the Council stated that:

“ it is considered that the proposed NES for plantation forestry is a blunt instrument to resolve what is effectively an administration (as opposed to environmental) issue. This issue may not occur in all localities and seems to be most relevant for the large forestry companies which operate in a range of areas and therefore can suffer the inconsistencies between local authorities. There are other ways that such issues can be resolved where they do exist.”

The Council notes that the issue being addressed in the current document has been refined to be “unwarranted variation” between plans. However, the Council remains concerned that the NES-PF is not the most effective or efficient method for resolving this issue for the reasons set out in that original submission.

The primary focus of the Council’s submission is the three “environmental risk assessments tools”.

Erosion Susceptibility Classification

The Council notes that a review of the ESC has been undertaken and that this was informed by the document “Update of the Erosion Susceptibility Classification (ESC) for the proposed National Environmental Standard for Plantation Forestry - revision of the ESC”. The result of that reassessment in a Marlborough context was a reduction in the amount of land classified as very high risk.

There is no material in the discussion document itself that explicitly establishes the criteria for the four bands of risk utilised. This has been unhelpful in formulating the Council submission. As the four bands of risk effectively determine the status of forestry activity, the criteria should be explicit and transparent. The original discussion document on the NES published in 2010 included such explicit criteria. The Council would welcome the provision of the criteria prior to the legal drafting of the NES.

In the absence of this information, the Council has relied upon the content of the technical publication. Geology appears to be one of the main factors influencing the outcome of the review in a local context with soils over greywacke and schist geologies not representing as significant risk as soft rocks.

The Council has reservations that the risk of afforestation and harvesting on all high risk soils can be appropriately managed via permitted activity conditions.

Except for earthworks on slopes greater than 25 degrees, the ESC treats Marlborough soils that are 7e or 8e (under the LUC system) in the same manner as soils of lesser risk of erosion. In particular, harvesting is

subject to the same conditions. It is acknowledged that an Erosion and Sediment Control Plan must be prepared for harvesting on high risk soils, but there is no means for the Council to act in the event that it considers that the Plan will not adequately manage the soil erosion risk. The forester complies with the proposed condition by providing the Plan to the Council under the current proposals.

The Council has serious concerns about the effect of harvesting operations and earthworks in some of the high risk areas. To illustrate its concern, attached are documented slope failures at forestry sites during a high rainfall event in 2010. It is acknowledged that this was an extreme event and, as such, it would be unfair to say that it represented typical climatic conditions. However, the event did prompt extensive monitoring of land stability throughout the District and allowed a comprehensive assessment of slope stability to be undertaken. Figure 1 shows the forestry sites where some form of slope failure occurred. The failures all occurred on high risk sites.

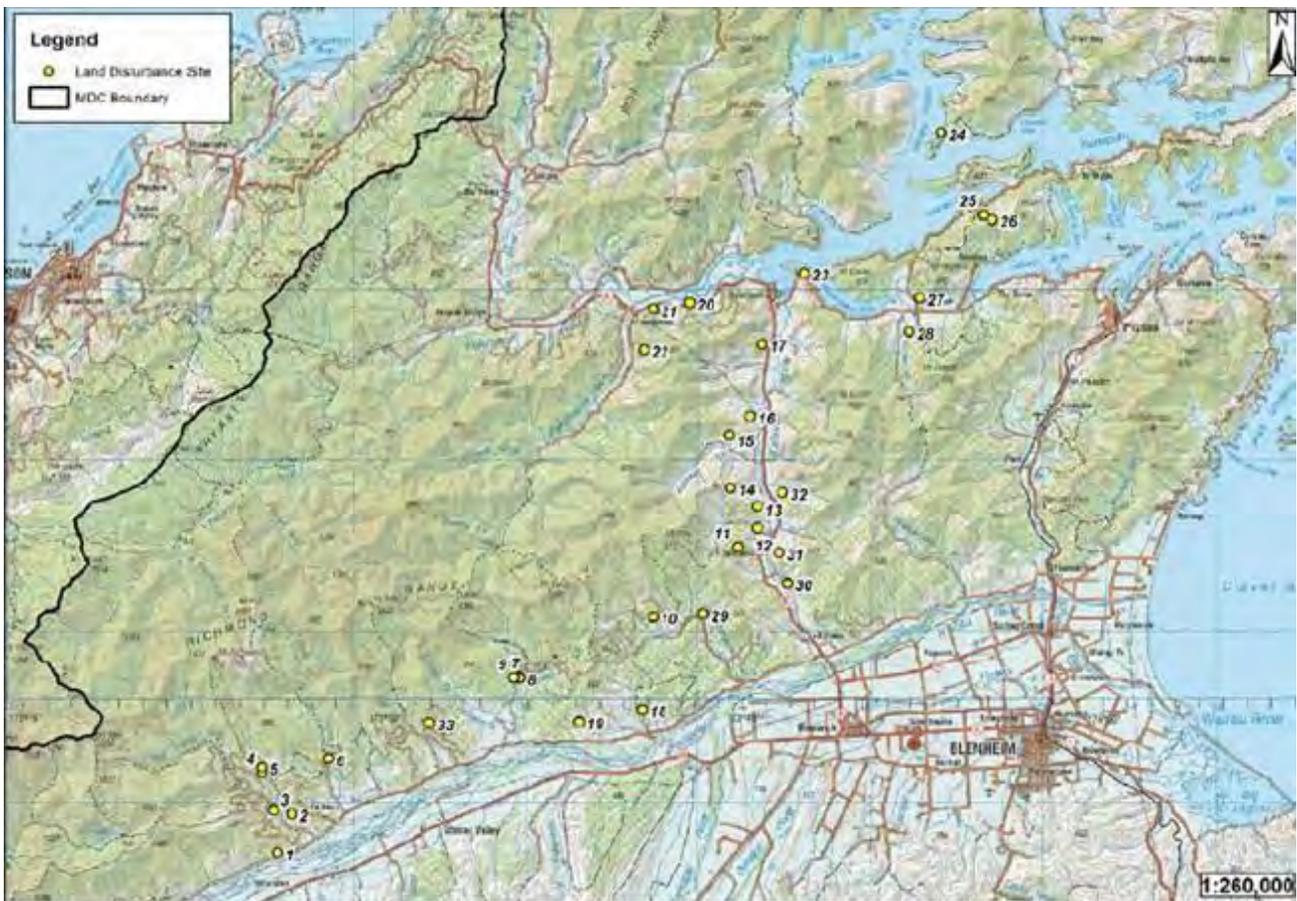


Figure 1: Record of slope failures

In section 3.5 of the discussion document it is stated that the environmental risk assessment tools are based on local environmental and biophysical information. The Council would like to highlight that in its view the ESC is not based on the inherent erosion risk posed by forestry on Class 7e and 8e land. The Council notes that one of the concluding remarks in the technical publication is that

“There remain a number of difficulties with applying the ESC based on potential erosion...”

Submission: A National Environmental Standard for Plantation Forestry” (NES-PF)

The Council notes that earthworks are proposed to be a restricted discretionary activity on high risk sites greater than 25 degrees slope. It is important that careful consideration is given to the way in which this requirement is regulated. The Council has a similar requirement within the Marlborough Sounds Resource Management Plan. There has been uncertainty with the administration of the rule in terms of the basis on which slope is measured. In terms of the proposed slope limit, the Council questions whether this rule would apply at any point over which earthworks are to occur, or apply to the average slope over a forested area. If average slope is being used, the Council has found that a rational basis for the land area to be used in calculation is essential.

Finally on this matter, there is Crown land in Marlborough that is currently utilised for forestry but is not covered by the ESC (i.e., it is undefined). The status of forestry and associated activities on this land is unclear and this situation should be rectified prior to the drafting of the regulations. The land concerned is easily identified on the tool provided on the MPI website due to the use of aerial photography.

RECOMMENDATION:

- 1. That the criteria utilised in the ESC for the four bands of erosion risk be published on a supplementary basis as soon as possible.**
- 2. That the erosion risk of Marlborough soils be reconsidered or, if this reassessment does not occur, that the Council be provided the opportunity to assess and approve Erosion and Sediment Control Plans.**
- 3. That the status of forestry and associated activities on undefined land be clarified.**

Fish Spawning Indicator

The Council strongly supports the consideration of the adverse effects of forestry and associated activities on fish spawning as part of the process of developing the NES. In doing so, it notes that other habitat values have not been considered as part of the process and can also be adversely affected by bed disturbance.

The Council is concerned that the list of 21 species that forms part of the indicator does not include species present in Marlborough rivers that are nationally threatened. This includes long fin eel, shortjaw kokopu, lamprey, torrentfish, inanga and bluegill bully. These species have the same vulnerability to sediment and turbid water as those species that are identified. It is requested that these fish species and their relevant spawning periods be added to the table. Failure to do so will treat nationally threatened fish species in an inconsistent manner.

It is noted that the spawning periods for the listed species do not necessarily reflect spawning times in a Marlborough context. The spawning can vary from year to year due to climatic and flow conditions. It is possible for spawning to occur outside of the periods stated in the rule.

The Council is concerned about standard 3 for the proposed rule. It is important that the NES explicitly identify what qualifications are required to undertake the freshwater fish survey. It is also recommended that the person undertaking the assessment is independent. These requests are made to ensure the robustness of the assessment process, given the enabling nature of Rule 1(c).

Submission: A National Environmental Standard for Plantation Forestry” (NES-PF)

Due to a fish species being diadromous or through inappropriate fish survey methods (especially timing), bed disturbance may occur as a permitted activity resulting in the permanent change of habitat. If the rule is specific to fish spawning, then there should at least be a requirement for the survey work to occur during the spawning period.

The Council does not necessarily agree that fording should be excluded from the meaning of bed disturbance. Firstly, bed disturbance is a term used in Section 13 of the RMA 1991. If the activity is bed disturbance under Section 13 then it can only be bed disturbance (if this rule is to be retained then the activity should be exempt from the rule as opposed to the meaning of bed disturbance). Secondly, fording could have significant adverse effects on spawning habitat (and other habitat values) and should be avoided where those effects are generated. The Council has monitored the effect of ford use in specific rivers. High sediment loadings associated with heavy forestry truck movements have been evident during these monitored periods.

The Council has found it difficult to comment further on the fording exemption as “axle movements” is not defined (i.e., it has not been possible to determine the number of movements anticipated by the exemption).

RECOMMENDATION:

- 1. That long fin eel, shortjaw kokopu, lamprey, torrentfish, inanga and bluegill bully be added to the list of relevant species to which the general rule applies.**
- 2. That greater clarity is provided on the scale of fording anticipated in 2a.**
- 3. That the qualifications of a “suitably qualified person” in 3 be explicitly identified.**
- 4. That a requirement be introduced for the suitability qualified person in 3 to be independent.**
- 5. That any survey undertaken under 3 must occur during the spawning period and at time of day that the fish is expected to be present.**

Wilding Pine Calculator

The Council strongly supports the intent for the NES to consider the risk of wilding pine spread as part of the process of regulating afforestation. Marlborough, like most of the east coast of the South Island, is susceptible to the spread of pines from commercial plantations. The community in some areas is now making a significant investment in the control of wilding pines.

The calculator represents a good attempt to identify the factors that contribute to wilding pine spread and to provide a methodology for assessing the risk of spread.

The Council has applied the calculator to South Marlborough conditions and in many situations the outcome exceeds the threshold of 11 due to the terrain, the resulting exposure to strong NW winds and lack of grazing pressure downwind.

The calculator does involve discretion in terms of how the proposal meets the calculator criteria. The Council notes that guidance material is to be prepared and this too is supported. However, the Council remains concerned that inconsistent and/or inappropriate application of the calculator could result in land being planted in the belief that the planting is a permitted activity.

On page 26 of the discussion document, there are two references to councils applying the calculator. However, there is no requirement in the draft rules for the Council to be involved in the assessment at all. Indeed, the Council will not necessarily be aware of the planting. This could result in situations whereby the Council discovers after the fact that land has been unlawfully planted. This will be an awkward situation to manage given the investment already made and the likely lack of mitigation applied to manage the risk.

Options for managing this situation would be to either require resource consent so that the discretion can be appropriately applied through the consents process or, alternatively, require the forester to independently verify the calculator output and provide that verification to the Council. It may be necessary to specify that the person is appropriately qualified to undertake that verification.

RECOMMENDATION:

- 1. That a requirement be introduced requiring the output from the Wilding Pine Calculator to be independently verified.**

Applying greater stringency

Section 3.4 of the discussion document sets out a rationale for local authorities retaining the ability to manage forestry activities. This is accompanied by Table 4, which sets out six specific circumstances under which councils may impose more stringent rules. The Council supports the principle that there is a need for the Council to apply more stringent rules in certain situations and/or environments and also supports the circumstances identified in the table.

The first of these matters is the coastal marine area. The Council supports the principle that the coastal marine area often supports important values and that more stringent management may be warranted to protect these values.

The Council has recently undertaken monitoring of the condition of marine habitat that is significant in a Section 6(c) context. This included extensive estuarine habitat in Hitaua Bay, Tory Channel. The catchment area of Hitaua Bay has been subject to harvesting and has resulted in the extensive deposition of fine sediment over the estuary. As a result, the estuary no longer retains ecological values of significance and it is recommended that it be removed from the register of significant sites. Photos are provided in Appendix 1 to show the adverse effects on the coastal marine area of this particular harvest activity. (For more information see Davidson Environmental Limited, July 2015 – a copy can be made available upon request).

There is no further detail provided in the discussion document on the circumstances under which local authorities will have the ability to utilise more stringent rules with respect to the coastal marine area. It would be helpful if there was greater clarity regarding this matter before any regulations are promulgated.

The Council supports the ability to apply more stringent rules to outstanding natural features and landscapes. However, the Council also has a statutory responsibility to maintain and enhance amenity values. It therefore believes it is appropriate for the matter to be extended to include landscapes that contribute to Section 7(c) matters. The status quo will potentially result in the planting of commercial forestry

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in areas currently considered to be inappropriate or which should at least require some form of assessment of the impact of the forestry on visual amenity.

In making this submission it is noted that both the NPS on Electricity Transmission (see Policies 7 and 8) and NES Telecommunication Facilities (see Clause 6) contain such a provision. The draft NES-PF would therefore create an inconsistency in the approach to Section 7(c) matters.

The Council is yet to give effect to the NPS Freshwater Management. The setting of cumulative limits is part of the Council’s Progressive Implementation Programme. Given the results of the Council’s state of the environment water quality monitoring, this is likely to include limits on sediment. The Council notes that there is no direct alignment between activity status of activities under the draft NES-PF and the process of determining cumulative sediment limits. For example, the status of harvesting may be permitted under the NES-PF but may potentially result in the runoff of sediment that exceeds a limit set for the water body under the NPS Freshwater Management. The Council highlights this matter as it anticipates that there will be administrative issues caused by the lack of alignment in time.

Permitted Activity Rules

A number of the draft permitted activity conditions as worded will involve a subjective evaluation to establish whether the activity is permitted or not. For example, the riparian disturbance rule for harvesting includes the phrases “where unsafe or impractical to do so” and “where slash removal is necessary”. There are other similar phrases used in other permitted activity conditions. The Council does not believe that it is appropriate to use language that requires judgements to be made as a condition of a permitted activity. This may have the consequence of creating tension between foresters and councils when the outcome of each party’s evaluation is different. The conditions should be redrafted to provide greater certainty for both the forester and for the council monitoring compliance with the condition.

The submission has already highlighted an issue created by requirements to provide the Council with information and the inability for the Council to respond to this information (as the means of compliance is the provision of the information). These issues could be overcome by also stipulating in the conditions that the documents must be approved by the Council. However, a council exercising discretion over the documents provided may also raise further legal issues. If this is the case, but it is considered appropriate for the Council to approve management plans (and the Council believes that this is appropriate in the case of the Erosion and Sediment Control Plans), consideration could be given to controlled activity status.

Some of the rules in the NES-PF will inevitably create permitted baselines in terms of other rural land uses. Of particular concern in this respect is quarrying and bed disturbance caused by fording because these activities are undertaken by other rural resource users. The NES-PF may unintentionally act to undermine the management of these activities prescribed in rules. In this regard, the Council has put considerable effort into the management of the adverse effects of river crossings in the rural environment, especially in dairy catchments. It would be unfortunate for that work to be undermined by permitted baseline arguments.

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Councils are unable to charge for monitoring of compliance with permitted activity conditions. The Council notes that by making forestry more permissive through the application of particularly the ESC, the monitoring of compliance with conditions of permitted activity will now fall on the ratepayer. This would seem an unfair outcome when it is the activities of the forestry industry that are being monitored.

RECOMMENDATION:

- 1. That draft permitted activity conditions that involve evaluative judgements be reviewed in an effort to provide greater certainty.**
- 2. Subject to other recommendations, that consideration be given to the use of controlled activity status in order to allow for the approval of at least Erosion and Sediment Control Plans.**

Transportation

A number of current resource consents for forestry in the Marlborough Sounds impose conditions requiring transportation of harvested logs by means other than road or otherwise limit the number of road movements. By way of background, the roading infrastructure in the Marlborough Sounds is typified by winding roads which are a mixture sealed and unsealed roads. The conditions have been imposed to protect the roading infrastructure and users of that infrastructure. The NES-PF does not consider those effects. On expiry of the consent, there will be no constraint on the method of log transportation. The Council anticipates that this will cause the potential for conflict with local communities.

Concluding Remarks

As stated at the outset, the Council does not believe that the NES-PF represents an efficient or effective response to “unwarranted variation” in the regulation of forestry activities. It has also highlighted practical and other concerns with respect to the three environmental risk assessment tools. Of particular concern is the effect of the amended ESC. The Council does not believe that this fairly or accurately represents the erosion risk presented by some soils in a Marlborough context and has concerns regarding the ability of the potential adverse effects of forestry activities on these soils to be managed via permitted activity conditions.

In addition to the specific matters raised in this submission, the Council is also aware that other councils have expressed similar concerns. It is recommended that representatives of local government be included in the process of reviewing the feedback received on the draft NES-PF. In this way, perhaps the concerns expressed by the sector can be reflected in changes to the document.

Record No: 151560783

Appendix 1: Photos of Hitaua Bay, Tory Channel



Figure 1: Location Map, including location of slip on harvested forestry block



Figure 2: Intertidal habitat, pre harvest (Davidson Environmental Ltd)



Figure 3: Slope failure post forest harvest. Note proximity to water body and slip material blocking flow leading to direct transport of fine sediment into estuary.

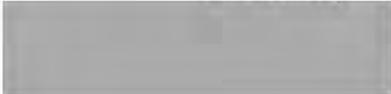


Figure 4: Sediment laden water in Hitaua Bay following rainfall inducing slip shown in Figure 3.



Figure 5: Deposition of fine sediment over estuarine habitat shown in Figure 2 (Davidson Environmental Ltd).

10 August 2015


Clare Hadley


Stuart Miller
Spatial, Forestry and Land Management
Ministry for Primary Industries
PO Box 2526
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(via email to NES-PFConsultation@mpi.govt.nz)

Dear Stuart

NELSON CITY COUNCIL SUBMISSION ON A NATIONAL ENVIRONMENTAL STANDARD FOR PRODUCTION FORESTRY

Nelson City Council appreciates the opportunity to comment on the consultation document of A National Environment Standard for Plantation Forestry (NES-PF). Nelson City Council supports the submission made by Local Government New Zealand.

1. Overview

In general, while Nelson City Council appreciates and supports the effort that has gone into developing an NES for plantation forestry and the improvements since the last iteration; this submission is largely in opposition to the proposed permitted activity standards and does not support the draft in its current form.

Nelson City Council is currently embarking on the development of an integrated second generation RMA plan review. The Nelson Plan aims to manage natural resources in an integrated and sustainable manner to maintain and enhance natural, ecological, recreational and cultural values. It is submitted that the NES-PF in its current form does not assist Council with meeting these objectives and may hinder its ability to manage the adverse effects from forestry related activities. Council requires the ability to be more stringent than allowed for in the NES-PF.

While the NES-PF tries to introduce a level of national consistency in relation to the plantation forestry sector, it does so in a way which starts from a premise that all activities should be permitted where the effects are largely unknown and introduce judgement and uncertainty. Language used such as "as far as is practicable", "if unavoidable", "except where unsafe or impracticable to do so" results in conditions that are litigious or unenforceable. This is at variance with the RMA and effects based planning. It is questionable therefore whether the

proposed permitted activity standard conditions are *vires* as they provide inadequate certainty or clarity.

The NES proposal explains further analysis and drafting is envisaged and the rules as they are amount to drafting instructions. There is no obvious clear and certain language for many of the rules that would suitably manage adverse effects across all circumstances. Therefore it is important that if the permitted activity status is retained for these activities, the relevant conditions err on the side of caution, alternatively a consents regime should be required.

The proposed NES is likely to result in higher costs for both the plantation forest industry and the Council in terms of permitted activity monitoring and enforcement with little clear additional benefit.

2. Overall Issues with Draft Rules

The proposed permitted activity rules where they are uncertain or unclear result in risks to the environment, or result in costly new processes and monitoring for councils. In particular Nelson City Council has concerns with the following:

- a) Frequent use of uncertain language such as "as far as is practicable", "if unavoidable", "except where unsafe or impracticable to do so" is all too uncertain and unclear to enable effective monitoring and compliance by councils.
- b) Third party approvals or processes for permitted activities (e.g. minimum afforestation distances from adjoining properties and dwellings, Heritage NZ).
- c) The requirements for provision of earthworks, harvesting and quarry management plans do not specify the required content or standards that must be met, nor are they able to be declined or improved by councils if deficient. These plans should all be provided to councils without the need to request them.
- d) Requirements for auditing result in increased workloads and costs for the Council. Costs for managing this information are not recoverable for permitted activities.
- e) Further definition and explanation for the majority of the terms used, such as "urban area" is required.
- f) It is unclear what process councils are to follow where more stringent rules are required in addition to the NES-PF rules. For example to maintain and enhance waterbodies as required under the NPS for Freshwater Management (NPS-FM).

3. Ability to be More Stringent

The listed NES-PF activities covered by the rules encompass all major works within forest activities. The ability for councils to be more stringent is tightly

constrained. To properly apply sustainable management and give effect to our statutory responsibility Council requires the ability to be more stringent than allowed for in the NES-PF.

Mapping areas of significance is expensive, takes considerable time to collect and collate the required data, and may not be the best planning management option. Council is currently considering its options in terms of mapping SNAs in the new Nelson Plan. Currently there are approximately 40 sites mapped in the operative plan, and at least another 120 have been identified as worthy of inclusion. It is submitted that good outcomes for these areas can be achieved through setting out key parameters and using site specific assessments. The inability of Council to protect SNAs that are not mapped in the plan means that the NES-PF has adverse implications for meeting section 6(c) RMA requirements.

Relief sought: Unmapped wahi tapu sites, unmapped significant indigenous flora and fauna, SNAs, other than outstanding but still significant freshwater bodies and natural features and landscapes (as well as sensitive receiving environments as below) all be included as matters where councils can apply more stringent rules.

4. Sensitive Receiving Environments

The fish spawning indicator enables controls to be targeted so restrictions on activities only occur where required to protect instream fish habitat. However, the NES-PF does not fully recognise the potential catchment scale flow on effects to sensitive habitats (e.g. lower catchment waterways and estuaries), and provides no incentives to harvest in a more sustainable manner (e.g. harvest smaller areas) to reduce wide-scale slope erosion and sediment discharges during intense rainfall events.

Relief sought: Inclusion of sensitive receiving environments such as estuaries, coastal marine areas, water intakes, sites of significance, dwellings and amenity features into the matters where councils can apply more stringent rules.

5. Orange Zone - Harvesting and Afforestation

Harvesting on all of the Orange Zone Erosion Susceptibility Class (ESC) is a permitted activity. This is opposed for the Nelson Region. Orange zoned land includes a number of Land Use Capability (LUC) units that are steep to very steep erosion prone land. The NES permitted activity conditions are inadequate and rigid. It is unacceptable that such land is afforded permitted activity status given the risks involved. Section 43 A (3) (b) RMA 1991 does not allow an NES to state that an activity is a permitted activity if it has significant adverse effects on the environment. This is such an activity.

Relief sought: Controlled or restricted discretionary status for harvesting on steep to very steep erosion prone LUC units of Orange Zone ESC.

Linked to Orange ESC harvesting issues is afforestation (of new forests) which is a permitted activity in this zone. This would prevent councils from applying planting restrictions as a method to mitigate woody debris from future harvesting.

Relief sought: Apply restricted discretionary status for afforestation on steep to very steep erosion prone LUC units of Orange Zone ESC.

6. Earthworks

The timing of earthworks and activity within riverbeds is a significant issue both in terms of generation of sediment and avoidance of impacts on aquatic ecosystems and birdlife. No provision for an earthworks "close out" season is provided for in order to protect the values of sensitive receiving environments including outstanding waterbodies and wetlands.

Relief sought: Councils have the ability to be more stringent around the timing of earthworks and activities adjacent to and within the bed of a river or lake in all zones where this is required to protect sensitive receiving environments and to achieve limits set under the NPS-FM process.

As Council develops its second generation plan it is considering introducing constraints on the area of clearcuts and roading density. The NES-PF does not include any restriction on or set thresholds for these activities in any of the erosion susceptibility classes.

Relief sought: Define and incorporate thresholds in the NES-PF to allow councils to control the size and timing of forestry activities such as earthworks and harvesting as a means of mitigating risk in all erosion susceptibility zones.

7. Management Plans

Harvest Plans, Quarry Management Plans, and Erosion and Sediment Control Plans are required to be prepared for harvesting, quarrying and earthworks respectively. The contents required of these plans is broadly described and it is uncertain whether the plans will adequately describe activities or if the activities intended will be sufficient to achieve other permitted activity conditions.

The role of councils is restricted to being advised when activities will begin and having the Plans made available to them. There is no provision for councils (or any other body) to certify the Plans as adequate. This becomes an issue for the smaller woodlots where planning and management practices may be currently lacking.

Relief Sought: During the legal drafting phase, the content of management plans should be made clear and linked to clear outcomes. Provision should also be made for Council certification to ensure they adequately meet requirements.

8. NPS for Freshwater Management (NPS-FM)

Many of the proposed rules in the Draft NES-PF do not provide for the NPS-FM Objectives 1 and 2, and the requirement for the Council to maintain and improve water quality. While the NES-PF provides councils with the “ability to be more stringent where required to meet the Objectives of the NPS-FM”, the discussion document identifies this as only where a limit has been set that has not been met, and forestry activities are the source of the contaminant.

It is submitted that although the NES-PF allows for councils to impose stricter regulations, this is likely to lead to increased litigation where forestry operators consider that local authorities are trying to impose improper forestry controls for reasons associated with the NPS-FM.

In the table on page 99 which lists matters where councils can apply more stringent rules, this only specifies this can be done in relation to Outstanding Freshwater Bodies and does not refer to meeting NPS-FM limits as discussed in section 6. Under the NPS-FM the threshold to include freshwater bodies as ‘outstanding’ is very high and has to be exceptional in some way. Only a small number have been identified by MFE across New Zealand. Under this definition, Nelson has no outstanding freshwater bodies, but it does have several waterbodies which must be maintained and enhanced. This does not provide for councils to meet their requirements under the NPS-FM.

Relief sought: Provide a more detailed description of local authorities’ ability to impose more stringent requirements in relation to implementing the NPS-FM. Further include the ability for councils to be more stringent in relation to all water quality limits set in order to maintain and improve water quality as required by the NPS-FM. Ensure that this ability to be stricter to meet NPS-FM objectives and limits is included in the rules and in the table on page 99 under ‘Matters where councils can apply more stringent rules’.

The NPS-FM specifically requires the protection of the significant values of wetlands. The discussion document does not specifically identify wetlands and their riparian areas as being a matter over which councils can be more stringent. All of the forestry activities identified within the rule tables have the ability to affect the significant values of wetlands. For example, in relation to setbacks, the NES-PF rule tables reference wetlands only greater than 2500m². In many instances the setbacks proposed may be insufficient to protect a wetland’s significant values – for example by altering the water table.

Relief sought: The rules in relation to wetlands are deleted in their entirety and councils retain the ability to be more stringent around the management of wetlands and their riparian areas across all activities.

9. Setbacks and Riparian Buffers

The conditions for earthworks and afforestation require setbacks of 5 metres for streams less than 3 metres in width and 10m for those greater than 3 metres. A riparian buffer width of less than 10 metres will not maintain all of the ecological functions that support healthy freshwater ecosystem processes, such as efficient plant nutrient uptake. Some riparian functions can be maintained or enhanced with riparian widths less than 5 metres either side of the stream, whereas others may require widths of greater than 15 metres (Parkyn *et al.* 2000).

Relief sought: Review information on riparian buffer widths necessary to support sustainable vegetation and meet aquatic functions.

The Harvesting rule allows for the felling of trees directly across waterbodies where unavoidable and for harvesting within and across riparian zones. As discussed above riparian zones are required to support healthy freshwater ecosystems and no felling into or across these zones should be permitted as of right.

Relief sought: Delete references to allow the felling and harvesting within riparian zones in the rules and allow councils the full ability to put in place appropriate rules for activities which could affect these riparian areas.

10. Environmental Risk Assessment Tools

There are issues with the reliability and implementation of the three environmental risk assessment tools as all involve judgement and interpretation. As discussed above, it is questionable whether such performance standards are *vires*.

Council has the following comments:

- ***Erosion Susceptibility Classification***

The ESC classification is based on LUC which is then used to determine activity status. Council has some concerns over the use of the ESC classification in the Nelson Region and the significant variation between the original maps produced in 2011 to the proposed version in 2015. This has resulted in most of Nelson's forestry areas downgraded from high to medium and low susceptibility. This has significant implications especially in catchments such as the Maitai, where forestry is seen to be having a large impact on instream water quality and river health.

Resource consent in the three lower ESC zones is only triggered by non-compliance with the Permitted Conditions. Therefore by implication, emphasis is on remedying adverse effects with little emphasis on avoiding adverse effects. This may not sufficiently protect environmental values as required under the RMA or NPS-FM.

This ESC classification currently takes no account of variations in downstream receiving environments which demand site specific measures to avoid or mitigate adverse effects. Where the activity status includes a resource consent requirement this imparts the flexibility to provide for differing receiving environments and this is supported. However, where permitted activity status applies, supported by generic permitted activity conditions only without allowance for variations in downstream receiving environments, this is opposed. It also breaches Section 43A (3) (b) RMA.

Relief sought: Inclusion of sensitive receiving environments such as estuaries, coastal marine areas, water intakes, dwellings and amenity features into the matters where councils can apply more stringent rules. It is noted that in the earlier Plantation Forestry NES proposal this included an exception for sensitive receiving environments.

Under several rules, for example earthworks, these activities are a restricted discretionary activity for land in the Orange Zone with a slope of greater than 25 degrees. It is unclear how this rule will be enforced and who is responsible for determining these areas.

Relief sought: Clarify who is responsible for defining land in the Orange Zone that has a slope that is over 25 degrees. The Council considers that this should be undertaken by MPI and provided to councils to allow for planning and management of those areas.

- ***Fish Spawning Indicator***

There appears to be no specific reference to the fish spawning indicator in the draft rules. Fish spawning is addressed as part of the general conditions that apply to all forestry activities, but neither the condition nor accompanying explanatory content refer expressly to the indicator or how it is to be used to evaluate compliance.

Relief sought: Amend rules and related conditions to specifically include reference to the fish spawning indicator.

Fish species: There are significant issues with the fish spawning indicator. The information used in the calculator is based on old research and outdated records dating back to 1915. The indicator only includes a limited number of species, and fails to include many endangered and at risk species across New Zealand.

Relief sought: Amend list to include: long finned eel, short finned eel, short jawed kokopu, torrentfish, Crans bully, bluegill bully, upland bully, giant bully, inanga, banded kokopu, lamprey and smelt.

Spawning: The General Conditions list periods of time where beds of rivers cannot be disturbed in order to protect the spawning of fish species. These times do not however align with local spawning dates for those species. Fish spawn at different times in the Nelson region which renders some of these dates ineffective.

Relief sought: Allow councils to identify the local spawning times for fish species in their region through their regional plans.

Non migratory fish species: The General Conditions do not provide for native non migratory fish species. For many non migratory fish species, such as Dwarf galaxias, that spend all their adult life in one location, adverse impacts from forestry related activities present a significant risk to the adult, its habitat, and lifecycle. This similarly applies to some migratory species as well; such as kokopu and koaro that migrate out to the sea for a short period as juveniles, but which spend most of their lives in rivers and streams. Protection should be extended to their adult habitat (and the habitat of their invertebrate food sources, i.e. rivers and streams), as well as their spawning habitat.

Relief sought: Allow councils to identify sites of significance for non migratory and migratory native fish in their regions and apply more stringent regulations in relation to activities in the beds of rivers to protect both adult and fish spawning habitat and lifecycles.

Fish migration: The General Conditions do not provide for native fish migration. In the case of species such as long finned eel, barriers to downstream migration can result in the death of the eels as they have undergone physiological change in order to undertake migration and no longer feed.

Relief sought: Allow councils to identify important migration periods for native fish in their regions and be more stringent in relation to activities in the beds of rivers during these periods.

Water temperature: The review of harvesting effects on fish spawning and habitat provides a useful summary, but does not fully take account of the significant increase in river water temperatures that occur when riparian margins are removed as part of the harvest. Increase in stream water temperature post harvest can have long term negative effects on freshwater invertebrate communities and fish spawning, which is well documented in NZ.

Relief sought: Allow councils to identify sites of significance for native fish in their regions and be more stringent in relation to riparian margin setbacks and activities in the beds of rivers during these periods.

Nesting sites: The General Conditions provide for protection of nesting sites from disturbance for Nationally Critical or Nationally Endangered

species. This does not provide for regionally threatened species or stronghold populations.

Relief sought: Councils are able to be more stringent where they have identified regionally threatened species or stronghold populations.

11. General Conditions

Fuel: The current permitted activity rule allows refuelling of machinery adjacent to surface water provided this does not occur within the waterbody. To reduce the risk from any accidental spills, a minimum distance for refuelling should be specified.

Relief sought: Require that all machinery on the work site shall be refuelled at least 20 metres away from any open watercourse. If spillage of any contaminants into any watercourse or onto land occurs, this shall be adequately cleaned up so that no residual potential for contamination of land and surface water runoff from the site occurs. If a spill of more than 20 litres of fuel or other hazardous substances occurs, the Council shall be immediately informed.

Vegetation Clearance and Disturbance: The permitted activity rule allows indigenous vegetation of existing tracks within SNAs to be damaged or removed. This may be at odds with Council's aim to maintain and enhance these areas, including old roads or tracks. Currently there is no age restriction or other qualification for these areas and arguably also allows old bridle and walking paths to be damaged for forestry purposes.

The rule also allows incidental damage to riparian and indigenous vegetation provided it will readily recover within five years. As discussed above, these performance standards are subjective and open to interpretation. Who will determine if the vegetation can recover within five years, and what happens if it does not – what comeback is there for councils or adjacent landowners?

Relief sought: Delete the last three bullet points of this performance standard. Consent should be required to damage or remove any indigenous vegetation within an SNA. Directional felling and adoption of appropriate harvesting techniques should also be implemented to avoid incidental vegetation damage. If it is determined that this cannot be achieved, consent should be required as a controlled or restricted discretionary activity.

Introduction of weed species from soil residues on heavy machinery:

Undesirable weed seed can be transported between areas on the tracks and tyre treads of skidders, haulers and diggers as these are uplifted from one site to another by trailer. Unlike logging truck movements that have greater potential to lose contaminated soil from tyre treads en-route to the next site, heavy logging machinery can potentially introduce new weed species from another district directly from stuck on, seed infested mud/soil.

Relief sought: Consideration should be given to the mandatory water blasting of machinery between sites. This should particularly apply if the next site is

relatively weed free or in cases where a forest is being retired from plantation forestry.

12. Administrative and Monitoring Costs

Nelson City Council considers that the provisions for permitted activities along with the monitoring and reporting requirements will lead to significant increased costs. The shift in focus to permitting activities for the forestry sector results in a shift of administrative and monitoring costs to the wider ratepaying community.

The need for amendments and alignment with council plans will require considerable administrative effort to align concepts and activity specifications in the Council Plan with the NES-PF.

Resource consent processes involve pre-application discussions, requiring further information and formulating clear activity based conditions that will lead to required environmental outcomes. These are proactive processes by which forestry activities are able to be shaped before they begin. Forestry activities such as earthworks, quarrying and harvesting are irreversible and are often large in scale and happen very quickly.

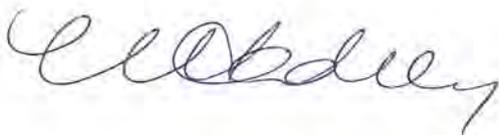
Where activities are permitted they are able to proceed without council approval. How the activities are carried out is unable to be influenced. Council involvement is limited to compliance monitoring and enforcement. These are reactive in nature, occurring after activities have occurred.

Relief sought: Councils are provided with the ability to charge forestry operators to monitor permitted activities; or councils are provided central government funding to fulfil the monitoring requirements.

Council supports the proposed review of the NES-PF after five years given its wide reaching impact on council rules and potential for significant adverse environmental effects.

Thank you for the opportunity to comment on this document. I would be pleased to make Council officers available to further explain these submission points and work with MPI staff towards solutions.

Yours sincerely



Clare Hadley
Chief Executive

Submission

By the: Northland Regional Council

On

Proposed National Environmental Standard for Plantation Forestry: Discussion Document

To: Ministry for Primary Industries, PO Box 2526, Wellington 6140
NES-PFConsultation@mpi.govt.nz

- i. The Northland Regional Council (council) thanks the Ministry for Primary Industries for the opportunity to make a submission on the proposed National Environmental Standard for Plantation Forestry (NES). This submission is made in the context of council's roles, functions and responsibilities under the Resource Management Act 1991 (RMA), the Local Government Act 2002 and the Biosecurity Act 1993. It is also made in the light of our desire to enable sustainable economic development in Northland.
- ii. Forestry is a significant industry in Northland (@151,735ha of the region is managed for timber production – see Appendix 1) and provides economic and environmental benefits. Northland also has unique, high value freshwater and marine environments that are sensitive to the effects of forestry (E.g. dune lakes and estuaries and harbours), in particular sediment. Unlike many other regions, sediment is a particular concern in Northland. This is recognised in our Proposed Regional Policy Statement (PRPS) which includes an objective to reduce sedimentation rates in estuaries and harbours¹ and supporting policy seeking reduction of sediment loads to water from use and development of land². Forestry can be beneficial if well managed or can exacerbate environmental issues if not. We therefore want to enable forestry where this provides environmental and economic benefits and provide appropriate controls where there are potential for adverse effects on Northland's unique environment and in order to achieve the outcome sought in our PRPS.
- iii. However we are concerned that a nation-wide 'one size fits all' activity / industry based NES does not provide the best framework for this, particularly given the complex and relatively new national policy environment. It is a very difficult task to integrate an activity / industry specific set of standards with the national policy direction set in both the New Zealand Coastal Policy Statement (NZCPS) and National Policy Statement for Freshwater Management 2014 (NPS-

¹ Proposed RPS Objective 3.2(c)

² Proposed RPS Policy 4.2.1(a)

FM). We don't consider the NES in its current form is well integrated with national policy and this has the potential to add significant cost and uncertainty for the industry, stakeholders and councils.

- iv. We understand the rationale behind the NES (namely, the desire to remove unwarranted variation, improve certainty and cost effectiveness) and this intent is supported. However we consider the development of good practice guidelines in collaboration with the forestry industry is a better long term solution than the 'one standard fits all' NES solution. In Northland we have made real progress in this regard (See our website for details: <http://www.nrc.govt.nz/Environment/Land/Northland-Forestry-Guidelines/>).
- v. We expect the NES to promote sustainable management by removing barriers to realising the benefits of forestry while managing negative effects on the environment. Council has concerns that the NES as proposed will not achieve these aims in the Northland region. Our submission outlines these concerns below using the questions posed in the Consultation document.

1) *Do you think section 2.1 and 2.2 accurately describe the problem facing plantation forestry?*

In short yes these sections describe problems facing the plantation forestry industry. They do not however illustrate the issues from a council perspective – namely the wide range of functions, obligations and duties that apply to councils in managing forestry activities (these include those imposed by National Policy Statements) and the variation in environmental sensitivity that needs to be addressed. These are outlined further below.

2) *Do you consider that the conditions for permitted activities will manage the adverse environmental effects of plantation forestry?*

3) *Are the conditions for permitted activities clear and enforceable?*

6) *Do you have any comments about any particular activity or draft rule?*

These three questions are related and our response below applies to all three.

Jurisdiction

While the NES attempts to allocate jurisdiction in Appendix 3 tables, it is unclear how the standards relate to the relevant sections of the RMA (Sections 9 – 15 RMA) or whether they are a combination thereof. This is important as in reality this establishes jurisdiction and clearly sets out the activities provided for by the NES. For example, the standards permit a range of land disturbance activities such as earthworks and quarrying

(presumably as a land use activity under section 9 RMA) but is generally silent on discharges from such forestry activity (e.g. there are no standards permitting stormwater discharges from earthworks). This is despite the Consultation Document acknowledging the water quality effects of sediment discharges in relation to earthworks, quarrying and harvest (at Pg's 58 and 59). It is unclear whether the NES envisages regional councils applying additional rules for the control of discharges associated with plantation forestry activities or whether these are in fact addressed by the NES – in other words are s15(1) discharges to water (or land where it may enter water) implicitly permitted under the NES rules (e.g. the NES rules are a combination of s9 land use and s15 discharge rules)? Or are regional councils expected to include rules for discharges from land use activities such as earthworks in addition to the NES? We remind the Ministry that before permitting a discharge in a plan rule, regional councils must be satisfied that the effects in s70(1)(c-g) will not occur – it is unclear how this is addressed under the NES (except perhaps for stream crossings).

This situation provides no certainty that adverse effects of forestry land uses on water quality can be adequately controlled, particularly if there is no discretion over the content or adequacy of management plans for Erosion and sediment Control, Quarrying and Harvest (raised below). This is of particular concern in Northland given that sediment is a key water quality issue in Northland and our Proposed RPS signals the intention to reduce impacts of sediment.

Certainty

The tables in Appendix 3 use a number of uncertain terms that are not appropriate as conditions of permitted activity rules. It is generally accepted a person should be able to determine whether an activity is permitted (or not) on a plain reading of a rule, without the activity classification being subject to some discretion on the part of the consent authority. The standards confer discretion to and in some cases require subjective evaluation of the consent authority. Examples include:

- Afforestation set-backs must be 10m from adjoining property unless approval is provided by the owner – this relies on a third party approval.
- Use of terms such as: whether an activity is '*for safety purposes*' or it is '*safe and practicable*' to do something or '*where topographical constraints leave no alternative*' or determining whether erosion is '*likely*' to be caused; evaluating the meaning of '*potential*' and whether it is a threshold that is triggered (E.g. whether '*exposed areas have the potential to discharge sediment to water*' or '*readily*

enter a surface water body' or adverse effects on aquatic habitat will be *'significant'*.

These clauses leave too much subjective judgement / discretion to be considered permitted activities and are likely to lead to costly contention between councils and the forestry industry. Where such judgement is required, the activity is better managed by a resource consent process.

In some circumstances the NES also requires the preparation of management plans to demonstrate compliance with conditions - erosion and sediment control plans (ESCPs), harvesting plans (HPs), and quarry management plans (QMPs). However where a plan is deficient or does not address effects adequately, there is no ability for a council to decline or amend such plans. This omission must be fixed if the NES goes ahead. Again, this increases the potential for contention between the industry and councils.

There are likely to be problems for industry in complying with the NES and for local government in enforcing them as the thresholds are not clear and require interpretation or judgement which will undermine certainty for all and lead to inconsistent application (which the NES is trying to avoid).

If the NES proceeds:

- *The NES should clearly identify the basis in sections 9-15 RMA for each of the activity standards in Appendix 3 to clarify jurisdiction, roles and functions.*
- *The NES should clearly state whether regional councils can apply controls on discharges from forestry activities under section 15(1) RMA in addition to the NES. If there is no ability for councils to control discharges, the NES should demonstrate how section 70 RMA is met and water quality is managed in the absence of discharge rules and receiving water quality standards for forestry.*
- *The NES should use clear and enforceable thresholds, standards and terms in permitted activity rules (E.g. area of exposed soils for earthworks) and not use terms requiring subjective judgements or third party approvals.*
- *The standards referring to management plans require some kind of audit / certification process to ensure they are fit for purpose which is problematic in a permitted activity rule. An alternative may be to include templates for these in the NES to provide greater certainty.*

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- *Consider the merits of a requirement for pest plant management plans across relevant forestry activity.*
 - *For comment on specific rules see Appendix 2*

7) *Are the matters where local authorities can retain local decision-making appropriate?*

In short, the answer to this question is no and councils need the ability to provide greater stringency in particular circumstances: these are primarily to give effect to national policy statements and reflect variable environmental sensitivities. These matters are outlined below.

National Policy

There are two national policy statements that are particularly relevant to the NES; The New Zealand Coastal Policy Statement 2010 (NZCPS) and the National Policy Statement for freshwater Management 2014 (NPS-FM). While the NES recognises both of these, it is not well integrated with either and could potentially frustrate the intent of both.

The NZCPS

The NZCPS provides comparatively prescriptive policy direction on managing the coastal environment. It will be extremely difficult for councils to implement a number of the NZCPS policies given the only explicit NES provision for implementation of the NZCPS is a 30m setback from MHWS (with the ability to be more stringent where appropriate for local / regional reasons). For example:

- The NZCPS applies to the coastal environment (direction on defining the Coastal environment is set out in Policy 1). The coastal environment clearly extends beyond the coastal marine area. However the NES only seems concerned with effects on the *coastal marine area* rather than the *coastal environment*.
- In our experience the coastal waters are less sensitive to the effects of forestry than freshwater bodies, yet the NES provides for 30m setback from the coastal marine area but only provides setbacks of 5-10m for rivers, wetlands and outstanding water bodies (i.e. the 30m setback appears overly conservative and the freshwater setbacks too small).
- Identification and management of natural character (Policy 13 NZCPS). Policy 13(1)(a) requires councils to *avoid adverse effects on natural character in areas of the coastal environment with outstanding natural character*.

-
- Management of coastal water quality (Policies 21-23 NZCPS). Policy 22 is specific to sedimentation and makes explicit reference to forestry.
 - The NES could also have implications for other NZCPS policies (e.g. Policy 7 Strategic planning).
 - Management of biodiversity (Policy 11 NZCPS). The NES provides for the ability to be more stringent in relation to the management of biodiversity for the purposes of section 6(c) RMA, but only where these areas are mapped in plans. Mapping biodiversity is an expensive and time consuming process and in many cases plans rely on criteria to identify significant biodiversity values (i.e. they do not map such areas).

The NES as it stands does not provide sufficient scope for councils to manage forestry to implement the NZCPS.

If the NES proceeds:

- *It should refer to the coastal environment, not just the coastal marine area to reflect the scope of the NZCPS.*
- *It should provide the flexibility to implement the NZCPS (in a similar manner to the NPS Freshwater).*
- *The NES should provide for the management of significant biodiversity without reliance on mapping.*

Question 11: Will the proposed NES-PF support regional councils to implement the NPS-FM?

The NES has implications for implementation of the NPS-FM. Under the NPS-FM councils are required to:

- Safeguard the life supporting capacity of freshwater and ecosystem processes and indigenous species (Objective A1(a) and B1);
- Maintain or improve the overall water quality within a region while protecting the significant values of outstanding freshwater bodies and wetlands and improving the quality of freshwater in freshwater bodies that have been degraded by human activities to the point of being over-allocated (Objective A2).
- Set objectives and limits and establish methods to avoid / phase out over allocation (Policy A1 and B1).
- Set targets to improve water quality where objectives are not met (Policy A2).

As noted above Northland has some unique features that are very sensitive to sediment, in particular dune lakes and estuarine systems. Unlike many other regions, sediment is a particular concern in Northland and our Proposed Regional Policy Statement has set an objective to improve overall water quality and reduce sedimentation rates in estuaries and harbours³ and associated policy to reduce sediment loads to water from use and development of land⁴. We acknowledge the NES provides the ability to be more stringent in relation to setbacks from outstanding freshwater bodies and wetlands (over .25ha) and this is supported. We also acknowledge at Pg 42 the NES states greater stringency will be allowed where:

- a *limit* has been set for a freshwater management unit that is not being met and forestry activities are a source of the contaminant within that freshwater management unit;

However, there may well be a need for further control to achieve the intent of the NPS-FM. Freshwater objectives deal with more than just contaminants and forestry can affect water quantity and the NPS-FM requires freshwater objectives and limits to be set for water quantity as well (E.g. flows and water levels). The ability to be more stringent should therefore not be limited solely to contaminants. We also have concerns with the NES as it relates water yield (Appendix 3 Pg 96) - The paragraph, in its current form, can be misinterpreted to mean that water sensitive areas only occur in low to moderate rainfall areas, which is not necessarily the case in Northland. There are catchments with annual rainfall above 1,200 mm that can be considered water sensitive (E.g. catchments around dune lakes and catchments where levels of groundwater and surface water allocation are high). The paragraph should make it clear that climate (rainfall) is only one of many criteria for defining water sensitive catchments and preferably the reference to 1200mm be removed altogether.

While council may set objectives in a plan in relation to sediment reduction / management we may not set numeric / load limits, in which case it is unclear whether the NES would provide for the ability to be more stringent in these circumstances (as it uses the term limit). This is exacerbated given sediment is not an attribute in the NPS-FM at this point in time. We note changes to the NPS-FM have been signalled and it may be that sediment / water clarity becomes a compulsory attribute in the National Objectives Framework – if this does eventuate integration between the NES and NPS-FM becomes

³ Proposed RPS Objective 3.2(c)

⁴ Proposed RPS Policy 4.2.1(a)

even more problematic, particularly if 'bottom-lines' are proposed for a sediment attribute and these are not being met (i.e. in a D state) due to forestry activity.

The NPS-FM also requires that councils establish methods (including rules) to avoid over-allocation⁵ - the ability to control land use activities associated with plantation forestry may well be needed to meet this direction. The extent to which councils can be more stringent to give effect to the NPS-FM generally (other than setbacks) is unclear and could lead to expensive litigation / contention between councils and the forestry industry.

If the NES proceeds:

- *Clarify that greater stringency can be applied where either a freshwater limit or an objective is not being met or is unlikely to be met as a result of forestry activities (i.e. to avoid over-allocation).*
- *Council supports the NES providing for controls in water sensitive areas but advise that rainfall is one of many criteria for defining water sensitivity and not necessarily the most appropriate in Northland – remove the reference to 1200mm P/A as this may be interpreted as a limit on council's ability to manage for water yield.*
- *We support the ability to be more stringent to implement the NPS-FM and in relation to setbacks for outstanding water bodies.*

GMO

The NES makes the use of GMO tree stock a permitted activity where approved by the EPA. Our PRPS includes a policy requiring a precautionary approach to the introduction of GMO plants⁶. This provision was appealed to the Environment Court on the grounds the RMA did not provide jurisdiction for council's to regulate the use of GMO's in policy statements and plans (*Federated Farmers of New Zealand v Northland Regional Council [2015] NZ EnvC 89*). The Environment Court's finding was that there is jurisdiction under the RMA for regional councils to make provision for control of the use of genetically modified organisms (GMOs). The matter has since been appealed to the High Court – it is therefore premature for the NES to include such provision for use GMO plants.

If the NES proceeds: it should remain silent on GMO and the permitted activity rule be removed given the jurisdiction issue is subject to legal proceedings and yet to be determined.

⁵ Policy A1(b)

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- 8) *Will the environmental risk assessment tools (the Erosion Susceptibility Classification, the Wilding Spread Risk Calculator, and the Fish Spawning Indicator) appropriately manage environmental effects as intended?*

These tools appear to be a good attempt to provide for the management of environmental effects in a targeted manner. However we have concerns that the NES will compromise a regional council's ability to fulfil its statutory obligations for biosecurity and biodiversity – it is somewhat odd that district councils will administer the Wilding Spread Risk Calculator (WSRC) despite biosecurity being a function of regional councils and there is also no evidence that the WSRC is fit for purpose in Northland. Also the NES would only allow wilding spread risk to be considered in relation to afforestation activities. Other activities that could potentially increase wilding risks include: replanting; pruning/thinning and harvesting via the general spread of material in these processes including from vehicles creating new pest pathways. The NES-PF may also frustrate future regional council biosecurity provisions should we wish to establish 'good neighbour' rules requiring boundaries to be maintained free of weed species (including pines if appropriate) to limit invasion and nuisance.

Erosion Susceptibility Classification

We have concerns on the resolution of the ESC and whether this adequately captures all land susceptible to erosion in Northland. We also have concerns with the classification system used by Landcare Research in that it is all based on the volume of sediment generated, not on the effects of that sediment – ie the sensitivity of the receiving environment which is at the core of the NPS-FM. We have several examples in Northland where such a simplistic approach doesn't work and all our rivers and most streams drain to tidal estuaries and harbours that have greater sensitivity to even small amounts of extra sediment and particularly finer textured particulates, and this can have a significant effect on the coastal ecosystem.

On the other hand, we have some very erodible land, particularly in the Mid-North with strongly podzolised soils which in its natural, pre-afforestation state, was short, frequently burnt gumland (low fertility heathland) scrub. This land is Class 7e8, Northland-Harmsworth, fairly high in the ranking and so forestry will be subject to resource consents yet this is the preferred/only effective land use (subject to good

practice). The same wise use argument holds for our steeper (Class 7e) greywacke hill country, pastoral farming has been tried and failed but it grows good forests.

Fish Spawning Indicator – whilst this is a very useful tool only three species of the threatened indigenous species applied to the tool occur in Northland. Whilst not all threatened species are particularly vulnerable to forestry activities (e.g. long finned eels) several other species are. It would be far more useful to provide comprehensive threatened species mapping to allow more effective minimisation / management of effects.

If the NES proceeds:

- *It should provide for local variation in the identification of erosion susceptible land in plans but retain the ESC as a default where no such exercise has been undertaken.*
- *Amend the NES to include provision for regional councils to make more stringent rules for the management of wilding conifer species that are priority risks in a region/district as identified in Regional Pest Management Plans.*

7) *Is the NES–PF the best option to meet the assessment criteria?*

For a NES to be justified as a response to a problem or perceived problem, the issues to be addressed should arise on a national scale, be significant, be best addressed through an NES (as opposed to another option) and should promote sustainable management. The case for this NES has not been made and it is dubious whether a NES aimed at addressing inconsistency for forestry activity, which operates in a multitude of receiving environments, can achieve an appropriate outcome.

Northland has a relatively high proportion of erosion prone land which would benefit from the stabilisation effects of forestry. Northland also has relatively large tracts of ‘marginal’ land for which forestry is likely the ‘optimum’ use if managed appropriately. Council is concerned that the NES provides a disincentive for conversion to forestry on such sites – for example, afforestation on land identified as ‘red areas’ (those with a severe, very severe or extreme erosion risk) requires consent as a restricted discretionary activity. This approach discourages long term plantations for Emissions Trading Scheme (ETS) advantage, which may not rely on harvest for returns. It is also likely that the NES will generate greater numbers of forestry consents in Northland compared with the status quo and increased uncertainty given the lack of clarity in the standards. The national consistency sought in the NES does not rest well with national policy direction, which

requires local solutions to local issues (and in the case of the NPS-FM encourages local solutions via freshwater objective setting).

On balance Council considers that in Northland, the NES as it stands will not result in environmental benefit and will unnecessarily add costs for industry, local government and ratepayers, without delivering efficiency gains, economic, social or cultural benefits. It could also frustrate implementation of national policy direction in the NZCPS and NPS-FM.

8) *Have the expected costs and benefits of the NES-PF been adequately identified?*

Most of the proposed standards require an element of monitoring to ensure compliance with the terms and conditions of the NES. However, this requires councils to undertake monitoring for the benefit of the industry. The ongoing cost of monitoring compliance with permitted activities is an unresolved issue for many councils.

Some councils are charging fees under the Local Government Act. In other regions monitoring is being undertaken by councils at a cost to the wider rate payer. Alternatively it is not undertaken at all. If the NES proceeds it should resolve this issue by ensuring consistency across the country and identify who is to undertake monitoring, under what legislation charges will be levied and how much will be charged. Council considers that the polluter pays principle must be at the core of any charging policy. As such administration costs of the NES should fall to the forestry industry (although it may be appropriate to adjust charges where public benefit is demonstrated).

The NES does not provide a cost benefit analysis at a local or regional level. It is therefore extremely difficult to assess the merits of the proposal in terms of sustainable management and its costs and benefits to Northland. Our high level assessment is that the NES would increase the administrative burden with no environmental or procedural benefit. Therefore it is likely that the costs of the NES for Northland and Northlanders exceed benefits when compared with the status quo. The June 2015 Cost / Benefit Analysis commissioned by the industry indicates benefits are marginal and come with a high degree of uncertainty⁷. The SCION report⁸ suggests environmental benefits are more positive than the status quo, however there is no comparison between the NES and other alternatives such as the use of industry codes of practice and good

⁷MPI Technical Paper No: 2015/14

⁸ Environmental Impact Assessment of the Proposed National Environmental Standard For Plantation Forestry: 8 June, 2015

management guidance. Our experience suggests the latter will go a long way towards resolving the issues identified but avoid the problems the proposed NES poses.

- 9) *Are there any issues that may affect the successful implementation of the NES-PF (such as decision-makers applying the permitted baseline test more frequently)?*
- 10) *Please describe any risks or opportunities that you consider have not been identified or addressed in the proposal?*

The NES is unclear on whether a 'whole of activity' or an environmental baseline approach is being taken. An activity based approach means both the positive and negative effects of the whole forestry cycle would be taken into account when identifying the significance of effects of forestry activity and subsequently setting activity status and applicable terms and conditions (i.e. activity status reflects the net of both positive and negative effects of forestry activity over the whole forestry cycle). Conversely, the environmental baseline approach means the NES applies minimum environmental standards (baselines) that apply at all times.

The proposed NES should be clear on the approach used – If the later environmental baseline approach has been used then there will be an expectation that like cases should be treated alike - where activities are permitted by the NES, similar activities with similar effects should also be permitted in the same manner (i.e. all earthworks / quarrying should be treated the same way whether for forestry or any other land use). This principle also applies to plan / rule making, not just decision making on resource consents – if council were to apply different controls than those in the NES to non-forestry earthworks it would need to justify this in a section 32 RMA evaluation, ideally based on analysis provided in association with the NES.

A related issue is that the Resource Management Act 1991 (RMA) in effect applies baselines for rule making in relation to water quality through sections 69 and 70. Section 70 RMA does not allow a Council to provide for certain discharges as permitted activities in a plan where they would result in freshwater being unsuitable for consumption by farm animals, significant adverse effects on aquatic life or the conspicuous change in colour/visual clarity. These are reflected in our Regional Water and Soil Plan (E.g. water clarity standards on discharges from land disturbance). Council is concerned that some forestry activities provided for in the NES as permitted activities would not be able to meet these standards and would therefore create adverse effects – for example, while the NES requires (unspecified) sediment and stormwater control measures on permitted earthworks, there are no 'receiving water standards' and therefore no certainty that

sections 69 and 70 RMA can be met (this depends on whether the NES contemplates further controls on discharges by regional councils – see discussion above).

Either the NES makes the assumption that the controls applied in the NES (to earthworks and quarrying for example) mean section 70 water quality effects will not occur or, it has concluded after taking a ‘whole of activity’ assessment that on balance these effects are acceptable when generated by forestry activity.

Council considers the permitted baseline effect of the NES is a real risk particularly in relation to management of water quality. We see real problems if the NES does in fact apply an environmental baseline and does not distinguish the impacts of forestry activity from other land uses, as this would undermine the ability to apply control to non-forestry activity of a similar nature. This has far-reaching implications particularly in giving effect to national policy.

If the NES is to proceed:

It clarifies whether a ‘whole of activity’ or environmental baseline approach is used and justifies the approach taken to ensure the permitted baseline effect does not undermine ability of plans to control adverse effects.

Conclusion

While Council acknowledges unjustified inconsistency is an issue for the forestry sector, there is also a need to address local environmental and local government administrative issues and to achieve the purpose of the RMA and implement national policy. These issues have not been addressed appropriately and, on balance, the NES as it stands is unlikely to achieve stated goals in Northland. The NES as proposed is not well integrated with national policy direction. Council considers credible and effective industry guidelines / good management practice, if referred to in plans, could resolve issues relating to certainty, inconsistency and management of environmental effects. Should the Ministry decide to progress the NES option, Council strongly recommends that the standards be amended to address the matters identified above and in Appendix 2 to this submission.

Signed for Northland Regional Council:

A handwritten signature in black ink, appearing to read 'Bill Shepherd', written in a cursive style.

Bill Shepherd (Chairman)

A handwritten signature in black ink, appearing to read 'Joe Carr', written in a cursive style.

Councillor Joe Carr

A handwritten signature in black ink, appearing to read 'Malcolm Nicolson', written in a cursive style with a long horizontal stroke at the end.

Malcolm Nicolson (CEO)

Dated: 11 August 2015

Appendix 1

Exotic forest production in Northland

Year ended March	Net stocked planted production forest area (1)		Total exotic timber harvested (2)		Total exotic timber harvested (2)		GDP (3)		Employment (3)	
	Hectares	% NZ	Hectares	% NZ	000m ³		\$M	% Northland	FTE	% Northland
2005	171,835	9.5%	2,956	7.2%	1,140	6.2%	212	3.9%	2,273	3.7%
2006	170,853	9.5%	2,751	6.4%	1,303	7.1%	219	3.8%	2,357	3.7%
2007	169,533	9.5%	3,054	7.2%	1,452	7.6%	220	3.7%	2,278	3.5%
2008	167,639	9.5%	3,846	9.0%	1,808	9.4%	223	3.8%	2,194	3.3%
2009	165,180	9.4%	4,130	10.3%	1,766	9.3%	193	3.3%	2,024	3.0%
2010	163,385	9.4%	4,802	11.0%	2,111	10.0%	197	3.5%	1,865	2.9%
2011	159,076	9.3%	5,651	11.9%	2,588	10.8%	213	3.8%	1,943	3.0%
2012	161,559	9.4%	6,636	13.8%	3,125	12.4%	222	3.9%	2,015	3.2%
2013	161,157	9.3%	7,130	14.1%	3,237	12.1%	228	4.0%	2,105	3.3%
2014	151,735	8.7%	6,605	13.2%	3,153	11.9%	234	4.0%	2,118	3.3%

Sources:

1. MPI National Exotic Forest Description, forest area as at 1 April
2. Statistics New Zealand, Forestry by regional council
3. Infometrics database, GDP and employment in forestry and related processing employment

Appendix 2: Comments on specific standards

AFFORESTATION		
<p>Objective: To introduce a consistent set of afforestation controls that manage the risk identified below in a manner that is in line with good forest management practice.</p> <p>Scope: Afforestation is the act of planting a production forestry crop on land that is not currently in forest and has not been under plantation forestry cover within the past five years.</p> <p>Risk: Risks associated with afforestation are primarily the:</p> <ul style="list-style-type: none"> • unintended spread of plantation species into areas not intended for forest production, including indigenous habitats such as tussock grassland and neighbouring properties – wilding spread can affect landscape values, conservation and biodiversity values, existing and future land uses and catchment hydrology; • establishment of forests in areas that are likely to have heightened risks during subsequent production forestry activities such as earthworks and harvesting. 		
Permitted		
Green Zone	Yellow Zone	Orange Zone
<p>Afforestation is a permitted activity in:</p> <ul style="list-style-type: none"> • Green, Yellow and Orange zones; • where the land is identified as: <ul style="list-style-type: none"> ○ Land Overlay 3A (LO3A) under the Gisborne District Combined Regional Land and District Plan 2006; or ○ Ministry for Primary Industries (MPI) Regional Scale Target Land; or ○ land that is included in a recognised regional council erosion management scheme; and • where the following permitted activity conditions are met. 		<p>The intent of the LO3A provision is to ensure the afforestation controls do not act as a barrier to afforestation initiatives such as Gisborne’s Sustainable Hill Country Project. Where other regions wish to adopt similar treatment for erosion-control purposes the National Environmental Standard (NES) will allow a gazettement process for an exemption to be granted to incorporate that land.</p>
Jurisdiction	Permitted activity conditions	Rationale
<p>District</p> <p>Regional</p> <p>(biosecurity is a regional function)</p>	<p>Wilding tree risk</p> <p>Afforestation of conifer species in an area with a wilding spread risk calculator score of 11 or less.</p>	<p>This condition seeks to allow as permitted the afforestation of areas and/or species that have a low risk of wilding spread. It is intended that the wilding tree conditions apply to only conifer species because the wilding risk calculator applies only to conifer species. This condition seeks to ensure species that do not pose a wilding risk are not affected by the wilding risk conditions. It is considered that the Biosecurity Act 1993 and regional pest management plans provide sufficient control of wilding risk of non-conifer species.</p>

District	Setbacks Afforestation must not occur within the following setbacks.		<p>These conditions aim to establish setbacks so as to avoid effects of forestry on adjoining properties, including urban zones, residential sites and public roads</p> <p>Road setbacks aim to avoid the excessive shading of paved roads because this can lead to increased or more frequent icing of the road, which is a safety risk.</p>
	Setback from	Minimum horizontal distance (m)	
	Adjoining property under different ownership	10 m – unless approval of the adjoining owner(s) has been obtained	
	Adjoining existing dwelling under different ownership	<p>The greater of:</p> <ul style="list-style-type: none"> i. 40 m; or ii. where vegetation could shade the dwelling between 10 am and 2 pm on the shortest day of the year (except where topography already causes shading); <ul style="list-style-type: none"> • unless approval of the adjoining owner has been obtained. 	
Urban/residential zone	30 m – unless approval of the adjoining owner(s) has been obtained		
Road setbacks	<p>Where vegetation could shade a paved public road between 10 am and 2 pm on the shortest day of the year; except where:</p> <ul style="list-style-type: none"> • topography already causes shading; • icing does not occur; • written consent obtained from the road-controlling authority confirming it is satisfied the vegetation does not pose a safety risk, having had regard to: <ul style="list-style-type: none"> – the physical characteristics of the road; – the degree of potential shading of the road; – the nature and extent of the vegetation; – the surrounding topography; and – potential weather effects on the road, including consideration of icing risk. 		
Regional	Setback from	Bank full channel width	Minimum horizontal distance
	Perennial river or stream	< 3 m with a catchment area 0-50ha	5 m*
		≥ 3 m with a catchment area >50ha	10 m* – except where a smaller setback is required to meet the conditions of a regional pest management strategy
	Wetlands larger than 0.25 ha and wider than 5m		5 m-10m*
	Lakes larger than 0.25 ha		10 m*
Coastal marine area		30 m*	
			Note: 30m CMA setback seems excessive as coastal

	<p>Outstanding freshwater bodies (as defined in the National Policy Statement for Freshwater Management (2014) (NPS-FM)) or surface water bodies subject to water conservation orders, or identified in plans as having outstanding natural landscape or character values and identified high value dune lakes.</p>	<p>10 m-50m*</p>	<p>waters less sensitive than freshwater bodies. Note: Councils have the ability to be more stringent in relation to outstanding freshwater bodies and water conservation orders <u>and areas identified or defined in regional or district plans as having significant biodiversity value.</u> It is intended that this additional stringency should be used to impose greater setbacks only where that is justified to protect the specific character(s) of the waterbody that is considered outstanding.</p> <p><u>The 50m setback figure is the retirement strip width recommended by NIWA 'Champion et al 1993' and 'Collier, 1996'.</u></p> <p><u>Reference to identified high value dune lakes recognises the significance, rarity and vulnerability of dune lakes. As well leaching issues associated with dune lake sand soils.</u></p>
	<p>Genetically modified tree stock Afforestation using genetically modified tree stock is permitted where the tree stock has gained the appropriate approval for deployment from the Environmental Protection Authority (EPA), and is subject to conditions imposed by the EPA.</p>		<p>This condition recognises that the EPA is best placed to evaluate the risks of genetically modified organisms and that approval and conditions imposed under the EPA regime will be sufficient to ensure any risks associated with the deployment of the tree stock are managed.</p>
<p>Controlled – N/A</p>			
<p>Restricted discretionary</p>			
<p>Red Zone</p>			
<p>Afforestation is a restricted discretionary activity and a consent is required in:</p> <ul style="list-style-type: none"> the Red Zone; any zone where permitted activity conditions cannot be met. 			
<p>Matters to which discretion is restricted</p>			

<p>Wilding risk</p> <ul style="list-style-type: none"> • Forest species • Mitigation action to restrict wilding tree spread <p>Setbacks (regional matters)</p> <ul style="list-style-type: none"> • Aquatic and terrestrial biodiversity effects <p>Setbacks (district matters)</p> <ul style="list-style-type: none"> • The effects on adjacent neighbouring landowners, dwellings or urban/residential zones. • Icing or shading effects on the road <p>Where afforestation is restricted discretionary because it is located on Red Zone land, then discretion must be restricted to the matters that address erosion risk.</p> <p>Erosion risk</p> <ul style="list-style-type: none"> • Effects of afforestation on land with severe to extreme erosion susceptibility under standard plantation forest regime, including effects on aquatic ecosystem. • Effects on rivers, lakes, wetlands and estuaries • Measures to avoid, remedy or mitigate erosion flooding and sedimentation including: <ul style="list-style-type: none"> ○ planting location and species, ○ requirements to address geotechnical and slope stability effects of infrastructure location; ○ sequencing of harvesting; ○ requirements to re-establish effective vegetation cover post-harvest through replanting or other means; ○ provision of downstream debris retention structures; ○ future harvesting and earthworks effects. <p><i>Note: consents in Orange Zone to be non-notified.</i></p>	<p>These matters seek to restrict the discretion of the decision-maker to the specific effects of the permitted activity condition(s) that could not be met.</p> <p>These matters seek to ensure that the following risks are considered, and appropriate conditions to mitigate these risks are imposed:</p> <ul style="list-style-type: none"> • the spread of wilding tree species; • the effects on aquatic environments when forests are established within regional setbacks; • erosion risk when forests are planted in the Red Zone.
<p>Discretionary – N/A</p>	

EARTHWORKS

Objective: To introduce a consistent set of forestry earthworks controls that manage the risks identified below in a manner that is in line with good forest management practice.

Scope: Earthworks is the modification of the shape of the ground surface by movement or removal of the surface of soil or rock. Includes forestry road and track construction, landing construction, stream crossing approaches, and cut and fill operation, but does not include soil disturbance by machinery passes.

Note: *Quarrying and mechanical land preparation do not fall within the scope of these earthworks controls. Quarrying and mechanical land preparation are defined activities and are subject to specific controls.*

Risks: Some of the most significant potential effects arising from forestry operations are associated with the construction of roads or infrastructure (such as landings) for harvesting operations. These effects are usually related to erosion or the products of erosion (that is, sediment). Sediment has two main impacts. It can:

- increase the turbidity of river water (decrease clarity);
- clog riverbeds and downstream receiving environments such as estuaries and lakes.

Both of these impacts affect the biological community and health of an ecosystem.

Specifically, erosion or excessive earthworks have the potential to reduce on-site productivity and cause loss or damage to forest infrastructure.

Permitted

Green Zone

Yellow Zone

Orange Zone (slope < 25 ~~25~~ 20 degrees)

Earthworks are permitted:

- in Green and Yellow zones;
- in an Orange Zone where the slope of the land is less than ~~25~~ 20 degrees;
- where the following permitted activity conditions are met.

Note: *Maintenance and upgrade of existing earthworks is permitted in all zones (including Red Zone), provided the permitted activity conditions are met.*

Note: The 20 degree threshold is consistent with the Department of Labour requirement for machines working on slopes not on tracks with 20 degrees being the angle at which slope failure typically commences, and is further supported by the NZ Steep land Logging harvest area (slopes over 20 degrees) which is currently 41% of the harvest and is expected to increase to 53% by 2016 and over 50% by 2025 (Friday Off Cuts 13th February 2015)

These conditions seek to ensure that, where earthworks are undertaken in highly erosion-prone areas, the specific risks of the activity on that site can be managed through consent conditions.

It is intended that such earthworks involve only works such as reshaping of road surfaces, including for drainage purposes. See the Glossary for the definition of "maintenance and upgrade of existing earthworks". Maintenance and upgrade of existing earthworks does not include road widening or realignment, reconstruction or alteration of an existing road grade

A definition of 'maintenance' is needed.

Clarification is needed on

- Slope measurement methodology (in a straight forward easy to follow form to ensure widespread understanding by forest operational staff

- What scale / degree of detail to provide

Jurisdiction

Permitted activity conditions

Rationale

District/ Regional	<p>Notice of commencement Regional and district councils must be notified at least 20 working days and no more than 60 working days before earthworks operations start, unless this requirement is waived by the relevant council. Councils may reduce this notice period at their discretion.</p>	<p>This rule seeks to ensure that relevant councils are notified in a timely manner of earthworks starting, so they are aware of operations occurring and can schedule monitoring programmes if necessary.</p>
Regional	<p>Road widening and realignment for safety purposes Road widening or realignment for safety purposes is permitted in all zones where:</p> <ul style="list-style-type: none"> the road is not being upgraded to increase its carrying capacity or allow use by a heavier class of vehicle; <u>Where Road widening and realignment occurs on slopes over 20 degrees or greater, all soil not used as structural fill must be end hauled to a suitable lay down area.</u> <u>Soil disturbance activities shall be undertaken in general accordance with the document titled NZFOA Road Engineering Manual 2012 and current regional best practice ESC guidelines.</u> road widening and realignment use best practice benching and compaction techniques in accordance with the New Zealand forest road engineering manual (NZFOA, 2012 – “NZFOA road engineering manual”) road widening and realignment is on slopes over 35 degrees, fill material must be end hauled, in accordance with the NZFOA road engineering manual, section <u>4.3.1-3; 4.6.1-3?</u> <u>overburden fill material</u> is placed in a way that meets the <u>spoil fill material</u> conditions; the volume moved is more <u>less</u> than 5 000 m³ per activity area; a record of any road widening or realignment for safety purposes is maintained and is available for inspection by the relevant council. 	<p>Narrow roads with poor visibility may increase the risk of accidents. This conditions seeks to ensure that the operation of these earthworks controls do not discourage works that would reduce health and safety risk.</p> <p>The intent of this rule is to allow upgrade for safe use by the same class of vehicle. Where the road has not been previously designed to carry fully loaded logging trucks these vehicles should not be able to use the road following the widening or realignment.</p> <p><u>Clarification is required on:</u></p> <ul style="list-style-type: none"> <u>How regional council determine what are and are not justifiable ‘safety purposes’.</u> <u>The role of local guidelines developed to establish good management practices</u> <u>Definition of ‘spoil’</u> <u>reference to design conditions e.g. suitable benching and compaction of fill</u> <u>We have some concern that 5,000m3 is too large scale for all soils and slopes covered by these permitted thresholds.</u> <u>Using the Glossary definition of an ‘activity area’ places an entire forest in an activity area therefore a more confined site area definition is needed.</u>

<p>Regional</p>	<p>Requirement to prepare an Erosion and Sediment Control Plan</p> <ul style="list-style-type: none"> • An Erosion and Sediment Control Plan (ESCP) must be prepared that assesses and addresses the operational risks to the environment. • Earthworks must be undertaken in accordance with an ESCP, which must be made available to the council on request at least not less than 20 working days before operations start. The scope of an ESCP must be matched to the scale and complexity of the operation. All earthworks activity must be carried out in accordance with that ESCP. • Material amendments to the earthworks plan must be documented and available to the relevant council on request. Material amendments are significant changes, such as the relocation of roads or landings, or changes to proposed controls to manage environment impacts or proposed rehabilitation works . <p>The ESCP must include but not be limited to:</p> <ul style="list-style-type: none"> • a description of the nature, scale, timing and duration of activities including construction, roading, the formation of any new track, earthworks and stabilisation; • the erosion and sediment control measures to be used and indicative locations, including: <ul style="list-style-type: none"> ○ water run-off controls; ○ methods to limit slumping of batters, cuts and side castings; ○ measures to maintain slope stability; ○ methods of sediment retention and control of sediment run-off; ○ methods to avoid effects on riparian margins and water bodies ○ natural overland flow paths and ephemeral waterbodies; • heavy rainfall response and contingency measures; • maintenance and monitoring procedures; • methods to monitor achievement of the plan; • revegetation requirements. <p>The erosion and sediment control plan shall include but not be limited to the following:</p> <ol style="list-style-type: none"> A written methodology for undertaking the works Details of all principles, procedures and practices that will be implemented to undertake soil disturbance including soil fill activities, methods to prevent soil erosion, debris avalanches and sediment discharge from each site The design criteria of all erosion and sediment control structures Construction timetable for the erosion and sediment control works and proposed site disturbance Timetable for site rehabilitation, rehabilitation methods and maintenance of rehabilitation works Maintenance, monitoring and reporting procedures Contingency measures including procedures to minimise adverse effects of failure of any erosion and sediment control works Identification and contact details of personnel responsible for the operation Maintenance of all key erosion and sediment control structures Rehabilitation of disturbed sites 	<p>The requirement to prepare an ESCP seeks to ensure that the risks of undertaking earthworks in the specific location are identified and measures to manage these risks have been considered and implemented.</p>
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Regional	<p>Operation</p> <p>Temporary tracks and other earthworks in the Orange Zone that are not required for future further harvesting operations must be deactivated and stabilised to control run-off within 20 working days of their last use.</p> <p>Land disturbance in ephemeral stream channels must be managed to avoid obstruction or diversion to the extent that no more than minor damming, flooding or erosion occurs.</p>	<p>This condition seeks to ensure that where temporary tracks have been created they are stabilised as soon as they are no longer required to decrease the risk of the disturbed area leading to increased run-off or erosion.</p> <p>Clarify what is meant by 'last use' and 'land disturbance' i.e. does this include vegetation disturbance</p>
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Regional

Setbacks

Earthworks must not be undertaken within these setbacks:

Setback from	Bank full channel width	Minimum horizontal distance
Perennial river or stream <u>Intermittent Watercourse</u>	< 3 m with a catchment area 0-50ha	5 m
	≥ 3 m with a catchment area >50ha	10 m – Except during the construction and maintenance of a water-body crossing or a debris trap
Wetlands larger than 0.25 ha and wider than 5m		5 m-10m
Lakes larger than 0.25 ha		10 m
Coastal marine area		30 m
Outstanding freshwater bodies (as defined in the National Policy Statement for Freshwater Management (2014) (NPS-FM)) or surface water bodies subject to water conservation orders and identified high value dune lakes.		10 m-50m

Setbacks for new earthworks construction also apply to temporary tracks, except where topographical constraints leave no alternative	Bank full channel width	Minimum horizontal distance	
Perennial river or stream	< 3 m	5 m	Except during the construction and maintenance of a water-body crossing or a debris trap
	≥ 3 m	10 m	
Wetlands larger than 0.25 ha		5 m	
Lakes larger than 0.25 ha		10 m	
Coastal marine area		30 m	
Outstanding freshwater bodies as defined in NPS-FM or surface water bodies subject to water conservation orders.		10 m	

These setback conditions aim to keep earthworks activities and machinery away from surface water bodies to reduce the risk of sedimentation or damage to riparian areas that have the potential to degrade water quality and in-stream habitats. 'Intermittent Watercourse' – defined as a watercourse that:

- a) Flows for most of the year or is only dry for short periods of the year, and during such dry periods has stable pools or 'wet patches'; and
- b) Has a defined water channel and banks; and
- c) Connects with a permanently flowing surface water body; and
- d) Provides habitat for aquatic flora and/or fauna species.

Use 'catchment area' not stream width as it can be easily measured without the need for a site visit on GIS / desk based geo-spatial systems. Also with natural variation in channel width, there is uncertainty for borderline streams.

The 50m figure is the retirement strip width recommended by NIWA 'Champion et al 1993' and 'Collier, 1996'.

Reference to identified high value dune lakes recognises the significance, rarity and vulnerability of dune lakes. As well leaching issues associated with dune lake sand soils.

Regional	<p>Fill Fill material must contain no more than 5% (by volume) of vegetation and wood, except for tracked areas or when wood is used as corduroy. <u>No vegetation shall be placed in structural fill or in cut to waste soil where decomposition may result in land instability.</u></p>	<p>Reference measurement methodology for determining vegetation and wood content</p>
Regional	<p>Spoil-Fill material <u>Spoil Fill material</u> must not be deposited:</p> <ul style="list-style-type: none"> • where it may cause failure of the deposited material or the underlying land; • into a <u>surface</u> water body or in a position where it can <u>readily may</u> enter a <u>surface</u> water body or in a position where it can deliver sediment <u>or staining directly or indirectly</u> into a <u>surface natural</u> water body; • over logging slash or woody vegetation; • outside a production area. 	<p>This condition seeks to ensure that excess spoil is not deposited where it increases the risk of slope instability <u>and includes subterranean water flows e.g. tomo's, that also have potential to transport sediment laden waters.</u></p> <p><u>Reference to staining provides for potential staining issues (particularly when associated with dune lakes) that can be associated with peat and slash.</u></p>
Regional	<p>Sediment and stormwater control measures Stormwater and sediment control measures must be installed and maintained:</p> <ul style="list-style-type: none"> • water run-off controls must be installed and maintained for all tracks <u>and roads</u>, landing sites and fire breaks; • batter, cuts and side castings must be established by methods that prevent slumping as far as possible. 	<p>These conditions seek to ensure that specific erosion and sediment controls are adopted to prevent sediment discharge to surface waterways and off-site erosion.</p>

Regional	<p>Stabilisation and containment</p> <p>As soon as practicable after Following the completion of the earthworks activity and no later than 12 months from the date of construction completion, exposed areas of soil that have the potential to discharge sediment to water must shall be:</p> <ul style="list-style-type: none"> • contained within the site; • stabilised to contain sediment by measures such as: and maintained to prevent soil erosion and sediment export directly or indirectly into natural water. <p>Contain sediment by measures such as:</p> <ul style="list-style-type: none"> o seeding; o vegetative cover (including revegetation through natural regeneration), mulch (for example, hay or straw) or slash cover; o compacting, drainage or roughening; o engineering techniques such as rock armouring. o Establish a maintenance free sward of vegetation of not less than an 80% cover on all exposed soil, o Use of recognised methods to stabilise exposed soil and manage sediment including but not limited to: <ul style="list-style-type: none"> o vegetative (e.g. percentage hay, straw or slash cover) o Sowing of grass seed, hydro seeding hydro mulching and seeding o drainage, or roughening, o engineering techniques, such as rock armouring, sediment sumps and silt fences <p>Stabilisation requirements do not apply to firebreaks.</p>	<p>These conditions seek to ensure that measures are taken after the completion of earthworks to stabilise disturbed areas to reduce the ongoing risks of the disturbed areas causing increased erosion or sedimentation of surface waterways.</p>
Regional	<p>Design</p> <ul style="list-style-type: none"> • Align and manage roads and tracks to divert run-off to disperse flows. • Bench and compact landing fill areas and road line fills on slopes over 25 20 degrees. 	<p>These conditions seek to ensure that tracks and roads are designed and constructed in a manner that reduces the risks of surface water flows leading to increased erosion or sedimentation of surface waterways.</p>
Controlled – N/A		
Restricted discretionary		
Orange Zone (slope > 25 20 degrees)	Red Zone	

<p>Earthworks is a restricted discretionary activity and a consent is required if it involves an earthworks volume greater than 1000m³ and:</p> <ul style="list-style-type: none"> • the land is in the Orange Zone and the slope is greater than 25 20 degrees; or • the land is in the Red Zone; or • any of the permitted conditions are not met. <p>If consent is applied for, a council may decline or grant the consent and impose consent conditions. However, a council's decision-making power is restricted to the matters listed below.</p>	
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Matters over which discretion is restricted	
<p>Where earthworks is restricted discretionary because it could not meet the permitted activity conditions:</p> <ul style="list-style-type: none"> • discretion must be restricted to the effects that the specific permitted activity condition(s) that could not be met was attempting to avoid. <p>Where earthworks is restricted discretionary because it is located in an Orange Zone and the slope is greater than 25 20 degrees or in a Red Zone, discretion must be restricted to the following matters:</p> <ul style="list-style-type: none"> • timing, location and duration of works; • ecological and aquatic effects; • method of stabilisation of soil disturbance; • method of sediment retention and run-off stormwater control effects on riparian vegetation; • method of minimising erosion; • placement and management of cuts and fill likely to cause slope instability • Construction method • use and maintenance of erosion and sediment controls. • Timing of works (the winter season is excluded for construction earthworks) • Rehabilitation of disturbed sites. 	<p>These matters are considered sufficiently broad to reflect the full range of potential impacts from earthworks operations.</p>
<p>Consents in Orange Zone must be non-notified.</p>	
<p>Discretionary – N/A</p>	

HARVESTING

Objective: To introduce a consistent set of harvesting controls that manage the risks identified below in a manner that is in line with good forest management practice.

Scope: Harvesting is the act of felling and extracting trees and the associated soil disturbance.

Harvesting includes:

- discharges of slash and contaminants to land and water associated with harvesting;
- production thinning;
- soil disturbance associated with harvesting, including disturbance by harvesting machinery;
- damage to indigenous vegetation adjacent to the plantation forest where necessary to remove the production crop [**Advice note:** *This is intended to include temporary edge damage to significant natural areas (SNA) (or similar) that is likely to readily recover. "SNA (or similar)" refers to an area identified in a regional policy statement, regional plan or district plan pursuant to section 6(c) of the Resource Management Act 1991.*];
- riparian vegetation disturbance;
- the damaging or removal of indigenous vegetation within a plantation forest, where its removal is necessary to harvest a plantation forest, including vegetation associated with a plantation crop, that is, vegetation that:
 - has grown up under (or may have overtopped) production species; or
 - is within an area of failed planting (within the last rotation); or
 - is within an area of regenerating cutover; or
 - occurs on an existing access road.

Harvesting does not include:

- earthworks (such as earthworks to establish temporary or permanent access roads, **tracks** or landings).

Risk: Risks particular to harvesting operations are primarily:

- sediment transport to water bodies;
- slash transport into surface water bodies;
- soil erosion
- **Deposition of slash in waterbodies.**

Sediment and slash can degrade water quality and in-stream habitats through increased sediment concentration and habitat destruction and can cause downstream infrastructure damage.

Permitted

Green Zone

Yellow Zone

Orange Zone

Harvesting is a permitted activity in Green, Yellow and Orange zones provided permitted activity conditions listed below are met.

Low intensity harvesting

Low intensity harvesting is permitted in all zones where:

- a minimum of 75% canopy closure is maintained at all times for any given hectare of forest land;
- all other permitted activity conditions for harvesting are met.

Jurisdiction	Permitted activity conditions	Rationale
District/ Regional	<p>Notice of commencement</p> <p>Regional and district councils must be notified not less than at least 20 working days and no more than 60 working days before harvesting operations start. Councils may reduce this notice period at their discretion.</p>	<p>This rule seeks to ensure that regional councils are notified in a timely manner of harvesting operations starting, so they are aware of operations occurring and can schedule monitoring programmes if necessary.</p>
Regional	<p>Harvest planning</p> <ul style="list-style-type: none"> • A Harvest Plan must be prepared that assesses and addresses the operational risks to the environment. • The Harvest Plan must be prepared in accordance with the prescribed template. • The Harvest Plan must be made available to the regional council for comment not less than at least 20 working days before harvesting operations start, either on request or provided annually on agreement with the relevant council. • The scope of the Harvest Plan must be matched to the scale and complexity of the operation. • All harvesting must be carried out in accordance with the Harvest Plan and any subsequent Harvest Plan changes. • Any material amendments to the Harvest Plan must be documented and made available to the relevant council on request. If a council has previously requested a copy of the Harvest Plan, any subsequent material amendments must be forwarded to the council for comment not less than 20 working days before the changes are implemented. • The Harvest Plan must include controls measures for mitigating effects on sensitive receiving environments including dune lakes <p>When undertaking harvesting in the yellow, Orange and Red Zone, a documented Erosion and Sediment Control Plan must be prepared in conjunction with the Harvest Plan. The Erosion and Sediment Control Plan must be prepared in accordance with the prescribed template.</p> <p>The Harvest Plan must include (but is not limited to):</p> <ul style="list-style-type: none"> • mapping, environmental risk assessment and details of the management of risks relating to ephemeral watercourses, rivers and surface water bodies and their riparian areas, including 	<p>This rule seeks to ensure that foresters prepare a Harvest Plan to identify and consider the environmental risks associated with harvesting operations before starting harvesting operations.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Consider exception for very small forest blocks • The prescribed template should promote inclusion of estimated riparian canopy cover reduction resulting from harvest activities, given it's direct affect on the life supporting capacity of streams. Also assessment of effects on in stream values including spawning and migration of threatened fish species. • The harvest plan should specifically provide measures necessary to avoid effects on high value dune lakes or identified of defined wetlands with significant biodiversity values on peat soils or podzols.

	<p>indigenous vegetation;</p> <ul style="list-style-type: none"> • a documented process for assessing and managing the effects and potential risks of slash entering water bodies appropriate to the scale and level of risk; • identify and clearly document slash storage sites, including using skid diagrams as part of the pre-harvesting operation hazard identification process (as appropriate); • slash management planning for <u>ephemeral watercourses, and perennial water bodies and birds nests on slopes >20 degrees,</u> • <u>Rehabilitation of disturbed sites and birds' nests</u> • <u>Harvest planning notes at a compartment level.</u> <ul style="list-style-type: none"> • As well as the above subjects; • <u>The harvest plan shall include but not be limited to the following;</u> • <u>Maps or aerial images of sufficient scale and detail to clearly show the nature and location of the vegetation removal operations, methods to be used to avoid soil disturbance and damage to riparian and vegetation in non stocked areas and shall additionally include but not be limited to the following matters:</u> <ul style="list-style-type: none"> • <u>Compartment maps of sufficient scale and detail to clearly show:</u> • <u>Perennial water bodies</u> • <u>Contours at not more than 20 metre intervals</u> • <u>Operational areas with slopes greater than 20 degrees</u> • <u>Existing and proposed roads, tracks, pads and landings</u> • <u>Existing and proposed river crossing structures and fords</u> • <u>Areas of proposed soil disturbance</u> • <u>Harvest areas, harvesting methods and setting level detail.</u> • <u>Wetlands and riparian zones</u> <p><u>Any changes to the Harvest Plan shall be confirmed in writing by the consent holder to the Council.</u></p>	
Regional	<p>Ground disturbance outside riparian zones</p> <p>During harvesting operations, avoid, mitigate or remedy actions that accelerate erosion and minimise the discharge of sediment to water bodies.</p> <ul style="list-style-type: none"> • Harvest systems must be planned and located to achieve butt suspension wherever practicable. This condition does not apply to riparian zones. • <u>Recovery of tree stems shall be planned and undertaken to provide for the suspension of tree butts above the land surface during transportation to avoid exposing sub soils, the formation of log chutes, scouring of the land surface, disturbance of intermediate ridges and water bodies.</u> • All disturbed soil must be stabilised or contained so as to prevent movement of sediment into any water body or coastal water resulting in: 	<p>The removal of vegetation and the disturbance of the ground increase the risk of erosion and sediment discharge to waterways. These rules seek to minimise the:</p> <ul style="list-style-type: none"> • amount of ground disturbance that occurs as part of harvesting and tracking operations; • effects of ground disturbance that does occur by controlling water flows and treating direct pathways to surface water bodies <u>and wetlands.</u> <p>These conditions apply to ground disturbance outside</p>

	<ul style="list-style-type: none"> ○ the diversion or damming of any river or stream; ○ the sedimentation of the bed of any surface water body; ○ Measureable significant adverse effects on aquatic coastal or wetland habitat; ○ Flooding, damage to downstream infrastructure, property or receiving environments. <ul style="list-style-type: none"> • All temporary harvest tracking must be stabilised with water controls or other means as required to minimise avoid erosion, sediment discharge in stormwater before that may discharge to a perennial water body or wetland. 	<p>riparian zones. Operations within riparian zones are subject to stricter controls.</p> <p>Provide a definition for riparian zones.</p>
Regional	<p>Riparian disturbance</p> <p>To limit riparian disturbance during harvesting, fell away from the water body or riparian zone, except where unsafe or impractical to do so. If unavoidable, fell trees directly across the water body for full-length extraction before de-limbing or heading. Seek to achieve minimum stream canopy disturbance through estimating percentage canopy removal and maintaining this below 50% for streams with a catchment less than 50 ha and 25% for larger catchments.</p> <p>No harvesting machinery must operate within 5 m of perennial water bodies, except:</p> <ul style="list-style-type: none"> • at water-body crossing points; • where slash removal is necessary; • where essential for assisting with directional falling and extraction of trees from the riparian margin. <p>When harvesting within or across a riparian zone, all disturbed vegetation, soil or debris must be deposited or placed in a position where it will not enter any watercourse to the extent that it causes more than minor adverse effects associated with:</p> <ul style="list-style-type: none"> • diversion, damming or erosion of any river or stream; or • degradation of any aquatic or riparian habitat; or • damage to downstream infrastructure, property or receiving environments. <p>Must have full suspension if pulling across streams with a catchment greater than 3 m 50ha in width.</p>	<p>Riparian zones are particularly sensitive to harvesting activities. This rule seeks to ensure that harvesting techniques are adopted that minimise riparian disturbance such as felling trees away from riparian zones and keeping machinery out of these zones (where practicable).</p> <p>Provide for measures to minimise extent of riparian disturbance / loss of stream shading.</p> <p>This could be expressed as a percentage and would help improve understanding of affects on the waterway and give harvesting crew a tangible target whilst helping to avoid cumulative effects associated with compounding use of exceptions.</p> <p>Maintaining cooler water temperatures (shading) will also assist with fish passage.</p> <p>Will forestry use models such as FENZ as well as the freshwater fish database to predict fish presence?</p> <p>- mandatory fish surveys would ground truth this data</p> <p>Harvesting also needs to take into account for migration periods as in the NIWA technical report backing up the NES-PF.</p> <p>Set back areas also maintain important spawning habitat for kokopu species (eg banded and giants which spawn in forest litter at high flows.</p>
Regional	Slash and debris management	This rule seeks to:

	<p>Place slash onto stable ground, and manage slash levels so slash does not accumulate to levels that could cause collapse at skid sites. To prevent potential land collapse at skids, install and maintain water and sediment controls.</p> <p>Whenever safe and practicable to do so, remove potentially unstable slash that has the potential to mobilise under flood flows from water bodies, and:</p> <ul style="list-style-type: none"> • block or dam stream flow; or • divert flow into stream banks in a way that is likely to cause erosion; or • damage downstream infrastructure, property or receiving environments; or • cause significant adverse effects on aquatic habitat. 	<ul style="list-style-type: none"> • reduce the risk of slash entering waterways; • ensure slash that does enter waterways is removed if its presence is likely to affect the flow or damage habitat, property or the environment; • ensure the stability of land is not affected by slash accumulations.
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Controlled		
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Red Zone (that is not class 8e)		
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<p>Harvesting is a controlled activity and a consent is required in:</p> <ul style="list-style-type: none"> • Green, Yellow and Orange zones where permitted conditions cannot be met; and • Red Zone that is not class 8e. 	
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Matters over which control is reserved		
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<p>If a consent is applied for, the council must grant the consent. Its ability to impose consent conditions is restricted to the matters listed below.</p> <p>In Green, Yellow and Orange zones, consent conditions are restricted to:</p> <ul style="list-style-type: none"> • the effects that the specific permitted activity condition(s) that cannot be met was attempting to avoid. <p>In Red Zone that is not class 8e, consent conditions are restricted to:</p> <ul style="list-style-type: none"> • the Harvest Plan and Erosion and Sediment Control Plan; • the method of harvesting; • the extent of operations; • timing in relation to fish spawning; • measures to address effects on water quality and riparian vegetation; • measures to address soil erosion during and after harvesting. 	<p>These matters seek to ensure that consent conditions are imposed that directly relate to the permitted activity condition(s) that could not be met.</p> <p>These matters are considered sufficiently broad to reflect the full range of potential impacts from harvesting operations.</p>
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Restricted discretionary		
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Red Zone that is class 8e		
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Harvesting is a restricted discretionary activity and a consent is required in Red Zone that is class 8e **(except on recent sands, subject to re-establishment of vegetative cover following harvest).**

A consent is required, and the council may decline or grant the consent and impose conditions. However, the council's ability to grant or decline the consent and to impose conditions is restricted to the matters listed below.

In **Red Zone that is class 8e**, consent conditions are restricted to:

- the Harvest Plan and Erosion and Sediment Control Plan;
- the method of harvesting;
- the location, extent and timing of operations (including in relation to fish spawning **and migration**);
- effects on water quality and riparian vegetation;
- soil erosion during and after harvesting;
- the containment of slash.

Discretionary N/A

MECHANICAL LAND PREPARATION

Objective: To introduce a consistent set of mechanical land preparation controls that manage the risk identified below in a manner that is in line with good forest management practice.

Scope: Mechanical land preparation includes root raking, discing, mounding and spot mounding, contour and downhill ripping, roller crushing, other cultivation of land (including spot cultivation) and associated removal of vegetation. V-blading involving disturbance of subsoil is considered under the earthworks rules.

Note: *Earthworks and quarrying do not fall within the scope of mechanical land preparation. Earthworks and quarrying are defined activities and are subject to specific controls.*

Risks: The predominant risks are soil erosion, impacts on habitats and degradation of water quality from sediment run-off to water bodies.

Permitted

Green Zone

Yellow Zone

Orange Zone

Red Zone

Mechanical land preparation is permitted:

- in Green and Yellow zones;
- in Orange and Red zones where the slope is less than **25 20** degrees;
- in Orange and Red zones where the slope is greater than **25 20** degrees but the technique used affects the subsoil (for example, deep downhill ripping or giant discing); and
- where the following permitted activity conditions are met.

Jurisdiction	Permitted activity conditions	Rationale
Regional	The activity must not be undertaken in Orange and Red zones where the slope is greater than 25 degrees, if the technique being used affects the subsoil (for example, deep downhill ripping or giant discing).	These conditions seek to ensure that, where mechanical land preparation is undertaken in locations and in a manner that carries the highest risks of environmental degradation (that is, where it affects the subsoil in steep country), these risks are managed through consent conditions.
Regional	<p>Methods</p> <p>Mechanical land preparation must be carried out parallel to the contour, where practical (except roller crushing and downhill ripping).</p> <ul style="list-style-type: none"> • Where mechanical land preparation does not follow the contour, run-off control measures must be provided to prevent sediment run-off to waterways. • For downhill ripping, individual sections of ripped soil must not exceed 50 m in length. • No downhill ripping in soils must be undertaken where there is evidence of gully erosion and tunnel gully erosion. 	These conditions seek to ensure that mechanical land preparation is undertaken in a manner that reduces the risk of disturbed areas channelling storm water and sediment flows towards surface water bodies.

Regional

Mechanical land preparation must not be undertaken within these setbacks:

Setbacks	Bank full channel width	Minimum horizontal distance	
Perennial river or <u>stream</u> <u>Intermittent Watercourse</u>	<u>< 3 m with a catchment area 0-50ha</u>	5 m	
	<u>≥ 3 m with a catchment area >50ha</u>	10 m	
Wetlands larger than 0.25 ha <u>and wider than 5m</u>		<u>5 m</u> <u>10m</u>	
Lakes larger than 0.25 ha		10 m	
Coastal marine area		30 m	
Outstanding freshwater bodies (as defined in NPS-FM) or surface water bodies subject to a water conservation order <u>and identified high value dune lakes.</u>		<u>10 m</u> <u>50m</u>	

These conditions aim to establish appropriate setback distances from water bodies to reduce the risk of damage to riparian areas that have the potential to degrade water quality and in-stream habitats.

'Intermittent Watercourse' – defined as a watercourse that:

a) Flows for most of the year or is only dry for short periods of the year, and during such dry periods has stable pools or 'wet patches'; and

b) Has a defined water channel and banks; and

c) Connects with a permanently flowing surface water body; and

d) Provides habitat for aquatic flora and/or fauna species.

Use 'catchment area' not stream width as it can be easily measured without the need for a site visit on GIS / desk based geo-spatial systems. Also with natural variation in channel width, there is uncertainty for borderline streams.

The 50m figure is the retirement strip width recommended by NIWA 'Champion et al 1993' and 'Collier, 1996'.

Reference to identified high value dune lakes recognises the significance, rarity and vulnerability of dune lakes. As well leaching issues associated with dune lake sand soils.

Controlled – N/A	
Restricted discretionary	
Orange (slope > 25 20 degrees)	Red (slope > 25 20 degrees)
<p>Mechanical land preparation is a restricted discretionary activity:</p> <ul style="list-style-type: none"> • in Orange and Red zones where the slope is greater than 25 degrees and the technique used affects the subsoil (for example, deep downhill ripping or giant discing); or • where the permitted activity conditions cannot be met. <p>If a consent is applied for, the council may decline or grant the consent and impose consent conditions. However, the council's ability to grant or decline the consent and to impose conditions is restricted to the matters listed below.</p>	
Matters to which discretion is restricted	
<p>Discretion must be restricted to the effects that the specific permitted activity condition(s) that could not be met was attempting to avoid. Where the activity occurs in Orange or Red Zones where the slope is greater than 25 20 degrees and the technique used affects the subsoil, discretion must be restricted to:</p> <ul style="list-style-type: none"> • ecological and aquatic effects (including effects on water quality); • the location of work in relation to coastal marine areas, rivers, streams, lakes and wetlands; • erosion and sediment run-off; • the type of mechanical land preparation and method used; • changes to hydrological flows (for example, from V-blading). 	
Discretionary – N/A	

PRUNING AND THINNING-TO-WASTE				
<p>Objective: To introduce a consistent set of pruning and thinning-to-waste controls that manage the risks identified below in a manner that is in line with good forest management practice.</p> <p>Scope: Pruning involves the removal of branches from a tree. Thinning involves the selective removal of trees within a stand. Thinning operations must leave a minimum of 250 stems per hectare. Thinning operations that thin in excess of this limit are likely to have similar effects to harvesting operations and fall within the definition of harvesting. Thinning-to-waste operations leave the felled trees in situ. Note: <i>Production thinning involves the removal of thinned trees for sale and falls within the definition of harvesting.</i></p> <p>Risk: Pruning and thinning-to-waste typically have minor environmental effects limited to issues with where the pruned or thinned material is deposited. The deposition of pruned or thinned material, such as branches, young trees or other woody debris, into surface water bodies or where it has the potential to enter a surface water body is the primary risk, because it can have detrimental effects on water flow, water quality, aquatic life and, in extreme cases, property and infrastructure.</p>				
Permitted				
Green Zone	Yellow Zone	Orange Zone	Red Zone	

Pruning and thinning-to-waste are permitted in all zones, provided all permitted activity conditions are met.		
<i>Note: Production thinning is considered Harvesting.</i>		
Jurisdiction	Permitted activity conditions	Rationale
Regional	<p>Slash</p> <p>Debris from pruning and thinning-to-waste must not be deposited in a perennial water body or where it may enter a perennial water body, if it has the potential to mobilise under flood flows and:</p> <ul style="list-style-type: none"> • block or dam stream flow; or • divert flow into stream banks in a way that is likely to cause erosion; or • damage downstream infrastructure, property or receiving environments; or • cause significant adverse effects on aquatic habitat. <p>Slash should be removed from a water body only if it is safe and practicable to do so.</p>	<p>This condition aims to ensure that slash and other debris is managed appropriately, particularly in areas adjacent to surface water bodies, so slash and other debris do not enter and damage these waterways or downstream infrastructure.</p> <p>This rule is intended to apply to flood flows up to a 10-year return period.</p>
Controlled		
Pruning and thinning-to-waste are controlled in all zones where permitted activity conditions are not met. If a consent is applied for, the council must grant the consent and can impose consent conditions but only in relation to the matters listed below.		
Matters over which control is reserved		
<ul style="list-style-type: none"> • aquatic effects; • effects on stream flow; • erosion; • potential effects on downstream infrastructure, property or receiving environments; • effects on aquatic habitat. 		Matters of control are intended to be limited to the primary risk of pruning and thinning-to-waste operations; that is, damage to aquatic ecosystems.
Restricted discretionary		
Discretionary		

FORESTRY QUARRYING

Objective: To introduce a consistent set of forestry quarrying controls that manage the risks identified below in a manner that is in line with good forest management practice.

Scope: Forestry quarrying is the extraction of rock, sand or gravel for use within the same forest operation for the formation of forest roads. These controls do not address noise, vibration, dust and vehicle issues associated with quarrying; councils retain their ability to address these matters. *[Advice note: Scope includes the extraction of alluvial gravel outside river beds.]* Earthworks and mechanical land preparation do not fall within the scope of quarrying. Earthworks and mechanical land preparation are defined activities and are subject to specific controls.

Risks: Quarrying can have similar effects to those of earthworks activities in relation to soil and slope stability, water quality, landscape, and effects on cultural sites.

- These effects are usually related to erosion or the products of erosion (that is, sediment) and the impact sediment has on water bodies.
- Sediment has two main impacts: it can increase the turbidity of river water (decrease clarity), and it can clog riverbeds and downstream receiving environments such as estuaries and lakes. Both of these impacts affect the biological community and health of an ecosystem. In a Red Zone, where quarry material is likely to be located in rocky

outcrops, the main risks relate to overburden disposal.

Permitted				This seeks to ensure that, where land is susceptible to earthflow, the risks of quarrying activities can be managed through consent conditions that are appropriate for the specific site.
Green Zone	Yellow Zone	Orange Zone	Red Zone (not susceptible to earthflow)	
<p>Quarrying is permitted in all zones except Red Zone where the ESC identifies land as having the potential for severe or very severe earthflow or slump erosion, provided permitted activity conditions are met.</p>				
Jurisdiction	Permitted activity conditions			Rationale
District/ Regional	<p>Notice of commencement District and regional councils must be notified at least 20 working days and no more than 60 working days before the first quarry operations start.</p>			This rule seeks to ensure that relevant councils are notified in a timely manner of quarrying operations commencing, so that they are aware of operations occurring and can schedule monitoring programmes if necessary.
District	<p>Visibility At the time of extraction, where a quarry is visible from an existing dwelling, an adjoining property under different ownership or a formed public road, no more than 5 000 m³ of material must be quarried per five-year period per activity site.</p>			This rule seeks to ensure that, where quarrying activities are likely to affect neighbouring properties, the effects are managed by limiting the magnitude of the quarry operations.
District	<p>Property setbacks Unless written approval from the owner(s) and/or occupier(s) has been obtained:</p> <ul style="list-style-type: none"> no quarrying activity may be undertaken closer than 500 m to an existing dwelling under different ownership; no excavated soil or overburden must be deposited within 20 m of an adjoining property under different ownership. 			These conditions seek to ensure that the effects of quarrying on neighbouring properties are adequately managed.
Regional	<p>Regional setbacks Quarrying must not be undertaken within 20 m of a surface water body.</p>			<p>This condition seeks to reduce the risks of:</p> <ul style="list-style-type: none"> sediment from ground disturbance activities entering surface water bodies; riparian zones being disturbed or damaged by quarrying activities such as the operation of machinery.
Regional	<p>Fill or spoil Excavated soil regolith and overburden of the quarry product must not be deposited:</p> <ul style="list-style-type: none"> within 20 m the permitted earthworks setback distances from of a surface water body; on the head of an active or relic earthflow or other mass movement feature, where the deposition of spoil could lead to reactivation or exacerbation of the earthflow or mass movement. No overburden material, quarried aggregate or quarry related activity shall be undertaken on the flood plain of a watercourse where it may adversely affect flood flows or result in damming or 			<p>These conditions seek to reduce the risks of:</p> <ul style="list-style-type: none"> sediment entering surface water bodies from the deposition of fill or overburden; the reactivation or exacerbation of earthflow or mass movement erosion.

	<p><u>diversion of a watercourse.</u></p> <ul style="list-style-type: none"> • <u>Overburden and exposed soil generated from quarrying activities shall be stabilised to prevent soil erosion and sediment export within six months of exposure.</u> 	
District	Material must not be transported off the property on public roads.	This condition seeks to ensure that these controls capture only quarries that are being used for forestry related purpose; that is, for the construction of access roads and river crossings within a forest. It is intended that councils retain the ability to regulate general-purpose quarries.
Regional	<p>Restoration</p> <p>Within two months of the quarry being deactivated <u>and following the completion of seasonal operations</u>, the land must be restored to a stable land form (including spoil, tailings and dump areas).</p>	These conditions seek to ensure that adequate measures are taken following the completion of the quarrying activity to reduce any ongoing risks of slope instability or sedimentation of surface water bodies.
Regional	<p>Water table</p> <p>Quarry depth must not go below the water table of any aquifer.</p>	This condition seeks to reduce the risk of contamination of underground aquifers.
Regional	<p>Quarry Management Plan</p> <ul style="list-style-type: none"> • A Quarry Management Plan must be prepared. • Quarrying activities must be undertaken in accordance with the Quarry Management Plan that must be made available to the council on request at least 20 working days before operations start. The scope of a Quarry Management Plan must be matched to the scale and complexity of the operation. • Material amendments to the Quarry Management Plan must be provided to the relevant council. Material amendments are <u>significant material</u> changes, such as the relocation of roads, <u>an increase in the annual volume of aggregate extraction, stripping of overburden, opening of new benches or faces, changes to the hydrology of the quarry catchment, changes to the rehabilitation of disturbed sites, any increase in annual production of aggregate, use of new sotegage or the opening of new ground landings</u>, or the proposed controls to manage environment impacts. <p>The Quarry Management Plan must include (but is not limited to):</p> <ul style="list-style-type: none"> • a description of the nature, scale, timing and duration of activities including construction and stabilisation; • the erosion and sediment control measures to be used and indicative locations, including: <ul style="list-style-type: none"> ○ water run-off controls; ○ methods to prevent slumping of batters, cuts and side castings; ○ measures to maintain slope stability; ○ methods of sediment retention and control of sediment run-off; ○ methods to avoid effects on riparian margins and water bodies; ○ Overburden and fill soil management 	This condition seeks to ensure that the potential environmental risks of quarrying activities and necessary measures to manage these risks are identified before operations start.

	<ul style="list-style-type: none"> ○ Quarry catchment drainage ○ Dust management • heavy rainfall response and contingency measures; • maintenance and monitoring procedures; • methods to monitor achievement of the plan; • revegetation requirements • operational range of annual extraction volume / quarry export. 	
Controlled		
All zones except Red Zone (susceptible to earthflow)		
	<p>Quarrying is a controlled activity;</p> <ul style="list-style-type: none"> • in all zones (except the Red Zone where the ESC identifies land as having the potential for severe or very severe earthflow or slump erosion); or • where any of the permitted activity conditions (except for property setbacks) cannot be met. <p>If a consent is applied for, the council must grant the consent, and its ability to impose consent conditions is restricted to the following matters.</p>	
Matters over which control is reserved		
	The effects that the specific permitted activity condition(s) that could not be met was attempting to avoid.	Reserving control to this matter seeks to ensure that consent conditions are imposed that directly relate to the permitted activity condition(s) that could not be met.
Restricted discretionary		
Red Zone (susceptible to earthflow)		
	<p>Quarrying is restricted discretionary:</p> <ul style="list-style-type: none"> • in all zones where property setback conditions cannot be met; • in a Red Zone where the ESC identifies land as having the potential for severe or very severe earthflow or slump erosion. <p>If a consent is applied for, the council may decline or grant the consent and impose consent conditions. However, the council's ability to grant or decline the consent and to impose conditions is restricted to the matters listed below.</p>	
Matters to which discretion is reserved		

Council discretion is reserved to:

- the location and duration of works;
- the disposal of fill and overburden;
- the area and volume of earthworks;
- the dimensions of cut and fill;
- ecological and aquatic effects;
- the method of stabilisation of earthworks;
- the method of sediment retention and run-off storm water control;
- effects on riparian vegetation;
- measures to rehabilitate land;
- effects on traffic and roading infrastructure.

These matters are considered sufficiently broad to reflect the full range of potential impacts from forestry quarrying.

Discretionary

REPLANTING

Objective: To introduce a consistent set of replanting controls that manage the risks identified below in a manner that is in line with good forest management practice.

Scope: Replanting is the act of planting a site following the harvesting of a crop. For the activity to be considered replanting rather than afforestation, the planting must occur on a site where plantation forestry has occurred within the past five years.

Risk: The primary risk associated with replanting is the re-establishment of forest in inappropriate areas where subsequent forestry activities carry an increased risk of causing adverse effects.

Permitted

Green Zone

Yellow Zone

Orange Zone

Red Zone

Replanting is a permitted activity in all zones, provided all permitted activity conditions are met.

Jurisdiction

Permitted activity condition

Rationale

Regional

Except where required by consent conditions, replanting must not occur within the following setbacks.

Setback from	Bank full channel width	Minimum horizontal distance
Perennial river or stream	< 3 m with a catchment area 0-50ha	5 m*
	≥ 3 m with a catchment area >50ha	10 m* - except where a smaller setback is required to meet the conditions of a regional pest management strategy
Wetlands larger than 0.25 ha and wider than 5m		5 m-10m*
Lakes larger than 0.25 ha		10 m*
Coastal marine area		30 m*
Outstanding freshwater bodies (as defined in the National Policy Statement for Freshwater Management (2014) (NPS-FM)) or surface water bodies subject to water conservation orders and identified high value dune lakes.		10 m-50m*
<ul style="list-style-type: none"> Except where a smaller setback is required to meet the conditions of a regional pest management strategy 		

Replanting setbacks from water bodies are the same as for afforestation. This control is to maintain setback distances throughout subsequent rotations. As with the afforestation setbacks, the aim is to establish appropriate setback distances from surface water bodies to reduce the risk of future operations such as harvesting or earthworks causing sedimentation or damage to riparian areas that have the potential to degrade water quality and in-stream habitats.

District / Regional	<p>Replanting adjacent to significant natural areas (SNA) When replanting immediately adjacent to indigenous vegetation identified, mapped or scheduled in a district or regional plan as an SNA (or similar), replanting must take place no closer than <u>either the stump line of the previous crop or the setback distances in the table below, whichever is further:</u></p> <table border="1" data-bbox="268 408 1341 799"> <thead> <tr> <th>Setback from</th> <th>Bank full channel width</th> <th>Minimum horizontal distance</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Perennial river or stream</td> <td>3 m with a catchment area 0-50ha</td> <td>5 m</td> </tr> <tr> <td>≥ 3 m with a catchment area >50ha</td> <td>10 m</td> </tr> <tr> <td>Wetlands larger than 0.25 ha and wider than 5m</td> <td></td> <td>5 m 10m</td> </tr> <tr> <td>Lakes larger than 0.25 ha</td> <td></td> <td>10 m</td> </tr> <tr> <td>Coastal marine area</td> <td></td> <td>30 m</td> </tr> <tr> <td>Outstanding freshwater bodies (as defined in the National Policy Statement for Freshwater Management (2014) (NPS-FM)) or surface water bodies subject to water conservation orders and identified high value dune lakes.</td> <td></td> <td>10 m 50m</td> </tr> </tbody> </table>	Setback from	Bank full channel width	Minimum horizontal distance	Perennial river or stream	3 m with a catchment area 0-50ha	5 m	≥ 3 m with a catchment area >50ha	10 m	Wetlands larger than 0.25 ha and wider than 5m		5 m 10m	Lakes larger than 0.25 ha		10 m	Coastal marine area		30 m	Outstanding freshwater bodies (as defined in the National Policy Statement for Freshwater Management (2014) (NPS-FM)) or surface water bodies subject to water conservation orders and identified high value dune lakes.		10 m 50m	<p>This condition seeks to ensure that, when replanting occurs directly adjacent to identified areas of significant indigenous vegetation, the replanting does not encroach further into these areas than the previous crop. The aim is to ensure that any existing buffers between the plantation crop and indigenous vegetation are maintained to reduce the risk of future forestry operation causing damage to adjacent indigenous vegetation when machinery is operating and trees are felled and recovered in close proximity.</p> <div data-bbox="1413 624 1998 775" style="border: 1px solid black; padding: 5px;"> <p>Advice note: “SNA (or similar)” refers to an area identified in a regional policy statement, regional plan or district plan pursuant to section 6(c) of the Resource Management Act 1991.</p> </div>
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Outstanding freshwater bodies (as defined in the National Policy Statement for Freshwater Management (2014) (NPS-FM)) or surface water bodies subject to water conservation orders and identified high value dune lakes.		10 m 50m																				
	<p>Replanting using genetically modified tree stock is permitted where the tree stock has gained the appropriate approval for deployment from the Environmental Protection Authority (EPA) and is subject to conditions imposed by the EPA.</p>	<p>This condition recognises that the EPA is best placed to evaluate the risks of genetically modified organisms and that approval and conditions imposed under the EPA regime will be sufficient to ensure that any risks associated with the deployment of the tree stock are managed.</p>																				
Controlled																						
Green Zone	Yellow Zone	Orange Zone																				
Red Zone																						
<p>Replanting is a controlled activity in all zones where permitted activity conditions are not met. If a consent is applied for, the council must grant the consent and can impose consent conditions relating to only the specific matters over which control is reserved.</p>																						
Matters to which control is reserved																						

<p>Control is reserved to:</p> <ul style="list-style-type: none"> • aquatic and terrestrial biodiversity effects; • species and location of replanting; • potential effects of future harvesting and associated earthworks activities on the adjacent surface water bodies or significant indigenous vegetation. <p>The consent must apply only to the area that could not be planted as a permitted activity.</p>	<p>The matters that a council's control is limited to reflect the specific risks of replanting and subsequent forest management activities, specifically the effects on surface water bodies or indigenous vegetation, from the re-establishment of plantation forest cover.</p>
Restricted discretionary	
Discretionary	

GENERAL CONDITIONS					
Permitted					
Green Zone		Yellow Zone	Orange Zone	Red Zone	
Jurisdiction	Permitted conditions			Rationale	
	<p>Notwithstanding specific activity rules, all forestry activities are permitted, provided the all activity specific conditions and the following general conditions are met.</p>			<p>Proposed wording negates activity specific conditions</p>	
District	<p>Archaeological <i>Known archaeological sites</i> During afforestation, replanting, mechanical land preparation, harvesting, earthworks and quarrying activities, the modification or destruction of an archaeological site (as defined by the Heritage New Zealand Pouhere Taonga Act 2014) may occur only if it is carried out on the authority of and in accordance with the Heritage New Zealand Pouhere Taonga Act 2014.</p> <p><i>Unrecorded archaeological sites</i> The following procedures apply to any archaeological site exposed or identified before or during plantation forestry activities:</p> <ul style="list-style-type: none"> • All site works in the immediate vicinity of the discovery that will destroy, damage or modify the site must cease immediately. • The area must be secured to prevent further disturbance until relevant Heritage New Zealand Pouhere Taonga authorisation has been obtained. • Works must then be carried out in accordance with the authorisation. 			<p>The operation of machinery around archaeological sites carries risk. These conditions seek to ensure that the modification or destruction of archaeological sites is avoided by requiring adherence to the Heritage New Zealand Pouhere Taonga Act 2014.</p>	
Regional	<p>Fuel During any plantation forestry activity there must be no refuelling of machinery within surface water bodies or storing of fuel or refuelling where it might enter a surface water body.</p>			<p>Fuel can result in significant damage to aquatic ecosystems if it enters water. This condition seeks to minimise the risk of fuel being discharged to water</p>	

District	<p>Vegetation clearance and disturbance</p> <p>Indigenous vegetation may be damaged, destroyed or removed provided it:</p> <ul style="list-style-type: none"> • has grown up under (or may have overtopped) managed forest species; or • is within an area of failed planting (within the last rotation); or • is within an area of regenerating cutover (that is, within five years of the harvest of the previous crop); or • is vegetation overgrowing a pre-existing access way, including an existing track or access way within an significant natural area (SNA) (or similar); or • is incidental damage to riparian vegetation that will readily restore recover within five years; or • is incidental damage to indigenous vegetation this is adjacent to plantation forest, including indigenous vegetation at the edge of an SNA (or similar) or along an existing track that will readily restore recover within five years. 	<p>when machinery is refuelled.</p> <p>Indigenous vegetation may provide habitat for indigenous fauna and may in itself be valuable. Some vegetation may establish quickly in existing forestry areas. In these cases, it is unlikely to be of outstanding habitat value. This condition seeks to avoid damage to significant vegetation while allowing forestry activity to continue where the activity is unlikely to have a significantly adverse effect on indigenous flora and fauna of an area.</p> <p>Advice note: Councils retain the ability to be more stringent when indigenous vegetation clearance (other than the listed permitted clearance activities) occurs within areas of significant indigenous vegetation or significant habitat of indigenous fauna as identified in district or regional plans, including SNAs. For clarity, this ability to be more stringent does not apply to existing production forest areas mapped as significant indigenous vegetation due to boundary errors.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Advice note: “SNA (or similar)” refers to an area identified in a regional policy statement, regional plan or district plan pursuant to section 6(c) of the Resource Management Act 1991.</p> <p>“Readily recover” refers to the recovery of the vegetation within the area.</p> </div>
Regional	<p>Dust</p> <p>Discharge of dust to air from activities undertaken on the site is a permitted activity, provided any nuisance dust is contained within the boundaries of the property or properties under the same ownership or under the same management.</p>	<p>Dust may create a nuisance to neighbouring land users. This condition seeks to ensure that dust is contained within the boundaries of a forestry site. Where this is not possible, resource consent will be required.</p>
District	<p>Noise</p> <p>The noise from forestry activities at the notional boundary of the nearest dwelling, where that dwelling is under different ownership, except where approval from the adjoining owner(s) has been</p>	<p>Noise may create a nuisance to neighbouring land users in some cases. However, as forestry is a productive rural land use noise should be expected.</p>

	<p>obtained, does not exceed:</p> <ul style="list-style-type: none"> • 55dBA (L eq) between 6 am and 10 pm; and • 40dBA (L eq) between 10 pm and 6 am; <p>except forestry vehicles and machinery or equipment operated and maintained in accordance with the manufacturer’s specifications in accordance with accepted best management practices.</p> <p>Note: “Notional boundary” means, the legal boundary of the property on which any rural dwelling is located or a line 20 m from the dwelling, whichever point is closer to the dwelling.</p>	<p>This rule seeks to limit the effect of noise on neighbouring land users</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Advice note: All activities must comply with the requirements of section 16 of the RMA. Council may issue an abatement notice to operators if any noise is deemed unreasonable.</p> </div>
District	<p>Nesting times</p> <p>Where indigenous bird species with a classification of Nationally Critical or Nationally Endangered (from the Department of Conservation’s <i>Conservation Status of New Zealand Birds, 2012</i> (Robertson et al, 2012)) are known to nest in areas where forestry operations are planned or under way, forest owners must have procedures to:</p> <ul style="list-style-type: none"> • identify nest sites and the nesting season; • protect these sites from disturbance or undertake the activity outside of the nesting season. 	<p>Forestry activities can have a negative impact on the breeding success of birds when undertaken during breeding seasons. This condition seeks to reduce the effect on nesting birds of high conservation value by ensuring foresters have procedures to protect nesting sites.</p>
Regional	<p>Spatial bundling</p> <p>For the purpose of determining the activity status of a proposed activity in circumstances where an activity crosses multiple Erosion Susceptibility Classification (ESC) zones, any overlap into a higher ESC zone must be disregarded provided:</p> <ul style="list-style-type: none"> • any discrete section of road within the highest ESC zone is equal to or less than 50 m (for earthworks); • the total area of the overlap is equal to or less than the smaller of (all other activities): <ul style="list-style-type: none"> ○ 2 ha; ○ 10% of the total activity area. 	<p>Many forests are likely to cut across multiple ESC zones. Where most of a forest is in a low-risk zone and a small area of the forest is within a high-risk zone, the overall effect is likely to be low. This rule allows activities to be treated as permitted where a small overlap into a zone that requires resource consent exists.</p>

Regional

Fish spawning

1. The bed of a permanently flowing river can be disturbed, provided all other activity-specific rules or consent conditions have been met, except where:
 - a. the New Zealand Freshwater Fish Database indicates that one of the following species is present within 1 km of the reach of the stream where the disturbance is made; or
 - b. where a catch has not been recorded in the New Zealand Freshwater Fish Database, the probability of one of the above species being present is greater than 0.5 under the River Environment Classification Predictive Fish Model 2014; and
 - c. the disturbance occurs during the corresponding peak fish spawning **or migration** period:

Species	Period
Redfin Bully	1 September to 31 October
Canterbury Galaxias	1 September to 31 October
Dwarf Galaxias	1 September to 31 October
Alpine Galaxias	1 September to 31 October
Lowland Longjaw Galaxias	1 September to 31 October
Dusky Galaxias	1 September to 31 October
Eldon's Galaxias	1 September to 31 October
Roundhead Galaxias	1 September to 31 October
Bignose Galaxias	1 September to 31 October
Taieri Flathead Galaxias	1 September to 31 October
Gollum Galaxias	1 September to 31 October
Upland Longjaw Galaxias	1 September to 31 October
Koaro	1 April to 31 May
Giant Kokopu	1 May to 30 June
Stokell's Smelt	1 December to 31 January
Atlantic Salmon	1 May to 30 June
Brook Char	1 May to 30 June
Brown Trout	1 May to 30 June
Chinook Salmon	1 April to 31 May
Rainbow Trout	1 April to 31 May
Sockeye Salmon	1 March to 31 March

2. For the purposes of this rule, the following activities are not considered to be bed disturbance:
 - a. fording by vehicles across the wetted river bed where the number of axle movements is less than 20 per day; and
 - b. partially suspended logs are hauled across the bed of a river less than 3m wide **and is undertaken outside spawning periods for any threatened fish potentially present.**
3. Where a freshwater fish survey has been undertaken by a suitably qualified person within the past 12 months at the site and the species has not been found, (1)(c) does not apply.

Forests often provide valuable habitat to indigenous and salmonid fish species. This rule seeks to minimise the adverse effect of forestry activities of fish breeding habitats. The species covered by this rule have a high conservation value and are sensitive to sediment and other disturbance during spawning periods.

Partial suspension: the butt of a log is lifted at least 1 m above the ground while the log is hauled to the landing while the small end of the log, or head of the tree, remains in contact with the ground.

Regional	<p>Slash Traps Where slash cannot be safely or practicably removed from water bodies, and there is an assessed risk of slash mobilising and causing adverse effects, alternative measures, such as slash traps, being used to retain slash onsite as far as practicable.</p> <p>The installation and use of slash traps is permitted provided the following conditions are met.</p> <p>Constructed slash (debris) traps located across a water body being:</p> <ul style="list-style-type: none"> • designed and constructed to a standard appropriate for likely debris quantity and types and water flow • located so as to avoid flooding of adjacent land, and in a position that allows access for maintenance • regularly monitored for the build-up of debris and within five working days following any rainfall event in the upstream catchment that is likely to mobilise debris • maintained free of accumulated debris – following storm events, accumulated debris being removed as soon as is practicable but no later than 20 working days of such accumulation occurring. 	<p>Slash traps can prevent slash and other debris from causing damage to aquatic environments and infrastructure. This conditions seeks to enable the construction and use of slash traps while ensuring that their adverse effects are avoided by locating them appropriately and maintaining them regularly.</p>
Controlled		
All zones		
<p>Notwithstanding specific activity rules, all forestry activities are controlled if all permitted activity conditions are met except for those relating to nuisance dust, noise or nesting times.</p> <p>If a consent is applied for, the council must grant the consent and its ability to impose consent conditions is restricted to the matters listed below.</p>		
Matters to which control is reserved		
<p>Control is restricted to:</p> <ul style="list-style-type: none"> • the method of controlling nuisance dust discharged to air that is carried onto adjoining properties or public roads; • the timing and duration of activities that breach the permitted noise conditions; • the effect on the ecological integrity of a significant natural area; • measures to be undertaken to mitigate the effects on fauna. 		<p>Matters of control are intended to be limited to the primary risk of forestry activities on nuisance effects and effects on biodiversity.</p>
Restricted discretionary		
Discretionary		
<p>All activities are discretionary where permitted activity conditions relating to archaeological sites, fuel, fish spawning, slash traps or indigenous vegetation disturbance are not met. If a consent is applied for, the council can decline or</p>		<p>Where the conditions for archaeological sites, fuel, fish spawning, slash traps and indigenous vegetation</p>

grant the consent and impose any consent conditions it deems appropriate.

disturbance are not met, the council will have full discretion over resource consents.

RIVER CROSSINGS

Objective: To introduce a consistent set of river-crossing controls that manage the risks identified below in a manner that is in line with good forest management practice.

Scope: River-crossing involves the installation, construction, placement, use, maintenance, alteration, removal or extension of a crossing in, on, under or over the bed of a river, lake or wetland, and associated bed disturbance.

Risk: River-crossing activities can have a range of effects on the bed of rivers or wetlands and the surrounding riparian areas if not managed appropriately. The primary risks include:

- Sedimentation of the water column and bed of the river;
- Disruption of fish passage;
- Disturbance of fish spawning habitat;
- Damage to the river bed and downstream infrastructure;
- Human safety.
- Upstream effects associated with backwater when culvert capacity is exceeded
- Downstream effects associated with breach of crossing embankment and rapid release of storage (flood wave)

General conditions

River crossings are permitted provided:

- all the applicable general conditions are met; and
- permitted conditions specific to the type of crossing (temporary crossings, culverts, single-span bridges, drift-decks and fords) are also met.

Any crossing existing as at [the date the proposed NES-PF comes into force] that was lawfully established, including under a rule in a plan or by a resource consent, and that meets the following permitted activity rules is permitted:

- effects on other structures and users (permitted activity conditions 2, 3 and 4 below);
- fish passage;
- erosion and sediment discharge from use;
- maintenance;
- single culverts – specific conditions relating to single culverts (permitted activity condition 7 below);
- battery culverts – specific conditions relating to battery culverts (permitted activity condition 4 below).
- Measures to reduce risk of embankment failure, or minimise effects of embankment failure due to flood events.

General conditions apply to all structures. These conditions must all be met for any crossing to be a permitted activity. Some general conditions continue to apply to controlled and restricted discretionary activities. Where this is the case, the controlled and restricted discretionary conditions will state which general conditions continue to apply.

Permitted

General river-crossing conditions

Rationale

<p>Notice of commencement</p> <p>The relevant regional council must be notified at least 20 working days and no more than 60 working days before the start of construction, placement or removal of any class of river crossing in a perennial stream (except for a temporary crossing).</p> <p>The council may waive, in writing, the requirement for notification for certain types of stream crossings or the time restrictions for notification, on the request of the forest manager.</p>	<p>This rule seeks to ensure that relevant councils are notified in a timely manner of river-crossing operations starting, so that they are aware of operations occurring and can schedule monitoring programmes if necessary.</p>
<p>Flow calculations</p> <p>To calculate the necessary culvert size, one or more of the following methods must be used to estimate flood flows:</p> <ol style="list-style-type: none"> 1. the Rational Method; 2. TM61; 3. Pearson's (1989) Regional Method (for updates to this method, see Griffiths and McKerchar, 2012); 4. an alternative method approved by the relevant regional council. <p>Records of the calculations must be available to the relevant council at the time of the notice of commencement.</p>	<p>This condition seeks to ensure that all culverts that are installed are large enough for flood waters to pass through the culvert without damage to the crossing structure.</p> <p>Advice note: <i>An online tool will be provided to assist foresters to undertake these calculations.</i></p>
<p>Effects on other structures and users</p> <ol style="list-style-type: none"> 1. The crossing does not alter the natural alignment of the river. 2. The crossing does not compromise the structural integrity or use of any other authorised structure or activity in the bed of the river or lake. 3. The crossing is constructed so that the structure or any part cannot break free and cause a blockage or erosion. 4. The crossing does not dam or divert water to cause flooding or ponding on any property owned or occupied by another person. 	<p>This condition will apply to all structures. It seeks to ensure that the activity does not result in environmental damage, such as erosion, damage to other infrastructure or damage to property</p>
<p>Fish passage</p> <ol style="list-style-type: none"> 1. Except for any temporary crossing, the crossing provides for the upstream and downstream passage of fish in perennially intermittently flowing rivers, except where the relevant statutory fisheries manager advises the council otherwise. 	<p>This condition seeks to ensure that migration of freshwater fish species is not disrupted except where the fisheries manager stipulates that barriers should remain in place to protect sensitive freshwater ecosystems from predatory fish.</p>
<p>Contaminant discharges from the construction or removal of crossings</p> <ol style="list-style-type: none"> 1. Those constructing or installing the crossing take all practicable steps to avoid placing organic matter (other than logs used for temporary crossings) or soil into a water body, or placing it in a position where it could readily enter or be carried into a water body. 2. Those constructing or installing the crossing take all practicable steps to avoid the discharge of sediment, including by minimising the disturbance of the bed. 3. No contaminants, other than sediment, are released to water from the activity. 4. Any concrete pouring avoids wet concrete or concrete ingredients coming into contact with flowing or standing water. 	<p>This condition seeks to minimise the effects of the construction or maintenance of river crossings on the environment, including:</p> <ul style="list-style-type: none"> • avoiding the sedimentation of water; • ensuring pollutants other than sediment (for example, cement) are not released

<ol style="list-style-type: none"> 5. Sediment resulting from the construction, installation or removal of the crossing is not discharged for more than eight consecutive hours per structure into any river, lake or wetland. 6. Except where it is necessary for machinery to cross a river bed, all machinery is kept out of flowing or standing water. 7. Following the completion of construction or installation, all excess construction materials and equipment are removed from the bed of the water body within five working days. 	<p>into water.</p>
<p>Erosion and sediment discharge from use</p> <ol style="list-style-type: none"> 1. The ongoing presence of the crossing for its normal operating use does not cause or induce scour erosion of the bed or erosion or instability of the banks of the surface water body and associated sedimentation. 2. Approaches to and abutments of river crossings are stabilised to prevent scour and sedimentation. 	<p>This condition seeks to minimise the ongoing discharge of sediment resulting from the ongoing use of the structure, including any erosion to the river bed as a result of water being redirected by the structure.</p>
<p>Maintenance</p> <ol style="list-style-type: none"> 1. Except for any temporary crossing, the crossing is maintained to avoid aggradation or erosion of the bed of the water body. 2. Except for any temporary crossing, the crossing is maintained to meet its design specifications for flow and fish passage. 	<p>This condition seeks to ensure that the crossing is maintained to ensure that the ongoing impact of the structure on water and the bed of the river is minimised.</p>
<p>Placement</p> <ol style="list-style-type: none"> a. Except for any temporary crossing, no crossing is installed or constructed: b. in a wetland of more than 2 500 m², outstanding water body or high value dune lake or c. less than 500 m upstream of a dwelling that is within 15 m of a river bed over 3 m wide. d. Downstream of a dwelling that is less than 1m above the crest level of the crossing crest. e. Detained volume of water at crest level of crossing is less than 20,000m³ 	<p>This condition seeks to ensure that permanent crossings are not installed:</p> <ul style="list-style-type: none"> • on large wetlands, so seeks to protect the significant values of these wetlands; • close to existing dwellings where their presence may result in damage to the dwelling during flood events. • Better to refer to crest height than distance
<p>Crossing-specific conditions</p>	
<p>Temporary crossings – specific conditions relating to temporary crossings</p> <ol style="list-style-type: none"> 1. Except as specified in bridges – condition 3: <ol style="list-style-type: none"> a. Any structure is in place two weeks or less. b. Any structure is not located within a significant wetland, outstanding water body or high value dune lake identified in a plan c. No excavation of the river banks or bed, unless a culvert is being used. d. Where logs are placed in the bed of a flowing water body, a 300 mm or larger culvert is first placed in the bed. e. All crossing materials are removed from the river bed within 24 hours of the completion of the operation for which the 	<p>The following sections set specific design requirements for each type of crossing to ensure the design of the crossing does not result in:</p> <ul style="list-style-type: none"> • damage to the environment as a result of sedimentation or bank erosion;

<p>crossing was constructed or installed.</p>	
<p>Single culverts – specific conditions relating to single culverts</p> <ol style="list-style-type: none"> 1. There is only one culvert per crossing and it is of the appropriate length. 2. The culvert must pass a 5% annual exceedance probability (AEP) flood event of no greater than 5.5 m³ per second, with no heading up. 3. The minimum culvert diameter is 450 mm. 4. The total height of the crossing crest is no more than 3.5 metres above the bed (measured from the inlet) and the fill depth and construction complies with the manufacturer’s minimum height specifications. 5. The culvert invert is at least 100 mm below the level of the bed of a river or lake and equal to the existing stream bed width, or provide for fish passage including consideration of any increased flow 6. For rivers where the bank full bed width is more than 3 m, the river bed invert gradient is no greater than 6%, measured 50 m either side of the crossing. 7. The culvert inlet (entry point) and outlet (exit point) are protected against erosion. 8. Culvert approaches and fill are built from soils free of organic matter. The fill is constructed using successively compacted layers each up to 200 mm loose depth and compacted. 9. Measures to reduce risk of embankment failure, or minimise effects of embankment failure due to flood events. 	<ul style="list-style-type: none"> • damage to downstream infrastructure; • damning of the crossing resulting in flooding or structural failure; • disruption of fish passage; • disruption to the navigability of rivers.
<p>Battery culverts – specific conditions relating to battery culverts</p> <ol style="list-style-type: none"> 1. The contributing catchment is less than 500 ha. 2. The diameter of each culvert diameter is 450–800 mm. 3. The invert of at least one culvert pipe is at least 100mm below the level of the bed of a river or lake to carry base flow. 4. The culvert pipe inlets (entry point) and outlets (exit point) are protected against erosion. 5. For rivers where the bank full bed width is more than 3 m, the river bed invert gradient, measured 50 m either side of the crossing, is no greater than 6%. 6. The culvert is sized to pass annual average flow. It must be constructed to allow greater flows to pass over it without structural failure. 	
<p>Drift deck – specific conditions relating to drift decks</p> <ol style="list-style-type: none"> 1. The contributing catchment is less than 500 ha. 2. The inlets and outlets are protected against erosion with designed protection works. 3. For rivers, the bank full bed width is more than 3 m and where the bed invert gradient, measured 50 m either side of the crossing, is greater than 6%, two discrete footings are used to embed the drift deck in the substrate to maintain the natural bed material under the structure. 	
<p>Ford – specific conditions relating to fording of streams</p> <ol style="list-style-type: none"> 1. No ford is located in any river listed as a habitat for threatened indigenous fish or as an indigenous or sports fish spawning area in any relevant regional plan or water conservation order. 2. Storm water and truck wash from any road surface is intercepted, diverted and passed through a sediment treatment 	

<p>structure as close as practicable to but no closer than 5 m to the river and is positioned above the annual flood flow level.</p> <p>3. Use of the ford does not cause conspicuous change in the visual clarity of the water beyond 100 m downstream of the ford for greater than one consecutive hour after use of the crossing.</p>	
<p>Specific conditions relating single-span bridges</p> <ol style="list-style-type: none"> 1. Bridges (except temporary bridges) are constructed to allow the flood flow from a 2% AEP (1 in 50-year) event to pass under with a clearance of at least 700 mm above the design flood level. 2. Temporary bridges are: <ol style="list-style-type: none"> a. constructed to allow the flood flow from a 5% AEP (1 in 20-year) event and to enable the passage of bed material; b. removed within two years of construction. 3. Bridges are located so as to not decrease the natural active (bank-full) flow bed or top flow width by more than 10%. 4. The bridge abutments or foundations are constructed parallel to the channel alignment. 5. The crossing must maintain the ability for vessels to navigate a river. 	
<p>Controlled</p>	
<p>The installation, construction, placement, use, maintenance, alteration, removal or extension of a crossing in, on, under or over the bed of a river, lake or wetland, and associated bed disturbance or contaminant discharge, is a controlled activity.</p> <p>The activity is a controlled activity if it cannot meet one or more of the applicable permitted activity conditions, but meets the applicable controlled activity conditions.</p>	<p>Where activities are unable to meet the permitted activity conditions they will require resource consent and will be regarded as controlled activities, provided the conditions in the controlled activity section are met.</p>
<p>Controlled activity conditions</p>	<p>Rationale</p>
<p>The activity is a controlled activity, provided the follow conditions are met:</p> <ol style="list-style-type: none"> 1. the crossing is not a ford; 2. the crossing complies with the following permitted general crossings conditions: <ol style="list-style-type: none"> a. notice of commencement; b. effects on other structures and users (permitted activity conditions 2, 3 and 4 above); c. fish passage; d. contaminant discharge from construction and removal activities (permitted activity conditions 2, 3 and 4 above); e. erosion and sediment discharge from use; f. maintenance; g. placement. 	

<p>Culvert-specific conditions</p> <ol style="list-style-type: none"> 1. The culvert must pass a 5% AEP flood event. 2. The total height of the crossing crest is no more than 4 m above the bed measured at the inlet end, and the culvert position complies with the manufacturer’s minimum height specifications. 3. Detained volume of water at crest level of crossing is less than 20,000m³ 	<p>Note: <i>Guidance will be provided on calculating annual exceedance probability (AEP).</i></p> <p>This condition seeks to ensure the culvert is able to pass flood flows without heading up and reduce the risk of sediment and gravel entering water.</p> <p>Volume is referenced in Building Act re dams</p>
<p>Bridge-specific conditions</p> <ol style="list-style-type: none"> 1. The bridge crosses a river with a contributing catchment of less than 5 000 ha. 	
<p>Matters over which control is reserved</p>	
<p>For culverts, control is reserved over:</p> <ol style="list-style-type: none"> 1. the timing of any disturbance of the bed of a surface water body in relation to adverse effects on aquatic ecosystems, including fisheries and indigenous biodiversity; 2. measures to avoid, remedy or mitigate the adverse effects of the structure on: <ol style="list-style-type: none"> a. property owned or occupied by another person, including flooding or ponding; b. provision for natural water flow and flood flows; 3. measures to minimise the duration and extent of bed disturbance; 4. measures to avoid or mitigate the risk of soil or debris being deposited or carried into the surface water body; 5. engineering design related to: <ol style="list-style-type: none"> a. the design flow of catchment above the culvert; b. culvert size and location; c. the number of culverts in the cross-sectional area of the river; d. the passage of debris and bed sediment in flood events exceeding the culvert design (bypass/overtop design); e. the structural stability of the culvert embankment; f. volume of water detained by the crossing embankment. 6. measures to account for any adverse effects of the culvert arising from: <ol style="list-style-type: none"> a. prevailing bed gradient and flow power; b. fill height above the culvert for dam failure assessment; c. velocity of water from the culvert; d. design flood levels; e. soil type and geology; 7. construction standards (headwall, apron); 	<p>These matters are considered sufficiently broad to reflect the full range of potential impacts.</p>

8. requirements for ongoing monitoring and maintenance of the culvert.	
<p>For single-span bridges, control is reserved over:</p> <ol style="list-style-type: none"> 1. the timing of any disturbance of the bed of a surface water body in relation to adverse effects on aquatic ecosystems, including indigenous biodiversity; 2. measures to account for: <ol style="list-style-type: none"> a. prevailing slope stability (including local stability of approaches and abutments); b. soffit height above the 2% AEP flood level watercourse; c. design flood levels; d. location, so as to not decrease the natural active (bank-full) bed or flow top width by more than 10%; e. soil type and geology; 3. erosion protection works; 4. location of the bridge; 5. requirements for ongoing monitoring and maintenance of the bridge, including removal of structure if damaged or it becomes redundant; 6. matters affecting navigation in navigable rivers and lakes. 	These matters are considered sufficiently broad to reflect the full range of potential impacts.
Restricted discretionary - River crossings are a restricted discretionary activity if they are not provided for as permitted or controlled	
The installation, construction, placement, use, maintenance, alteration, removal or extension of a crossing in, on, under or over the bed of a river, lake or wetland, and associated bed disturbance or contaminant discharge is a restricted discretionary activity, if it does not meet any of the applicable permitted or controlled activity conditions but it does meet the restricted discretionary activity conditions.	Where the controlled activity conditions cannot be met, consent is required and the activity will be regarded as a restricted discretionary activity, provided the conditions in this section are met.
<p>The crossing complies with permitted general crossings conditions for:</p> <ol style="list-style-type: none"> 1. notice of commencement; 2. effect on structures and users (permitted activity conditions 2 and 3 above); 3. contaminant discharge from construction activities (permitted activity conditions 1 and 2 above); 4. erosion and sediment discharge from use; 5. maintenance; 6. placement. 	
Matters over which discretion is restricted	
<p>Consent may be granted or declined and conditions imposed, in respect of only the following matters to which discretion is restricted.</p> <p>Culverts, drift decks and fords:</p> <ol style="list-style-type: none"> 1. aspects of engineering relating to characteristics of the site of the crossing, the design, construction or installation of the crossing, to avoid: 	<p>Consent may be granted or declined and conditions imposed, in respect of only the following matters to which discretion is restricted.</p> <p>These matters are considered sufficiently</p>

<ul style="list-style-type: none"> a. causing flooding or ponding on any property owned or occupied by another person; b. altering the natural course of the river; c. causing or inducing erosion of the bed or instability of the banks of the surface water body; d. causing instability of the structure and approaches and obstructions to the passage of debris and bed sediment in an event exceeding the crossing design (such as bypass/overtop design), including the: <ul style="list-style-type: none"> i. number and capacity of culverts, where fill height is greater than 2.5 m; ii. design flood level and design of protection works and upstream ramp for drift decks; iii. Detained water volume upstream of crossing embankment e. compromising the structural integrity or use of any other authorised structure or activity in the bed of the river or lake, including structures and activities downstream of the crossing, that are at risk if the crossing fails, including the composition and strength of the culvert embankment; f. heading up culverts in lesser events than 20% AEP; g. affecting navigation in navigable rivers and lakes; <p>2. measures to:</p> <ul style="list-style-type: none"> a. minimise impacts on water quality, including from the release of sediment from the disturbance of the bed of the river, and avoidance of run-off from pouring of concrete and impediments to bed load sediment transport; b. avoid or mitigate the deposition of soil or other debris in the surface water body, or where it could readily enter or be carried into a water body; c. minimise the duration and extent of bed disturbance; d. avoid, remedy or mitigate the adverse effects of the structure on: <ul style="list-style-type: none"> i. erosion or land instability, including erosion protection works; ii. natural water flow and flood flows; iii. the permanent passage of fish; iv. aquatic ecosystems, including indigenous biodiversity; e. maintain the structure, including removal of accumulated debris. <p>3. monitoring requirements.</p>	<p>broad to reflect the full range of potential impacts.</p> <p>These matters are considered sufficiently broad to reflect the full range of potential impacts.</p>
<p>Discretionary – Crossings are a discretionary activity if they do not comply with any applicable restricted discretionary condition</p>	
<p>The installation, construction, placement, use, maintenance, alteration, removal or extension of a crossing in, on, under or over the bed of a river, lake or wetland, and associated bed disturbance or contaminant discharge is a discretionary activity, if it does not comply with any applicable permitted, controlled, or restricted discretionary condition.</p> <p>Consent may be granted or declined and conditions imposed.</p>	<p>Where the restricted discretionary conditions cannot be met, the consenting authority will have full discretion over whether consent may be granted.</p>

Matters that are out of scope of the proposed NES-PF

Activities associated with or undertaken in plantation forests	Rationale for matters being left out of scope
Agrichemical use	These activities are not universally undertaken as part of forestry operations, so greater national consistency in relation to these activities would not provide significant benefits.
Burning	
Gravel extraction from the beds of rivers	
Milling activities and processing of timber	Timber-processing facilities have a variety of effects that are quite distinct from the effects of growing and harvesting a forest.
Use and development of land that has the potential to be affected by contaminants in soil	This is controlled by the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health.
Effects that may arise from forestry activities	
Water yield: Catchments are identified in a district or regional plan for the management of water yield (including ground water) for the purposes of achieving a desired flow or water supply.	Afforestation can have an impact on total water yield and low flows in low-to-moderate rainfall areas (that is, less than 1,200 mm per year). Variability means that planning controls may be required for water-sensitive catchments. For this reason, it is intended that regional councils retain the ability to manage afforestation in catchments that have been assessed as being water sensitive.
Nuisance issues: There are nuisance issues, including, vibration, vehicle movements and road damage.	Nuisance issues are often site-specific and controls are best determined at a local level. Traffic movement and roading issues also have implications under the Local Government Act 2012 and are best addressed at a local level.
Infrastructure: Effects on network utility infrastructure is identified by district councils as needing setbacks for safety or function reasons.	The effects of forestry on network infrastructure, particularly health and safety issues, should be managed at a local level to account for local circumstances.

Risks that the presence of forests may exacerbate

Fire risk: Forestry increases the fuel load available to wild fires in rural areas, which can aggravate the effects of a fire if it enters a plantation forest. Most of these effects will be within the forest itself, but, in some circumstances, forestry could aid the spread of fire to urban areas and areas of indigenous forest, national parks, reserves or conservation areas.

Fire risk is normally season- and site-specific and depends on the nature of the surrounding environment (for example, if there are houses or communities near a plantation forest). In these cases, councils would retain the ability to manage these risks as they deem appropriate.

Natural hazards: Natural hazard areas mapped in regional or district plans.

Establishing a plantation forest in an area susceptible to natural hazards, such as flooding, coastal hazard or streambed erosion may not always be appropriate. It is difficult to determine the appropriateness of afforestation in such areas on a national scale, so councils retain the ability to manage these issues as they deem necessary.

Matters where councils can apply more stringent rules

Ability to be more stringent	Rationale
<p>Coastal marine area: Setbacks from the coastal marine area.</p>	<p>In many locations, the coastal marine area has important values, such as landscape and habitat values. The coastal marine area also has many issues associated with it, such as coastal hazards. In some cases, rules for appropriate setbacks are more appropriately determined at a local or regional level. Having this issue in the “ability to be more stringent” list also allows for alignment with the New Zealand Coastal Policy Statement.</p>
<p>Geothermal and karst: Geothermal and karst protection areas that are mapped and regulated in a district or regional plan.</p>	<p>Some regions (for example, Waikato) have delicate geothermal areas that need careful land management to prevent damaging or destroying these areas. Because management regimes are likely to require unique techniques, councils are considered to be in the best position to establish rules that reflect the local situation. There is also potential for forestry operations to affect or be affected by karst land forms.</p>
<p>Heritage values: Places and areas of known cultural or heritage value identified in regional or district plans including wāhi tapu and sites of significance to Māori but not currently covered by the archaeological authority provisions of the Heritage New Zealand Pouhere Taonga Act 2014.</p>	<p>This was developed in accordance with advice from the Ministry of Culture and Heritage and the Historic Places Trust. It provides protection for values that are not directly protected under the Heritage New Zealand Pouhere Taonga Act 2014. It does not refer to iwi management plans as these must be taken into account in regional or district plans.</p>
<p>Significant natural areas: Greater stringency is allowed in relation to designated (mapped) areas of significant indigenous vegetation and significant habitats of indigenous fauna as identified in a regional policy statement, regional plan or district plan pursuant to section 6(c) of the Resource Management Act 1991 (RMA).</p> <p>For the avoidance of doubt, this excludes damage, destruction or removal of vegetation that:</p> <ul style="list-style-type: none"> • has grown up under (or may have overtopped) managed forest species; or • is within an area of failed planting or windthrow (within the last rotation); or • is within an area of regenerating cutover (within five years of the harvest of the previous crop); or • vegetation overgrowing a pre-existing access way, including an existing track or access way within an SNA (or similar); or • is incidental damage to riparian vegetation that will readily 	<p>Indigenous vegetation and habitats of indigenous fauna are sensitive to forestry activities, such as harvesting. Also, in some cases, plantation forests can be a refuge and habitat during a forest’s growth period. Under the proposal, councils are given the opportunity to apply more stringent rules in their plans for natural areas identified in plans as being significant. This would allow councils to consider integrated species protection and the maintenance of ecological corridors, among other things. In some cases, there will be valuable indigenous vegetation that has not been specifically classified as “significant” in plans. Setting levels for the clearance and conversion of such indigenous vegetation for plantation forestry activities is most appropriately determined at a local level, as values, including habitat values, vary from case to case.</p>

Ability to be more stringent	Rationale
<p>recover within five years; or</p> <ul style="list-style-type: none"> is incidental damage to indigenous vegetation that is adjacent to plantation forest, including indigenous vegetation at the edge of an SNA (or similar) or along an existing track that will readily recover within five years. <p>Outstanding freshwater bodies (as defined in the National Policy Statement for Freshwater Management 2014 as “those water bodies identified in a regional policy statement or regional plan as having outstanding values, including ecological, landscape, recreational and spiritual values): Setbacks from outstanding freshwater bodies identified in a regional policy statement, regional plan or district plan.</p> <p>Outstanding natural features and landscapes: Afforestation within an outstanding natural feature and landscape area as identified in district or regional plans pursuant to section 6(b) of the RMA.</p> <p>Shallow aquifers: Greater stringency is allowed in relation to quarrying activities where the activity occurs over a shallow aquifer (less than 30 m below ground level) within a drinking water protection zone identified in a regional plan.</p>	<div data-bbox="884 240 2022 316" style="border: 1px solid black; padding: 5px;"> <p><i>Advice note: Temporary edge damage to SNAs that are likely to readily recover is permitted. The ability to be more stringent should not apply to this.</i></p> </div> <p>It is considered appropriate that setbacks from significant wetlands, rivers or lakes will be established at a council level, because the appropriate distance will depend on the water body in question.</p> <p>Particular areas are sensitive to the landscape and visual impacts of new plantation forests, subsequent harvesting and earthworks. It is proposed that councils be given the flexibility to apply more stringent rules in relation to outstanding natural features (including landforms) and landscape areas that are identified in plans.</p> <p>Some councils have developed rules that manage the risks to the groundwater systems, particularly shallow aquifers, in that region from quarrying activities. Given the complexity of groundwater systems, it is appropriate for councils to retain the ability to manage this issue.</p>

