

**BEFORE THE HEARING COMMISSIONERS APPOINTED BY WAIMAKARIRI
DISTRICT COUNCIL**

IN THE MATTER of the Resource Management Act 1991
(the Act)

AND

IN THE MATTER of hearing of submissions on Stream 3
(Natural Hazards) to the Proposed District
Plan

**INDUSTRY STATEMENT TO BE TABLED OF SARAH CAMERON FOR
HORTICULTURE NEW ZEALAND**

29 June 2023

PURPOSE AND SCOPE OF EVIDENCE

1. This statement responds to the Section 42A report recommendations in regard to the Horticulture NZ submission and further submissions on Stream 3, specifically firebreak setbacks and shelterbelts.

INTRODUCTION

2. HortNZ is the industry body for the horticulture sector, representing growers who pay levies on fruit and vegetables sold either directly or through a post-harvest operator, as set out in the Commodity Levies (Vegetables and Fruit) Order 2013.
3. On behalf of growers, HortNZ takes a detailed involvement in resource management planning processes as part of its national and regional environmental policy response.

RESPONSE TO SECTION 42A REPORT

4. **Appendix 1** includes a summary table setting out HortNZ's submissions, the recommendations of the S42A report on these submissions and HortNZ response.
5. The specific topic of firebreak setbacks and shelterbelts, where further explanation is required, is addressed below.

SHELTER BELTS

6. HortNZ submission sought the deletion of NH-R7 (appendix 1) and noted that by requiring a large setback, valuable land, including highly productive land, is lost from production if planting up to the boundary is not provided for. In addition, fire risk is also managed through rules requiring setbacks of residential units and buildings. These setbacks should be sufficient to protect life and property.
7. Shelterbelts are an inherent part of rural production, used for a number of reasons including preventing wind erosion of soils, shelter and shade for stock, and wind and weather breaks for orcharding. They can also reduce the potential for reverse sensitivity issues as they act as a barrier between properties – particularly they are an important mitigation tool for managing spray drift.
8. Generally, boundary shelter is evergreen (Internal shelter tends to be deciduous) and is around eight metres tall (once fully grown). Shelter trimmer machinery can only generally reach to around eight metres which is why shelter doesn't generally grow taller. Shelter is maintained and

trimmed every 12-18 months and growers self-monitor for any gaps and dead or diseased areas.

The below examples are of an eight metre, highly condensed, evergreen, cryptomeria shelter. Shelter is generally less than one meter wide.



9. Shelterbelts tend to be planted on or close to boundaries to maximise the use of highly productive land and to provide weather controls and reverse sensitivity protections.
10. Growers cannot waste valuable land with poorly maintained shelterbelts and trimmings are generally removed or mulched so do not remain in the paddock or orchard as a fire source. Nor do growers want to put their operation and assets at risk of wildfire. Shelterbelt trimmings are also removed to reduce pest and disease risk so the potential for wildfire risk is also reduced.
11. There appears to be an assumption that all shelterbelts are 'generic' or 'homogenous' and generate high fuel loadings, often because of poor maintenance. However, there can be considerable variation in types of shelterbelts, and some may be more fire prone or have greater risk than others. But the provisions don't provide for any differentiation according to the nature, size, scale, or risk of a shelterbelt.
12. Modern hedge plantings tend not to be the traditional high macrocarpas row which were likely to have residue in the understorey.
13. Shelterbelts are important to horticulture growers and the inability to locate them on boundaries would mean that the use of productive land would not be able to be optimised. This is particularly relevant given the high level of highly productive land in the Waimakariri district and the likely

future constraints on primary production activity that will occur as a result of applying a rural lifestyle zoning to large parts of the rural environment.

NATIONAL POLICY STATEMENT FOR HIGHLY PRODUCTIVE LAND

14. The National Policy Statement for Highly Productive Land has one objective, being:

Objective: Highly productive land is protected for use in land-based primary production, both now and for future generations.

15. There are nine policies to achieve the objective. Particularly relevant to the matters being considered here are Policies 1, 4 and 9 which are:¹

Policy 1: Highly productive land is recognised as a resource with finite characteristics and longterm values for land-based primary production

Policy 4: The use of highly productive land for land-based primary production is prioritised and supported

Policy 9: Reverse sensitivity effects are managed so as not to constrain land-based primary production activities on highly productive land.

16. The S42a author states *"I note that land located between the shelter belt and the adjoining property is still available for production and I note the setbacks will still provide for soil erosion, stock shelter and shade, and wind and weather breaks"*

17. This statement provides a lack of understanding of the purpose of shelterbelts.

18. Requiring a 30m setback from an adjoining boundary and 10m from any road will likely mean highly productive land is retired as this parcel of land will not have the benefit of the shelterbelt protection and reverse sensitivity will be extremely compromised.

19. In the Waimakariri District, the previous rural subdivision regime has resulted in a highly fragmented parcel structure. Orchard and paddock sizes are not large and any loss of land that might otherwise have productive capacity, will have a significant impact on the activity.

¹ <https://environment.govt.nz/assets/publications/National-policy-statement-highly-productive-land-sept-22-dated.pdf>

20. This will create an economic loss to the grower and mean less fruit and vegetables which will have an impact on New Zealand's domestic food supply and compromise food security for New Zealanders.

PLANTATION FORESTRY

21. The S42a author states “I note that the NESPF (National Environment Standard for Plantation Forestry²) requires a setback of 10m from any roadside boundary and 40m from any dwelling. The 10m road setback proposed in NH-R7 is the same as the NESPF”.
22. Shelterbelts are not plantation forestry. The proposed rule structure must recognise the distinction and provide a more nuanced planning response that addresses the form and function of shelterbelts in primary production, the actual fire risk factors associated with these shelterbelts and an effective and efficient method response that may not need to rely on regulation and include advice and education for what otherwise might be difficult rules to monitor and enforce.

Definition of plantation forestry ³	Definition of shelterbelt
<p><i>plantation forest or plantation forestry means a forest deliberately established for commercial purposes, being—</i></p> <p>(a) at least 1 ha of continuous forest cover of forest species that has been planted and has or will be harvested or replanted; and</p> <p>(b) includes all associated forestry infrastructure; but</p> <p>(c) does not include—</p> <p>(i) a shelter belt of forest species, where the tree crown cover has, or is likely to have, an average width of less than 30 m; or</p> <p>(ii) forest species in urban areas; or</p> <p>(iii) nurseries and seed orchards; or</p>	<p>Means any trees planted primarily to provide shelter for stock, crops or buildings from the prevailing wind(s) or to mitigate potential spray drift from agrichemical applications</p>

² <https://www.legislation.govt.nz/regulation/public/2017/0174/latest/whole.html>

³ <https://www.legislation.govt.nz/regulation/public/2017/0174/latest/whole.html#DLM7373522>

(iv) trees grown for fruit or nuts; or (v) long-term ecological restoration planting of forest species; or (vi) willows and poplars space planted for soil conservation purposes	
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23. Plantation forestry involves the establishment and management of large-scale tree plantations, primarily for commercial purposes such as timber production. The key characteristics of plantation forestry include:

- The primary objective of plantation forestry is to cultivate trees for economic gains, such as harvesting timber, pulpwood, or other forest products on a commercial scale
- Plantation forests often consist of a single or limited number of tree species that are chosen for their rapid growth, high timber yield, or suitability for specific industrial applications
- Plantations require intensive management practices, including regular pruning, thinning, and fertilisation, to maximise tree growth and timber production. The focus is on achieving high productivity and uniformity across the plantation
- Plantation forests are typically harvested in a cyclical manner, where sections of the plantation are harvested at regular intervals, allowing for continuous timber production.

24. A shelterbelt refers to a linear arrangement of trees or shrubs planted to provide protection from wind, soil erosion, and other environmental factors like mitigating spray drift. Shelterbelts have the following characteristics:

- Shelterbelts are primarily established to provide protection to crops, livestock, buildings, or other sensitive areas from the adverse effects of wind, such as soil erosion, wind damage, reduced crop yields and spray drift
- The choice of tree species for a shelterbelt depends on the desired objectives. Typically, trees with varying heights and characteristics is selected to create a wind barrier while minimising the risk of shading

- Shelterbelts are designed as linear features, often planted in rows or staggered patterns, with the aim of intercepting and slowing down wind flow. The width and height of the shelterbelt depend on the desired level of protection and the specific site conditions
 - In addition to wind protection, shelterbelts can provide other environmental benefits such as reducing soil erosion, improving microclimate, enhancing biodiversity, reducing spray drift and creating habitat for wildlife.
25. HortNZ does not agree that comparing shelterbelts to plantation forestry setbacks is appropriate. While both plantation forestry and shelterbelts involve tree planting and management, their objectives, species selection, management practices, and intended outcomes are quite distinct. Plantation forestry focuses on commercial timber production, while shelterbelts aim to provide protection from wind and other environmental factors.

FIREBREAK SETBACKS

26. The S42a author states "*I understand that research into firebreak setback distance found that between 20 to 30m was the optimal to provide the best protection for houses against wildfires. This is reflected in the 10-30m safety zone promoted by Fire and Emergency NZ*".
27. Fire and Emergency NZ firebreak policy⁴ does not state a recommended firebreak setback. The policy details the process on how a firebreak is assessed using the following consequence rating:
- Evacuation opportunity of the public.
 - Potential level of environmental, cultural, biodiversity and historic damage or loss.
 - Potential level of property, social or economic loss.
28. The policy goes on to say that a series of practical and scientific tests will be undertaken to determine the potential fire behaviour of the area, what construction of firebreak would reduce the risk and if it would be practical to implement.
29. Section 62 of the Fire and Emergency Act⁵ (firebreaks) does not state set firebreak setbacks.
30. In addition, HortNZ asked Fire and Emergency NZ if they promote a 10 – 30m firebreak and while they responded that after a scientific assessment,

⁴ [2023-04-14-FENZ-1650-Firebreaks-Policy-Factsheet-FINAL.pdf \(fireandemergency.nz\)](#)

⁵ [Fire and Emergency New Zealand Act 2017 No 17 \(as at 06 April 2023\), Public Act – New Zealand Legislation](#)

(as detailed in the firebreak policy) specific advice of this nature was provided for houses built right up to boundary next to Ashley Forest, they do not promote a 10-30m firebreak setback. This would require a detailed assessment, outlined in their firebreak policy.

31. Fire and Emergency followed up this discussion with an email that confirmed they do not provide specific firebreak setback guidance. This is attached as **Appendix 2**.
32. HortNZ could find no evidence of any research that stated a 20-30m firebreak setback is optimal. It is unfortunate that the S42a author has not referenced this research.
33. As above, HortNZ is concerned that the s42A author has determined that a blunt regulatory response is necessary without a full consideration of other methods.

RESIDENTIAL SETBACKS

34. The S42a author states that *"the approach taken by the Council is similar to that taken by the Christchurch District Plan which has a 30m setback for new dwellings or new plantations from each other"*.
35. Shelterbelts are not dwellings and do not meet the definitions for plantation forestry (as per the NESPF) or the definition of the Christchurch District Plan relied on by the s42A author (means the use of land and **buildings** for planting, maintenance and harvesting of timber tree species for commercial wood production).
36. The plan seeks to restrict planting of shelterbelts that increase wildfire risk however the provisions do not require any responsibility of a landowner to appropriately locate a residential unit to mitigate potential wildfire risk.

GENERAL COMMENTS

37. The S42a author states "Submissions by Hort NZ [295.90] and Federated Farmers [414.97] imply that the proposed rule NH-R7 prohibits the use of shelterbelts within the rural environment.

38. This is simply incorrect. HortNZ submission states

There is a functional need to provide for shelterbelts in the productive rural environment. Because of this HortNZ support a permitted activity status for shelterbelts.

Fire risk is also managed through rules requiring setbacks of residential units and buildings. These setbacks should be sufficient to protect life and property.

HortNZ seeks that shelterbelts are recognised by including as part of rural production. By requiring large setback valuable land, including highly productive land, is lost from production if planting up to the boundary is not provided for.

CONCLUSION

39. HortNZ is of the opinion that a more nuanced approach to fire risk is required, and that more consideration is required as to whether other reasonably practical options exist and whether the proposed regulatory response is the most efficient and effective method (including monitoring and enforcement capability).
40. There is a distinction (by definition, form and function) of plantation forestry from shelterbelts.
41. There will be significant impacts on primary production activities and specifically on the productive capacity of highly productive land in the Waimakariri District (also constrained by rural-lifestyle zoning) if the proposed regulatory response is adopted.

Sarah Cameron

29 June 2023

Appendix 1

Provision	Support/ oppose	Reason	Decision sought	S42A Response	HortNZ response
NH-O1 Risk from natural hazards	Support	HortNZ supports the risk-based approach outlined in the Objective	Retain as notified	Accepted in part	HortNZ accepts the recommendation in the S42A report
NH-P1 Identification of natural hazards and a risk-based approach	Support	HortNZ supports the risk-based approach outlined in the policy.	Retain as notified	Accepted	
NH-R2 Natural hazard sensitive activities	Support	This rule only relates to natural hazard sensitive activities.	Retain as notified	Accepted in part	HortNZ accepts the recommendation in the S42A report
NH - R3 Natural hazard sensitive addition to existing natural hazard sensitive activities	Support	This rule only relates to natural hazard sensitive activities.	Retain as notified	Accepted in part	HortNZ accepts the recommendation in the S42A report
NH-R7 Woodlots and Shelterbelts	Oppose	Shelterbelts are an inherent part of rural production, used for a number of reasons including preventing wind erosion of soils, shelter and shade for stock, and wind and	Delete NH-R7	Accepted in part	HortNZ continue to seek a more efficient and effective regulatory approach

weather breaks for orcharding. They can also reduce the potential for reverse sensitivity issues as they act as a barrier between properties – particularly they are an important mitigation tool for managing spray drift.

Shelterbelts are actively managed by farmers and growers because they are a valuable tool to aid primary production.

There is a functional need to provide for shelterbelts in the productive rural environment. Because of this HortNZ support a permitted activity status for shelterbelts.

Fire risk is also managed through rules requiring setbacks of residential units and buildings. These setbacks

		<p>should be sufficient to protect life and property.</p> <p>HortNZ seeks that shelterbelts are recognised by including as part of rural production. By requiring large setback valuable land, including highly productive land, is lost from production if planting up to the boundary is not provided for.</p>			
NH-R16 Coastal Flood Assessment Overlay	Support	This rule only relates to natural hazard sensitive activities.	Retain as notified	Support in part	HortNZ accepts the recommendation in the S42A report

Appendix 2

You don't often get email from graeme.knight@fireandemergency.nz. [Learn why this is important](#)

Hi Sarah,

Good talking to you this morning re: Fire break setbacks.

As far as I am aware Fire and Emergency doesn't have any guidelines around fire break setbacks from road or boundaries.

If you have any other questions, please don't hesitate to contact me.

Regards

Graeme

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Fire Fact "A House Fire Can Become Fatal Within 5 Minutes"

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