

Forestry Plantations, Wilding Tree Spread, & Tree Shading
(RU009)

Baseline Report

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TABLE OF CONTENTS

Glossary of Terms	4
1. Introduction	5
1.1 Methods	5
1.2 Managing Wild Fire Risk Scope of Works	5
1.3 Tree Shading.....	6
2. Background	6
2.1 Forestry Cycle	6
2.2 History	6
2.3 Government Incentives	8
2.4 Present	8
3. District Plan Provisions	10
3.1 Objectives and Policies	11
3.2 Definitions	11
3.3 Rules	11
4. Other District Plans	13
4.1 Christchurch District Plan	13
4.2 Proposed Hurunui District Plan	14
4.3 Ashburton District Plan.....	16
5. National environmental standard - Plantation Forestry 2017 (NES-PF).....	17
5.1 Objectives.....	17
5.2 Definitions	17
5.3 Relevant NES-PF sections to the Proposed District Plan.....	18
5.4 Wilding Tree Calculator	18
6. Relevant Policy and Strategy Documents	19
6.1 Mahaanui Iwi Management Plan 2013.....	19
6.2 Canterbury Regional Policy Statement (RPS).....	20
6.3 Canterbury Land and Water Regional Plan (LWRP)	20
6.4 New Zealand Wilding Conifer Management Strategy 2015 - 2030	20
6.5 Canterbury Regional Pest Management Strategy 2018.....	21
7. Acts of Parliament.....	22
7.1 Fire and Emergency New Zealand Act 2017	22

7.2 Heritage New Zealand Pouhere Taonga Act 2014	22
8. Consultation	22
9. Discussion	24
9.1 Definitions:	24
9.2 Rules:	25
9.2.1 Waterway setbacks	25
9.2.2 Line of sight to road/rail crossings	25
9.2.3 Height restrictions near airfields	25
9.2.4 Forestry within ONL and SNAs	25
9.2.5 Forestry Quarrying	26
9.2.6 Wilding trees	26
9.2.7 Forestry exclusion zones	26
9.2.8 Visual Amenity Landscapes (VAL)	27
9.2.9 Noise and vibration	27
9.2.10 Cultural sites	27
9.2.11 Transportation	28
9.2.12 Earthworks	28
10. Proposed Options	29
11. References	32
12. Appendixes	33
Appendix A – Definitions	34
Operative Selwyn District Plan Definitions	34
NES-PF Definitions	34
Appendix B – Relevant District Plan Provisions	36
Relevant Rural Volume Rules	38
Appendix C– NES-Plantation Forestry Reviewed Provisions	48
Provisions for Territorial Authorities	48
Appendix D– Proposed ONL & VAL, and existing Forestry Exclusion Zone Map	60
Appendix E–Other Provisions	61
Canterbury Regional Policy Statement	61
Canterbury Land and Water Regional Plan	61
Christchurch District Plan	61
Proposed Hurunui District Plan	62
Ashburton District Plan	62
Appendix F– Forestry Owners	64

Glossary of Terms

NES-PF = National Environmental Statement- Plantation Forestry

ODP = Operative District Plan

ONL = Outstanding Natural Feature or Landscape

RMA= Resource Management Act

SNA = Significant Natural Feature

VAL = Visual Amenity Landscape

1. INTRODUCTION

Plantation forestry covers approximately 1.5% of the Selwyn District. Forestry occurs through all five areas of the district; High Country, Malvern Hills, Inner Plains, Outer Plains, and Port Hills. The Malvern Hills contains the largest area of forestry, with over 7,100 hectares; covering approximately 14.8% of the zone. The Operative District Plan (ODP) currently contains provisions to manage the effects of plantations and their related activities. Plantation effects include wilding tree spread and tree shading. The ODP's definition of Plantation is broad and covers plantation's planted for both commercial and various non-commercial purposes.

Changes at the national level, are placing more focus on the forestry industry. Marking a new era in forestry, the Ministry for Primary Industries has established a new portfolio-based branch specifically for forestry; Forestry New Zealand (Jones, 2017). The introduction of the National Environmental Standard for Plantation Forestry (NES-PF) signifies change within the industry. The NES-PF is designed to provide a nationally consistent set of rules that address the risks of forestry activities and protect sensitive environments. The Ministry of Primary Industries anticipates this to reduce the costs of plan development and legislation.

This investigation is to identify and assess the ODP's provisions relating to forestry activities; assess the potential implications of the provisions contained within the NES-PF; to identify any cross overs between the two, and provide options and recommendations for consideration to inform the proposed Selwyn District Plan. In addition, it also reviews the efficiency and effectiveness of the operative tree planting provisions that address wilding tree spread in the High Country, and tree shading.

1.1 Methods

The following methods were used in gathering information for this report:

- Historic information was gathered from various published and internal reports. Information was gathered on plantations in a general context, national context, and specifically within the Selwyn District. Technical contact, Mark Rykers, provided information on the Council's management of its own plantations.
- A search for existing forests was conducted by using aerial GIS mapping, and from the resource consents database. Forestry blocks over 1 hectare in size were included. However, there is an element of error with some blocks potentially been harvested, mistaken as orchards or native bush.
- The Selwyn District Council's database of resource consents since 1991, was searched and summarised, for the establishment of plantations and the use of earthworks in association with plantations. Shelterbelts resource consents were also searched.

1.2 Managing Wild Fire Risk Scope of Works

Running concurrently to this Scope, a Wildfire Risk Management Scope is also underway. The wildfire scope is primarily looking at setback restrictions between new plantings and existing dwellings and vice versa. The presence of the NES-PF does have some effect on the content of the proposed provisions, but for plantings not covered by the NES-PF these will be subject to restrictions. As such wildfire risk management and setbacks have not be included as part of this scope to avoid duplication.

1.3 Tree Shading

On the 28th of June 2017 an Issues and Options Report on Tree Shading was presented to the District Plan Committee, who subsequently endorsed the preferred option. The preferred Option (two) recommended that the effects of tree shading are managed through a combination of policies within the Proposed District Plan, and other methods outside of the District Plan. Given the presence of this decision, all tree shading rules will be removed from the Proposed District Plan, and will not be discussed in any detail within this report.

2. BACKGROUND

2.1 Forestry Cycle

Exotic conifers are popular in New Zealand's forestry industry, growing faster than indigenous species. *Pinus radiata*, the most common forestry tree, takes between 25-30 years to mature. A forestry cycle comprises of five key stages [Figure 1.1]. Land is first cleared and young plants, about 30 centimetres high, are planted in the winter. As the trees grow their lower limbs are removed to produce knot-free timber. The trees are then thinned to around 300 trees per hectare, this allows them more space to grow. Most pruning and thinning occurs within the first 12-15 years and then the remaining trees are left to grow until harvest (Berg, 2008). Finally, trees are harvested, they are felled and de-limb for transportation off site. Exotic

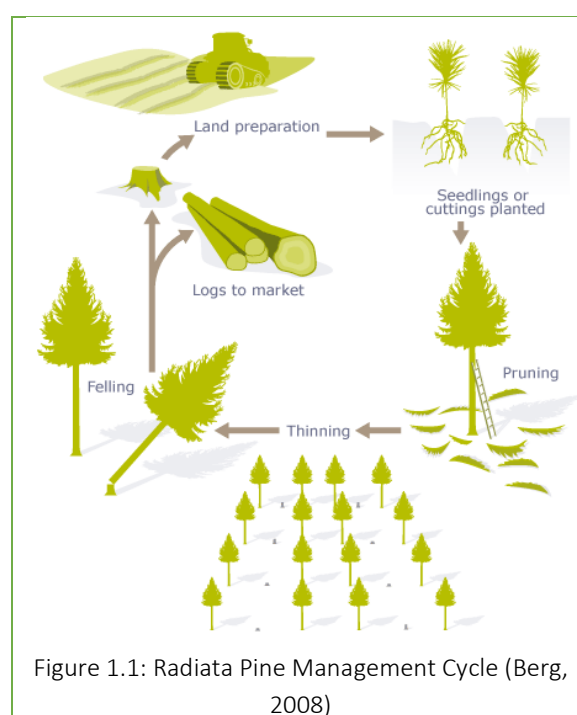


Figure 1.1: Radiata Pine Management Cycle (Berg, 2008)

conifers are an important commercial species that contribute significantly to forestry exports. Forestry is New Zealand's third largest export after dairy and meat (Ministry for Primary Industries, 2014).

Plantations are vulnerable to the elements; snow, frost, wind, and fire. Snow weighs down and breaks plantation limbs, while frost can damage the younger plants. Fire can move quickly through plantations. However, wind has historically been deemed the most destructive element to forestry on the Canterbury Plains (Cooney, 1949).

2.2 History

The Canterbury Plains was originally a treeless landscape (Cooney, 1949). From the 1850's various acts were passed to encourage the planting of trees. The Forest Trees Planting Encouragement Act 1871, allowed for the establishment of the Selwyn Plantation Board. On May 29th, 1911 the Selwyn Plantation Board has its first meeting (Cooney, 1949). The Board

was set up to control and administer 15,900 acres of plantation reserves; 6,400 acres had already been planted and 9,500 were leased for agricultural and pastoral purposes (Cooney, 1949).

Nationally forestry became popular in 1925, with the introduction of Government incentives. This forestry boom was followed with a second boom in 1960, and then again in 1980's and 1990's (Pacific Forest Products NZ Ltd, n.d.). From 1880 to 1950, the preferred forestry species moved from eucalyptus and acacia, to radiata pine and douglas-fir (Cooney, 1949). Radiata pine became popular due to its rapid growth rates in New Zealand; nearly seven times faster than when grown in California, USA (Pacific Forest Products NZ Ltd, n.d.). Today it is the dominant plantation forestry species; used in 90% of commercial forests (Ministry for Primary Industries, 2016).

The following figures [Figure 1.2& 1.3] are aerial photos of the Selwyn District. These show the movement of plantations from the plains, to the Malvern and Port Hills. The 1990's forestry boom is evidently in figure 1.2, 1995-1999. These years saw fifteen resource consents being lodged for the establishment of new forestry areas.

In 2010, the Selwyn Plantation Board was disestablished and the majority of its significant forestry blocks were sold to private companies. However, the council currently manages 161.9 hectares of forestry land, spread through 57 sites. This does not include McHughs Forest in Darfield, which has been retained as a forested park.



Figure 1.2: Aerial Photos 1995-1999 (Land Information New Zealand, n.d.)

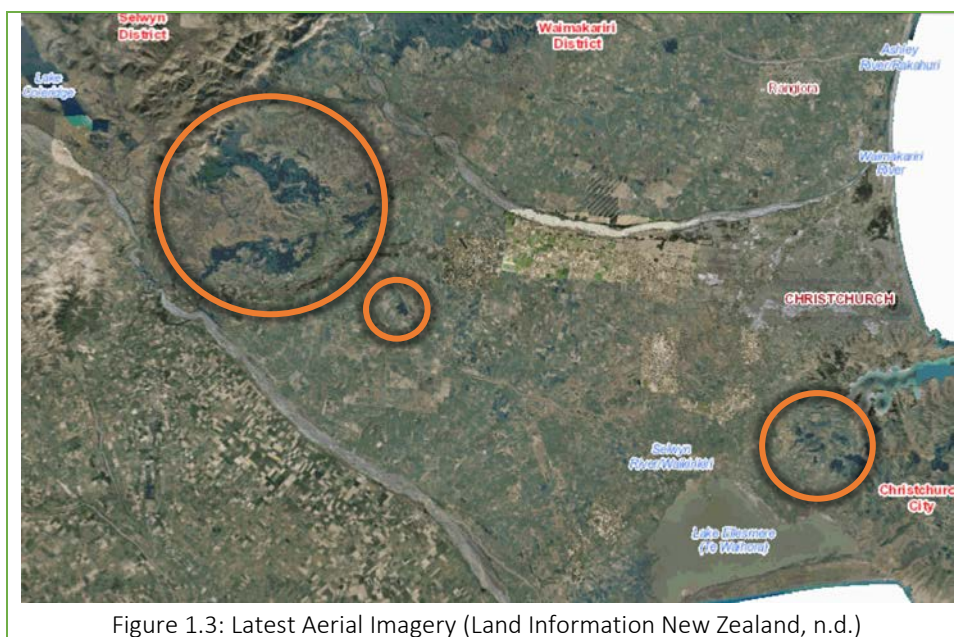


Figure 1.3: Latest Aerial Imagery (Land Information New Zealand, n.d.)

2.3 Government Incentives

The government currently has two schemes and one initiative, which promote the forestry industry and its environmental benefits. These are the Afforestation Grant Scheme, Emissions Trading Scheme (ETS), and the Permanent Forest Sink Initiative (PFSI).

Afforestation Grant Scheme is aimed at increasing the area of plantation forestry in New Zealand. The government has recognised the decline in the forestry industry of the last two decades. This scheme aims to help reverse this decline and is designed to help establish 15,000 new hectares of forestry, by 2020 (Ministry for Primary Industries, 2017).

The ETS and the PFSI are closely linked schemes, they both work on carbon credits. The PFSI allows landowners to receive carbon credits through their permanent forests, which have been established after January 1st, 1990. These forests can be formed with either exotic or indigenous species. Limited harvesting of these forests is allowed (Ministry for Primary Industries, 2017). The ETS is where forestry owners can register their post 1989 forestry land and earn New Zealand Units (NZU), which are more commonly known as carbon credits. The scheme also requires owners to mandatorily become participants when non-exempt pre-1990 forest land is deforested (Ministry for Primary Industries, 2017).

These schemes have not made a noticeable change in the Selwyn District. As carbon credits continue to gain value, and further focus is placed on this industry the demand for forestry land in the district could potentially increase. The allowance of limited harvesting of these forests and the commercial nature of carbon credits, subject them to the NES-PF.

2.4 Present

From the desktop study, Selwyn District currently has approximately 9,398 hectares of plantation forestry, covering 1.5% of the District [Table 1]. The Port Hills and the Malvern Hills zones have the most plantation forestry coverage (14% PH, 14.8% MH). The ODP manages plantations through rules in its Rural Volume, with restricted discretionary rules for plantations

in the Port Hills, Malvern Hills, High Country, areas of Outstanding Natural Landscapes (ONL's), and Forestry exclusion zones.

Zone	Zone Size (h)	Forestry Size (h)	Coverage
PH	3,255	456	14.0%
IP	27,905	330	1.2%
OP	175,644	871	0.5%
MH	47,928	7,109	14.8%
HC	357,644	632	0.2%
Total	612,376	9,398	1.5%

Table 1: Desktop assessment of forestry cover in the Selwyn District

Data presented by the New Zealand Forest Owners Association current as at 1 April 2016 indicated a slightly larger area being used for forestry within Selwyn, with the average age of the forestry being 21.2 years old (Table 2 & 3).

	Area (ha)	Standing volume (000 m ³)	Area-weighted average age (years)
Selwyn District	9,849	2,547	21.20
Canterbury Region	96,860	21,099	19.51
South Island	501,205	110,659	17.67
New Zealand	1,704,747	501,460	17.08

Table 2: Forested Areas

	Age class (years)											Total
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-50	51-60	61-80	
Selwyn	927	524	699	1,922	2,910	1,748	628	203	209	50	28	9,849
Canterbury	7,438	6,326	15,127	25,159	25,030	8,432	4,906	2,140	1,437	507	359	96,860
South Island	59,134	51,393	79,925	122,915	115,336	32,275	22,903	10,125	5,087	1,323	790	501,205
New Zealand	244,997	180,845	264,872	389,865	379,773	131,617	71,960	24,345	11,553	3,083	1,836	1,704,747

Table 3: Age of forestry

The council currently manages 161.9 hectares of land, spread through 57 sites. The majority of sites are either disused gravel reserves, undeveloped parts of other recreation reserves or cemeteries. Most of the sites are small in area (two hectares or less) with the largest being ten hectares. Currently 62.7 hectares of land is afforested and 53.8 hectares is currently deforested. The majority of this land was deforested due to significant damage occurring during windstorms in late 2013. This deforested land is now at its four year threshold for carbon credits and must be replanted for the 2018 planting season or carbon credits will need to be re-paid.

Since the ODP (2006-2017), ten resource consent applications for plantation forestry have been lodged, with four of the consents being for earthworks in relation to forestry activities. These

properties were located in the Malvern Hills (seven) and High Country (three) Zones. Of these resource consents, one was withdrawn, one is on hold (since 2012), and the most recent one lodged in 2017, currently incomplete, but replaced by a second application. Between, 1991-2003 there were a total of 39 resource consents applied for forestry activities and these were spread throughout all of the zones. Based on a 25-30 year growth rate, these plantations will likely be coming into maturity in the next few years. Between 2004 and 2009 no resource consents for plantations were lodged with the council.

A recent example of a resource consent is 155230 by Trans-Tasman Forestry Ltd. This consent was for the clearance of wilding pines by logging and aerial spraying, replanting with *Pinus radiata*, *Pinus ponderosa* or *Pinus radiata* X *Pinus ponderosa* hybrid, including earthworks associated with a new track and harvesting platforms. The site is located in the High Country and owned by Canterbury University. Conditions were imposed on the consent relating to a tarn and the species used. The tarn to the south was to be fenced and ensured that it is not disturbed and sediment control measures should be in place to protect it during harvesting and afforestation activities. The species was limited to *Pinus radiata*, *Pinus ponderosa*, or *Pinus radiata* X *Pinus ponderosa* hybrid.

The most recent application which has been granted was 175440. The application was lodged by Ben Moore Grazers Ltd. They proposed a radiata pine forest in the Malvern Hills, which would be registered for the NZ Emission Trading Scheme. It was a restricted discretionary activity due to its location in the Malvern Hill Zone, triggering rule 2.2.2 (“...in the area... Malvern Hills... it shall be a restricted discretionary activity...”). Rule 2.2.3.2, lists the matters for consideration by the Council. Matters to be considered are the design and siting of the plantation. The application proposed a minimum setback of five metres from boundary fences of neighbouring properties. The site is not located close to roads therefore road shading was not an issue. The application was also assessed against the incoming NES-PF requirements. The following conditions were applied: the ridge line was to remain open non-forested land; the boundary setback was doubled, to a minimum of ten metres along with a ten metre setback of any edge of waterbody; and harvesting was on the condition that it must be notified 20-60 days before it commences. These harvesting conditions match with the NES-PF requirements (NES-PF 64).

Four resource consents were found regarding shelterbelts. One was for the production of shelterbelt trees (1992), one was for removal (2009), one for replacement of a shelterbelt with a bund (2015), and one for location alterations (2015). This follows the observational trend of the removal of shelterbelts, making way for a changing land use on the plains, from crop to dairy. Shelterbelts are not a financial investment like forestry is, shelterbelts are used to protect investments, such as crops, stock and land.

3. DISTRICT PLAN PROVISIONS

The ODP identifies forestry plantation as a rural activity, which needs to be recognised and provided for, as part of promoting sustainable management of natural and physical resources. The policies focus on avoiding the effects of forestry and its related activities, with particular focus on the High

Country, Malvern Hills and Port Hill areas. The relevant provisions have been attached to this report as **Appendix A and B**.

3.1 Objectives and Policies

The Objectives and Policies of the District Plan focus on the protection of the district's natural features, and aquatic environment. More specifically provisions address wilding tree spread, water quality and quantity management, indigenous vegetation protection, and the protection of ONL and OFL's.

3.2 Definitions

The ODP defines three types of tree planting; Shelterbelt, Amenity Planting, and Plantations. Forestry activities are also referred to in the definition of earthworks. The most relevant definitions to this Scope are discussed below.

Amenity Plantings:

This definition primarily covers plantings in the immediate vicinity of a principal building either to provide shelter, aesthetic appeal, or to visually screen the site. This definition includes woodlots, orchards and vineyards which are located in close proximity to the principal building, and are for the purpose of primarily serving the residents. There is a limit of four hectares for woodlots, orchards, and vineyards, to be considered under this definition.

Shelterbelt:

This definition covers a group of trees primarily for the purposes of providing shelter to stock, crops, or buildings from wind. There is a requirement that a shelterbelt have a maximum width of 20 metres, and are not clear felled.

Plantation:

This definition essentially acts as a catch-all definition for any group of trees that do not comply with the 'Amenity Plantings' or 'Shelterbelt' definitions. This definition includes all trees regardless of them being for harvest or not. There are no area restrictions imposed through this definition.

Industrial Activity – Rural based industrial activity:

A subpart of the 'Industrial Activity' definition is a definition for 'Rural Based Industrial Activity' which involves the use of raw materials derived from the rural environment, including forestry.

3.3 Rules

Within the ODP, there is a dedicated section for shelterbelts and amenity plantings (2.1), and another for plantations (2.2). Rules have been attached as **Appendix B**.

Shelterbelts and amenity plantings are permitted under Rule 2.1.1, if all of the associated conditions are met:

- Restriction on species type;
- Not within an outstanding natural landscape or a forestry exclusion area;
- Restrictions on plantings along SH73 and the Midland Railway;

- Setbacks from waterbodies;
- Restrictions on tree shading;
- No encroachment within line of sight of rail crossings or road intersections;
- Heights restrictions near airfields;
- Restrictions on the planting of trees in areas of customary significance, and other protection areas.

Depending on the condition breached, the activity may be considered either a restricted discretionary activity, a discretionary activity, or a non-complying activity.

Section 2.2 addresses 'Plantations' with the planting or harvesting of any plantation being a permitted activity if all of the associated conditions are met:

- Not within certain rural areas, or visual amenity landscapes;
- Customary sites;
- Setbacks from waterbodies;
- Restrictions on tree shading;
- No encroachment within the line of sight of rail crossings or road intersections;
- Height restrictions near airfields.

Depending on the condition breached, the activity may be considered either as a restricted discretionary activity, a discretionary activity, or a non-complying activity.

In 2014, there was a move to remove shading setback limits from both the Shelterbelt and Amenity Plantings, and the Plantation sections. This proposal was notified to the public and due to public feedback the proposal was withdrawn. The shading rules remain in the ODP (ODP 2.1.1.5 & 2.2.1.6). The rules state that no tree shades any part of the carriageway of any road between 1000 and 1400 hours. However, from aerial images and local site assessments in the district, the majority of shelterbelts on the northern side of roads can be found to be in breach of this rule, therefore it is questionable how effectively it is able to be enforced.

It is relevant to note that under the ODP there are no setback requirements for plantations to neighbouring properties, there are only provisions addressing the shading of neighbouring properties

Wilding tree spread is dealt with by restrictions on the species of trees that are permitted to be used for plantings in certain environments. If an activity breaches these restrictions then a wilding management plan is required, and any activity may be subject to a notified process.

The inclusion of Forestry Exclusion Zones in the ODP limit forestry plantations and shelterbelts in that mapped zone, while not subjecting the area to other requirements, like an ONL or VAL labelling would. **Appendix D** shows the ODP's Forestry Exclusion Areas with the proposed ONL and VAL areas. These areas were excluded from the Areas of Outstanding Landscape, because they are areas where more intensive pasture improvements, structures and buildings, earthworks or other activities may be appropriate landscape changes, but where exotic plantations may have more significant adverse effects on the landscape. Rather than limiting other uses of that land by classifying it as Areas of Outstanding Landscape, the ODP confined the restrictions to the one land use which may be inappropriate in those areas. The map shows

all of these Forestry Exclusions Zones are now overlapped with either proposed ONL or VAL areas.

4. OTHER DISTRICT PLANS

4.1 Christchurch District Plan

It is relevant to note that the Christchurch District Plan was drafted prior to the NES-PF.

Definitions:

The Christchurch District Plan only provides definitions for 'Amenity Tree Planting' and 'Plantation Forestry'.

'Amenity Tree Planting' includes the planting of trees to provide shelter, landscaping, screening, or natural hazard mitigation. There is no specific definition for 'Shelterbelt' but this concept is covered by the 'Amenity Tree Planting' term. This term is also covered under the more general 'Farming' definition which also includes shelterbelts.

'Plantation Forestry' includes the planting of trees for commercial harvesting.

Rules:

The Christchurch District Plan has multiple rural zones, which have different rules depending on the zone. For the purposes of this report only the Rules within the Rural Banks Peninsula Zone and Rural Waimakariri Zone have been included.

Rural Banks Peninsula Zone

There is a permitted activity status for 'existing forestry' activity, which includes the tending, maintenance and harvesting of commercial forests. This also includes any ancillary earthworks to facilitate this.

A new 'plantation forestry' activity is classified as restricted discretionary, with some of the matters of discretion including:

- Best practice management
- Wilding trees
- Tracks and roads
- Traffic generation
- Significant features and rural amenity landscapes
- Indigenous biodiversity and ecosystems
- Cultural significant sites

This Rule does not include any conditions, and as such all 'plantation forestry' activities within this zone will be classified as restricted discretionary.

This Zone does not contain a specific 'Amenity Tree Planting' rule but it does have a 'Farming' provision which renders this activity as permitted.

Rural Waimakariri Zone

‘Plantation forestry’ activities within this zone are considered to be permitted, and have no associated activity standards to meet.

Regardless of the zone of the activity, general rules will still apply to these activities, there general rules cover aspects such as noise, and lighting.

This Zone does not contain a specific ‘Amenity Tree Planting’ rule but it does have a ‘Farming’ provision which renders this activity as permitted.

4.2 Proposed Hurunui District Plan

A large proportion of the Hurunui landscape is a working landscape used for a range of legitimate pastoral, horticultural and forestry activities. Therefore, the Hurunui Council recognises that the management of this landscape must be flexible enough to enable activities to occur but where adverse effects on the environment can be avoided, remedied or mitigated. Their policies suggest that they work with forestry owners and relevant organisations to promote sound forestry practices to avoid, remedy or mitigate adverse effects of forestry planting and harvesting on landscape values and important vistas and view. However, some landscapes are particularly vulnerable to adverse effects arising from change. The Council has zoned a Forestry Management Area where they apply a more regulatory approach, with a defined set back rule of ten metres and management of wilding tree spread. The Forestry Management Area is comparable with Selwyn’s High Country and Malvern Hill Zones.

Definitions:

The Proposed Hurunui District Plan includes definitions for ‘amenity tree planting’, ‘forestry’, and ‘shelterbelt’.

The ‘Amenity tree planting’ definition is the same as that for the Christchurch District Plan. While shelter is included in the ‘amenity tree planting’ definition, a specific ‘shelterbelt’ definition has also been included. This ‘shelterbelt’ definition includes trees planted for the primary purpose of providing wind shelter, and must not solely consist of native species.

The definition for ‘forestry’ includes forests that are specifically planted for carbon sequestration, or for harvesting for timber or wood based product production. This extends to replanting failed plantings, pruning and thinning, ancillary earthworks, and the harvesting and replanting of trees.

It is relevant to note that this definition includes forests for the purposes of carbon sequestration, rather than forests only being used for commercial harvesting.

Rural Rules:

Amenity Plantings, shelterbelts, and forestry are generally permitted, however this is subject to restrictions within certain areas of the rural zone, and permitted development standards.

If a standard is breached the activity falls to a restricted discretionary activity. Permitted development standards have restrictions on the following:

- 50m setback to principal buildings on adjacent lots, this includes new forestry and woodlots.

- New principal buildings not within 50 metres of a forestry plantation.
- New forestry or woodlot to be setback at least 10 metres from a boundary.
- Size restrictions on trees and shelterbelts within 10 metres of a property boundary.
- Restrictions on the location of trees in relation to their proximity to public water, wastewater, and storm water pipes.
- Species restrictions based on proximity (within 200 metres) to certain sensitive sites (e.g. QEII land, conservation land, rivers, and wetlands).

The relevant matters of discretion for activities that breach setback standards have been limited to:

- Height, species, location
- Shading, competition for moisture and nutrients, root-heave, fire risk, wind throw, on adjacent lots.

For activities that involve the planting of new trees within a Forestry Management Area and any planting of a restricted species as listed in the Plan, consent is required as a restricted discretionary activity, with matters of discretion depending on the form of the activity including:

- Wilding tree spread
- Species and their ability to spread
- Locations exposure to seed dispersal
- Intensity of the surrounding land use and type of vegetation cover.
- Wilding management plan
- Locational siting, and design of plantings including composition.
- Effects on indigenous biodiversity

Landscape Rules:

In addition to restrictions within the Rural Zone, activities within an Outstanding Natural Feature or Landscape are managed. The establishment of a new forest up to 1 hectare or 2.5% of the site area (whichever is greater), and the establishment of new shelterbelts (except where provided for through Rule 11.4.6.6) are permitted activities.

If an activity is not covered by the permitted activity rule, the activity is classed as a restricted discretionary activity with matters of discretion being limited to:

- Species and their ability to spread
- Locations exposure to seed dispersal
- Intensity of the surrounding land use and type of vegetation cover.
- Wilding management plan
- Locational siting, and design of plantings including composition.
- Effects on indigenous biodiversity
- Effects of wilding spread on natural character or landscape values.

If an activity breaches a permitted activity rule, then the activity is classified as a non-complying activity.

4.3 Ashburton District Plan

Definitions:

The Ashburton District Plan contains definitions for 'Amenity Tree Planting', 'Amenity Vegetation', 'Forestry Activity', and 'Shelterbelt'.

The 'Amenity Tree Planting' definition allows for the planting of trees for amenity purposes which are in close proximity to buildings on the site. Shelterbelts, forestry, commercial orchards, wood lots and other tree crops are excluded from this definition.

This District Plan defines 'Forestry Activity' as the use of land primarily for the purposes of planting, tending, managing and harvesting trees for timber production. There is a qualifier that any production needs to be in excess of onsite domestic or farm wood supply. Therefore, smaller woodlots used for a farms firewood and fences posts would not be covered by this definition.

'Shelterbelt' is defined by this Plan as any tree or vegetation primary for the purpose of provided shelter for stock, or other agricultural/horticultural purposes up to a maximum width of 15 metres. It is relevant to note that this definition does not apply to providing shelter to buildings.

Rules:

The status of an activity is dependent on the zone it is located within. The Ashburton District Plan has split the rural area into three zones, A, B, and C. Zones A and B are typical rural environments, with Zone C being areas of higher amenity significance (hills, mountains etc.).

Forestry activities within the Rural A and B Zones are permitted subject to the relevant site and zone standards. Tree planting within the Rural C Zone is permitted as long as this is limited to shelterbelts located in a shelterbelt area as specified by the planning maps, and to the relevant site and zone standards.

Any activity which is listed as a permitted activity but cannot meet a relevant site standard, but which can meet all of the relevant zone standards is considered to be a restricted discretionary activity. The relevant matters of discretionary include:

- Siting, design, species, management, and wild tree spread controls
- Effects of planting on nature conservation values
- Any loss of, or adverse effect on the views of outstanding natural landscapes.
- Adverse effects on present vegetation patterns
- Adverse effects on the openness and spaciousness, naturalness of the landscape

Forestry in a Rural C Zone is considered to be a discretionary activity as long as the activity complies with all of the relevant zone standards.

If any activity breaches a zone standard, then the activity is rendered as a non-complying activity.

The relevant site standards covers aspects such as:

- Any tree planting in the Rural C Zone other than that required to screen buildings is limited to within the shelterbelt areas in the maps, and provided that:
 - o Tree plantings don't exceeded 5 hectares in a 10 year period;
 - o Have a maximum width of 15 metres;
 - o Restrictions on species.
- Tree plantings in Rural A and B Zones are required to be a minimal of 2.5 metres from internal boundaries adjacent to existing dwellings.

The relevant zone standards require that no tree planting occurs above the altitudinal land use line or within a significant nature conservation area.

Relevant definitions have been attached to this report as **Appendix E**

5. NATIONAL ENVIRONMENTAL STANDARD - PLANTATION FORESTRY 2017 (NES-PF)

The NES-PF is a national environmental standard which took effect on the 1st of May 2018. This Standard manages many aspects of forestry activity traditionally dealt with at a Regional and District Council level. Given the presence of this Standard, Section 44 of the RMA requires that the Selwyn District Plan not to be inconsistent or duplicate matters contained within the Standard. **Appendix C** contains the sections of the NES-PF that Territorial Authorities must pay particular regard to. The following is a summary of the NES-PF.

5.1 Objectives

The NES-PF has two main objectives: to maintain or improve the environmental outcomes associated with plantation forestry activities nationally; and to increase certainty and efficiency in the management of plantation forestry activities.

The NES-PF regulations apply to forestry activities: afforestation; pruning and thinning to waste; earthworks; river crossings; forestry quarrying; harvesting; mechanical land preparation; replanting; ancillary activities relating to slash traps, indigenous and non-indigenous vegetation clearance, discharges, disturbances, diversions, noise, dust, indigenous bird nesting; and fuel storage and refuelling.

Section 6 of the NES-PF allows for the rules of a district plan to be more stringent if it is giving effect to: National instruments (National Policy Statement for Freshwater Management, and Policies 11, 13, 15, and 22 of the New Zealand Coastal Policy Statement 2010); matters of national importance (outstanding natural features and landscapes, and significant natural areas); and unique and sensitive environments (separation point granite soils, geothermal area or karst geology, activities 1km up-stream of drinking water supplies, forestry quarrying activities over a shallow water table).

5.2 Definitions

The NES-PF provides definitions for 'Plantation Forestry', along with associated activities such as; 'Afforestation', 'Forestry Quarrying', 'Harvesting', and 'Indigenous Vegetation'. Plantation Forestry's definition is very specific to plantations that are over one hectare in size, which are

for commercial purpose, and are subjected to harvesting. **Appendix A** has the full definitions for both the relevant ODP and NES-PF definitions.

5.3 Relevant NES-PF sections to the Proposed District Plan

The NES-PF has introduced a range of provisions addressing aspects historically dealt with at either a district or regional council level. Table 4 provides a summary of the relevant sections as well as the authority who is responsible for managing these new provisions. The relevant sections and how they relate to the ODP and the Proposed District Plan will occur in latter sections.

<u>NES-PF Section</u>	<u>Territorial</u>	<u>Regional</u>
Afforestation	9-17	
Pruning and thinning to waste	19-permitted	20-21
Earthworks	23-permitted	24-35
River Crossing		37-49
Forestry Quarrying	51-54, 57, 60, 61	51-52, 54-56, 58-61
Harvesting	63, 64, 70	63-71
Mechanical land preparation	73- permitted	73-75
Replanting	77—79, 81	77-78, 80-81
Slash Trap	83- permitted	83-92
Indigenous vegetation clearance	93-94	
Non-indigenous vegetation clearance	95	95
Discharges, disturbance, and diversions		97
Noise and vibration	98-99	
Dust	100-101	100-101
Indigenous bird nesting	102-103	102-103
Fuel storage and refuelling		104-105

Table 4: NES-PF Section Authority

5.4 Wilding Tree Calculator

The wilding spread risk for Plantation Forestry will be assessed via the Wilding Tree Calculator contained within the NES-PF. The Calculator must be applied to any land where afforestation of conifer species is proposed. The calculation must be conducted by a suitable competent person as described in section 11(2); the council must be given a copy of the wilding tree risk calculator calculation sheet at the same time as notice is given of the afforestation (NES-PF10). The calculation must not produce a score of 12 or more (NES-PF 11), or it becomes a restricted discretionary activity (NES-PF 16 & 17). The Wilding Tree Calculator guide, provided from the Ministry of Primary Industries, explains the assessments that are undertaken in the calculator. Indicator one: species growth. It looks at the growth of the tree and its features for

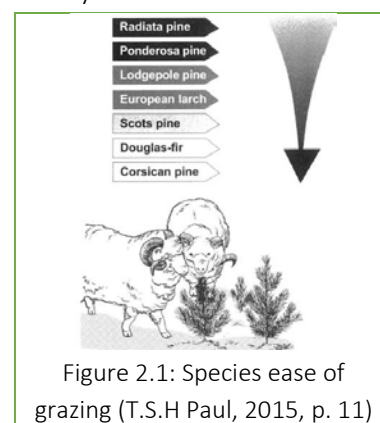
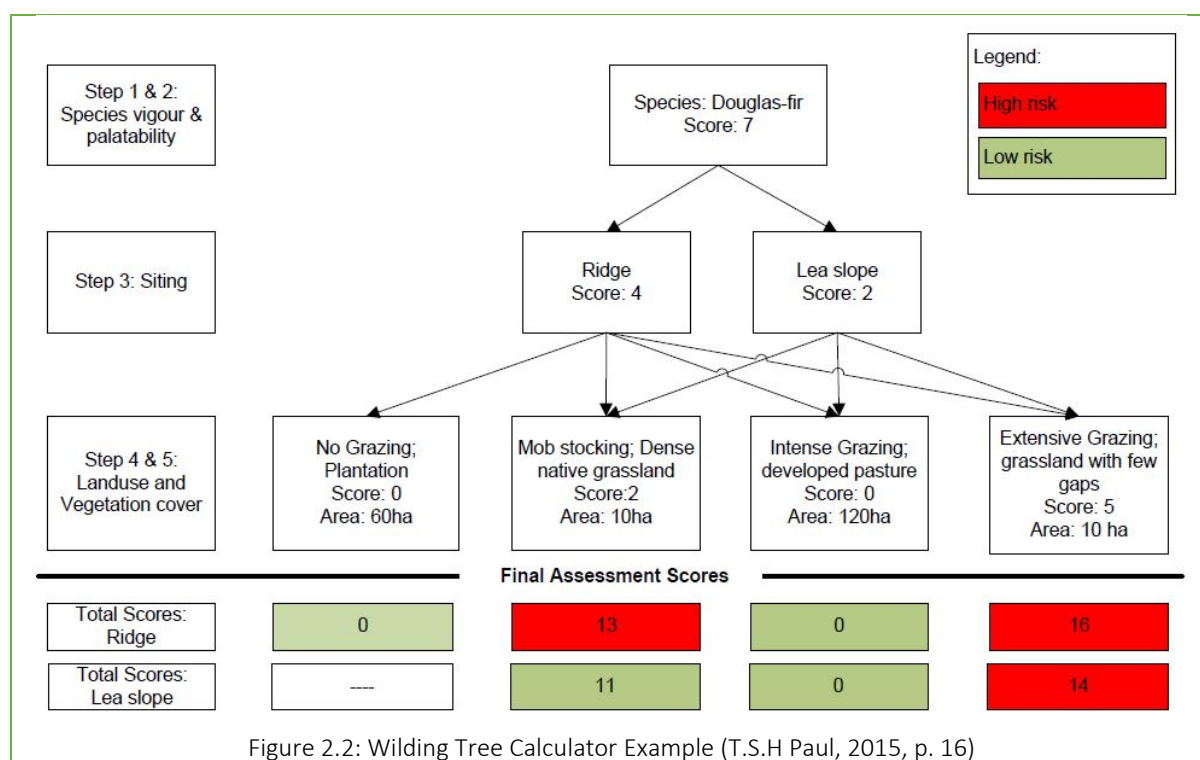


Figure 2.1: Species ease of grazing (T.S.H Paul, 2015, p. 11)

example, species that produce cones on its periphery edges are more likely to spread. Indicator two: species palatability. This looks at how susceptible species are to livestock browsing. The more palatable a species is the better young seedling can be grazed. Figure 2.1 shows Radiata pine as more palatable than a Douglas-fir. Douglas fir is one of the species currently listed in the ODP in rule 2.2.2.2 [Plantation] and 2.1.1.1 [Shelterbelts and Amenity Planting]. Indicator three: the site. This looks into where the forestry site is located, relative to the prevailing wind direction and slope. Indicators four and five, are downwind land use, and vegetation cover. Figure 2.2 shows a working example of how the wilding tree calculator works (T.S.H Paul, 2015).



6. RELEVANT POLICY AND STRATEGY DOCUMENTS

6.1 Mahaanui Iwi Management Plan 2013

Policies in the Mahaanui Iwi Management Plan seek to resolve significant issues by asking the fundamental question: what will the impact of this activity be on future generations?

Papatūānuku is profoundly important in the Ngāi Tahu worldview, as the birthplace of all things of the world, and the place to which they return. The issue of intensive rural land use having adverse effects on water quality, and quantity, biodiversity and soil health and associated Ngāi Tahu cultural values. Two overarching policies have been laid out, prioritising protection of resources and environmental health over economic gains, and making a priority of addressing adverse effects of intensive rural land use. Mahaanui identifies commercial forestry and wilding trees as potentially having adverse effects on tāngata whenua values. The plan sets out their policies regarding commercial forestry (P.14). It states that commercial forestry in the region must be managed to avoid adverse effects on the landscape, water, indigenous biodiversity and cultural heritage. Weed and pest control or eradication is also identified as being critical to

achieving mahinga kai and biodiversity objectives. Wilding tree eradication in the high country and foothill regions is seen as a key issue (P.15). It requires effective district and regional policy to prevent the establishment and control the spread of wilding trees, including; prohibiting planting of high risk species in plantation's, shelter belts or amenity plantings; requires buffers around all forestry blocks; and requires wilding seedling control. It is highly recommended that Mahaanui Kurataiao Limited is consulted with on this topic of forestry and wilding tree spread.

6.2 Canterbury Regional Policy Statement (RPS)

The RPS recognises the contribution that the forestry and logging industry has on the economy (RPS1.2.2). It focuses on protecting the environment from adverse effects of these activities; protecting water flow, soils, and in particular, wilding tree spread. Currently Canterbury is being adversely affected by wilding tree spread, it occurs most predominately within Canterbury's river catchments and high country. Therefore, it is appropriate to manage the risk of wilding tree spread from new forestry plantations. Its wider region policy for spread of wilding trees requires territorial authorities to set objectives and policies to minimise risk, through the location, design, and species planted. (RPS p5.3.13, **Appendix E**).

6.3 Canterbury Land and Water Regional Plan (LWRP)

The LWRP recognises that forestry can play a part in reducing flash flooding, and soil erosion, which contributes to the quality of the aquatic habitat. However, the converse of this is that changing land use patterns to forestry can significantly reduce flows in waterbodies as a result of rainfall interception, and root absorption.

The LWRP only contains a definition for 'Plantation Forest', which includes a forest of a selected species of trees for the purposes of a carbon sink, or harvesting to produce timber or other products.

The LWRP contained the following relevant Rules:

Rule 5.72 – which renders the replanting of a plantation forest in a listed flow sensitive catchment as a permitted activity, subject to the replanted forest being in the same location and the same size as the one that was harvested, and occurs within five years.

Rule 5.73 – any afforestation in a listed flow sensitive catchment is a controlled activity subject area controls in relation to catchment size.

Any breach of the above Rules will render the activity as Restrict Discretionary.

There is an additional rule managing high erosion risk areas, which lists silviculture practices in accordance with the Code of Practice for Plantation Forests and any associated sediment discharge to water as permitted.

6.4 New Zealand Wilding Conifer Management Strategy 2015 - 2030

This is a non-statutory strategy that supports collaborative action to address the critical issues facing wilding conifer management (Ministry for Primary Industries, 2014). This strategy suggests the use of the wilding conifer "risk calculator" to assess and reduce the risk of new wilding conifers establishing. This calculator assessment is now utilised in the NES-PF. The strategy also recognises the different roles that each sector is well placed to perform, this

includes local landowners. It recognises that territorial local authorities are well placed to establish appropriate rules in their district plans to ensure that land occupiers are undertaking their roles. While it also recognises that regional councils are well placed to enable wilding conifer control in regional plans. This specified division of roles is also seen in the NES-PF. However, the strategy also recognises that land occupiers are well placed to have significant effects on managing wilding spread. Their own personal management and collaboration with authorities and neighbours is critical in helping to manage wilding tree spread. Therefore, it is recommended that forestry landowners are consulted with, to gain maximum benefits for managing wilding tree spread in the district.

6.5 Canterbury Regional Pest Management Strategy 2018

The Canterbury Regional Pest Management Strategy is currently under review and it is at the Decisions stage of the process.

The strategy identifies wilding conifers (in the progressive containment programme) as a pest. As part of the Strategy's consultation, it was recognised that there is a strong support for greater regulatory support for current wilding conifer control efforts. It defines wilding conifers as any introduced conifer tree, including but not limited to:

- **Bishops pine**, *Pinus muricata*
- **Contorta (lodgepole) pine**, *Pinus contorta*
- **Corsican pine**, *Pinus nigra*
- **Douglas fir**, *Pseudotsuga menziesii*
- **European larch**, *Larix decidua*
- Maritime pine, *Pinus pinaster*
- **Mountain pine and dwarf mountain pine**, *Pinus mugo* and *P. uncinata*
- Ponderosa pine, *Pinus ponderosa*
- Radiata pine, *Pinus radiata*
- **Scots pine**, *Pinus sylvestris*

This list is more extensive than the species currently listed in the ODP (2.1.1.1, 2.2.2.2). The species that are currently listed in the ODP are in **bold**. The species underlined are the species that the strategy specifically mentions to be included in progressive containment programme, along with the general term 'wilding conifers'. They propose to focus on priority management areas within the Wilding Conifer Containment Area [Figure 4]. The goal is to secure the clearance of wilding conifers and the named pest conifers from within 900,000 hectares of land, over the first 10 years. The Wilding Conifer Containment Area covers the High Country Zone and some of the Malvern Hills. It is recommend that once the strategy is operative, a GIS map should be obtained from Environment Canterbury, in order to fully assess the Wilding Conifer Containment Area cover in the lower zone, the Malvern Hills and the Open Plains.



Figure 4: Proposed Wilding Conifer Containment Area: (yellow)
(Environment Canterbury, 2017, p. 106)

7. ACTS OF PARLIAMENT

7.1 Fire and Emergency New Zealand Act 2017

Section 22 requires Fire and Emergency New Zealand to prepare and issue fire plans for each local area, including policies and procedure for fire control. Through their website, they publicly announce fire risk levels for the region and outline fire types that are permitted, need consent, or are not permitted. Section 69 allows for the owner or occupier of any forestry land to organise and maintain a group of persons as an industry brigade and appoint a principal officer in the brigade for the purpose of protecting industrial premises in any emergency. There were no requirements for forestry land owners to prepare fire management plans.

7.2 Heritage New Zealand Pouhere Taonga Act 2014

This act provided an overriding protection of Heritage sites from plantation forestry and the NES-PF. It protects archaeological sites from being modified or destroyed (s42). It also continues the system for a list (formerly the Register), to be known as the New Zealand Heritage List/Rārangi Kōrero, comprising historic places, historic areas, wāhi tapu, and wāhi tapu areas, and also to include wāhi tūpuna, as a means for recognising heritage values. This act allows for the current provisions regarding wāhi taonga sites and management areas.

8. CONSULTATION

The following stakeholders and partners will be contacted as part of the pre-notification consultation process:

- SDC Consents and Monitoring
- Environment Canterbury (Policy and Land Owner)
- Mahaanui Kurataiao and other key forestry owners
- Matariki Forests Limited (as a significant forestry operator within the Selwyn District)
- Federated Farmers

In general discussions with the SDC Consents Team, it was mentioned that provisions addressing shelterbelts should remain easy to follow, and that the wilding tree calculator should not be implemented across all tree plantings. The Consents Team will be further consulted throughout the development of this Scope.

Key Forestry Owners

From the visual analysis and the analysis of resource consents the following plantation land owners are considered the largest forestry owners within each particular zone. Full list of forestry owners in the district along with details of the associated resource consents is in **Appendix F**.

Forestry Owner	Involvement in Plantation Forestry
University of Canterbury, RC submitted by Trans-Tasman Forestry Ltd	They have an estimated 300 ha of plantations in the High Country .

Lake Hill Limited	Located in the High Country , with an estimated 199 ha of plantation.
Matariki Forests Limited	They current have an estimated 8314 ha of plantations in the Malvern Hills and have further plantations throughout New Zealand.
Ben More Grazers	Operates in the Malvern Hills . Has an estimated 735 ha of forestry. Applied for resource consent in 1998, and most recently, in 2017 to establish further plantations.
Environment Canterbury,	Estimated to be operating 361 ha of plantations, predominately in the outer and inner plains .
Mr McKay	Located on the outer plains this is the largest plantations that is privately owned. It is estimated at 128 ha.
Ahuriri Farm Limited	Currently operating an estimated 171 ha of Radiata Pine plantations on the Port Hills .
Fortuna Forest Products Ltd	Located in the Port Hills with an estimated 68 ha of plantations.

9. DISCUSSION

This section will form the investigation and discussion on how the NES-PF provisions and existing ODP provisions interrelate, and what this will mean for future planning frameworks. This will primarily make up the basis for the recommended provisions for the Proposed District Plan.

Given the presence of the NES-PF, legal advice was sought from Adderley Head about the primacy of the provisions contained within the NES-PF over potential provisions contained within the Proposed District Plan. In summary the advice stated that a District Plan is not required to adopt a NES definition. However, by not adopting a NES definition, there is potential for conflict and inconsistency between the District Plan and a NES. Given that the RMA requires that the District Plan not be inconsistent or duplicate matters contained within an NES, alignment between the two documents in how the definition is used within the rules needs to be carefully considered.

9.1 Definitions:

The Landscape Assessment conducted by Boffa Miskell found that the definition used for 'Amenity Planting' incorporated a range of activities that have quite different visual effects, such as orchards, vineyards, and woodlots up to four hectares in size. Vegetation stands of this size are typically more than just 'Amenity Plantings' and should be considered differently when assessing the effects on the landscape. It is then recommended that a reduction in the area trigger from four to one hectare occur to allow for small scale woodlots, orchards, vineyards, etc. which are only serving that amenity purpose, to still be treated under the 'Amenity Plantings' provisions, where larger stands will be classified under the plantation provisions.

One key difference between the NES-PF and the ODP is with the definition of Plantation Forestry. The NES-PF defines Plantation Forestry, as a forest over one hectare in size which has been deliberately established for commercial harvesting. It explicitly excludes shelter belts, nurseries, orchards, vineyards, ecological plantings of forest species and willow and poplars space planted for soil conservation purposes. While the ODP doesn't define 'Plantation Forestry' there is a definition for 'Plantation' which does allow for a wider range of vegetation stands than the aforementioned NES-PF definition. There is no requirement for the forest to be commercially harvested, and can include orchards, vineyards, and other forms of vegetation. Given this situation it is recommended that a new definition for 'Plantation Forestry' be created, with the content mirroring the NES-PF, and the existing term 'Plantation' be kept to cover all non-NES-PF plantings.

It is relevant to note that the definition for 'Shelterbelt' differs between the ODP and the NES-PF, the NES-PF definition is very simple and doesn't include a width qualifier, whereas the ODP only considers stands less than 20 metres in width to be a shelterbelt. Although there is a discrepancy between the two definitions, a removal of a width qualifier is not considered to be required given that the NES-PF's purpose is to control and manage plantation forestry activities, rather than shelterbelts, hence the abbreviated definition for shelterbelts. The NES-PF definition for 'Plantation Forestry' does state that shelterbelts less than 30 metres in width are not to be considered under that regulation, so to avoid potential conflicts and gaps in the

planning framework, and amendment/update to the 'shelterbelt' definition should raise the maximum width from 20 metres to 30 metres. However, another way of achieving the same outcome and considered to be better practice would be to include the width restrictions for a shelterbelt within any permitted activity rule.

The current ODP lacks any definition for forest related quarrying activity, whereas the NES-PF has introduced this term and rules addressing it. It would be appropriate for the Proposed District Plan to adopt the definition contained within the NES-PF.

The ODP has a definition for 'Indigenous Vegetation' but this differs from the definition contained within the NES-PF. Given that the NES-PF's primary purpose is to control plantation forestry activities a different definition for 'Indigenous Vegetation' should not bring the Proposed District Plan into conflict with the NES-PF. However, consideration will need to extend to how any indigenous vegetation clearance rules within the Proposed District Plan relate to those contained within the NES-PF, and that it should be made clear within the Plan that 'Plantation Forestry' is excluded from this aspect of the Proposed District Plan.

9.2 Rules:

9.2.1 Waterway setbacks

ODP rules addressing the proximity of plantings to waterways has been specified by the NES-PF to be managed by the regional authority, and as such these provisions can be removed from the Plan.

9.2.2 Line of sight to road/rail crossings

The ODP currently contains rules dealing with line of sight around road and rail crossings. The NES-PF does not directly regulate line of site, but it does contain a requirement that plantings should be at least 10 metres from the boundary. This setback does not meet the needs of the current setback requirements, which requires setbacks of up to 30 metres in some instances. Therefore, any provisions dealing with this aspect also need to include NES-PF defined plantations.

9.2.3 Height restrictions near airfields

The ODP restricts the height of trees on the approach slopes into airfields. No provisions within the NES-PF have been created to deal with this, and therefore provisions can remain in the district plan. The actual details of these restrictions will be dealt with in the Airfields Scope of Works and will not be addressed any further as this part of scope of work.

9.2.4 Forestry within ONL and SNAs

Where an ONL or SNA exists, the district plan can be more stringent than the NES-PF as per section 6 of the regulation. This section allows the district plan to have extra provisions to provide for the protection of these areas above the measures included in the NES-PF. Presently, NES-PF plantation forestry activities are classified as a restricted discretionary

activity within ONL and SNA areas. ONL and SNA areas are currently being reviewed and amended where appropriate. These amendments should ensure that the actual areas needing protection are defined, and as a result appropriate provisions need to be in place to ensure that protection happens. The Boffa Miskell study recommends that the district plan be more stringent than the NES-PF and that generally forestry should be avoided within ONL areas. This assessment would leave a district plan classifying this form of activity in ONLs as a non-complying activity, with the associated policy protection.

Regarding SNAs, the NES-PF provisions dealing with these areas are more stringent than our existing rules for these areas. Therefore, rather than duplicating these provisions through emulation, it is appropriate to remove these from the Proposed District Plan. However, similar rules as to those contained within the NES-PF should be used for non NES-PF plantings.

9.2.5 Forestry Quarrying

Forestry related quarrying is classified as a permitted activity within the NES-PF if the relevant conditions have been met.

If an activity were to breach the permitted NES-PF rule, depending on the condition, the classification becomes either a conditional or restricted discretionary activity.

Therefore, as the NES-PF has covered forestry related quarrying an exception within any general quarrying provisions in the Proposed District Plan for forestry related quarrying will need to be present.

9.2.6 Wilding trees

The ODP attempts to managing wilding tree spread through the restriction of species types in certain areas, whereas the NES-PF has introduced a wilding tree calculator which includes species type as one of the variables.

However, for non-NES-PF defined plantings, a species restriction should still exist with an amendment to include an additional species (European larch – *Larix decidua*) as highlighted by the species noted in the Wilding Tree Calculator. This restriction should only occur in areas of particular significance such as the High Country as it currently stands and be extended to the Malvern Hills, bringing any District Plan provisions in line with the wilding conifer containment area specified in the Canterbury Regional Pest Management Strategy.

9.2.7 Forestry exclusion zones

The NES-PF has removed the ability of Council to restrict plantation forestry activities from particular zones or areas (forestry exclusion zone) where that restriction would be more stringent than the NES-PF. In the Selwyn context, some areas that are currently a forestry exclusion zone (Malvern Hills) are being proposed to be converted into ONL areas, which would then facilitate a stricter approach by Council. However, some of these existing exclusion areas are not being incorporated into proposed ONL areas, and are thus not allowed under NES-PF, and will need to be removed from the proposed District Plan.

9.2.8 Visual Amenity Landscapes (VAL)

Under the NES-PF afforestation within a VAL area will be either be a permitted activity, or a controlled activity where the rules in the district plan restrict plantation forestry within VALs. This is a change from the current situation under the ODP which renders them a restricted discretionary activity within the Port Hills VAL area. If an activity were to be controlled under the NES-PF, the matters of control are restricted to the effect caused on the amenity values of the VAL. This matter of control is quite broad and could cause issues when councils receive applications under Section 13 of the NES-PF.

Consideration needs to be given to whether there is merit in rendering plantation forestry as a controlled activity within VAL areas, given the limited ability to amend an application a controlled activity affords.

On review of the matters of discretion contained within the ODP all matters are generally covered by other aspects of the NES-PF or will be dealt with under other provisions in the Proposed District Plan. However, there is a matter outstanding that should be addressed by a controlled activity status for plantation forestry in a VAL, this being the pattern or shape of the activity in relation to the host environment. Primarily this would allow the Consents Team to manage this aspect to reduce the visual effect of a plantation forest. Typically this would be way of ensuring the direction of planting would follow the localised contours.

Regarding 'other' plantings in a VAL area, these should be managed through specific VAL area rules.

9.2.9 Noise and vibration

Currently the ODP manages noise through rule 9.16 and vibration through rule 9.17. Rule 9.16.3.1 provides a noise exemption to activities of a limited duration, including forestry, provided that it complies with the requirements of section 16 of the RMA. However, noise for forestry will now be managed through the NES-PF via specific provisions addressing noise and vibration, which are to be managed by the territorial authority. The noise and vibration from an activity will either be permitted or if non-compliant, restricted discretionary. Given this, there is no requirement for the Proposed District Plan to contain provisions addressing noise and vibration from plantation forestry activities. For the purposes of easing plan use it may be worth noting via an advice note that the NES-PF addresses these aspects.

9.2.10 Cultural sites

Under the NES-PF there is no regard for the protection of Wāhi Taonga Sites, Wāhi Taonga Management Areas or Silent File Areas. However, the NES-PF does have regard to land zoned by the council as papakāinga (NES-PF 17(2a)). The ODP's rules protect Wāhi Taonga Sites or Wāhi Taonga Management Areas from inappropriate disturbances, and destruction, classing plantations in these areas as a restricted discretionary activity (ODP 2.2.1.2-2.2.1.4 & 2.2.7.2-2.2.7.4). Although the NES-PF does not have provisions regarding these sites, Section 6 of the Resource Management Act protects these sites as a matter of national importance. The

Heritage New Zealand Pouhere Taonga Act also provides protection of these types of sites. Therefore, protection of these sites from Forestry Plantation can and should continue through the district plan.

9.2.11 Transportation

The NES-PF manages on site harvesting activities, however it does not manage off site activities including transportation routes. The ODP manages transportation routes through rule 2.2.3.7 as a matter of discretion for restricted discretionary plantation activities. Given this gap in the NES-PF it is recommended that off-site effects such as traffic be managed by the District Plan either directly, or through general transportation provisions. Additionally, it may be worth investigating the potential to include some form of developer contribution requirement when providing notice of the intention to harvest to council. This would help fund roading repairs required as a result of forestry related transport.

9.2.12 Earthworks

The ODP states that any forestry related earthworks associated with the planting of trees are not covered by the Section 1 Earthworks Rules, but that these Rules do apply to any earthworks required for harvesting and creating tracks. This approach is in conflict with the NES-PF which states that any forestry related earthworks is a permitted activity at a territorial level. Given this, the Proposed District Plan will need to provide an exemption for this activity.

NES-PF Section	Rural Volume ODP	Territorial	Regional
Afforestation	2.2 Plantations	9-17	
Pruning and thinning to waste		19-permitted	20-21
Earthworks	1. Earthworks 2.2 Plantations	23-permitted	24-35
River Crossing	2.2 Plantations		37-49
Forestry Quarrying	1. Earthworks	51-54, 57, 60, 61	51-52, 54-56, 58-61
Harvesting		63, 64, 70	63-71
Mechanical land preparation		73- permitted	73-75
Replanting	2.2 Plantations	77—79, 81	77-78, 80-81
Slash Trap		83- permitted	83-92
Indigenous vegetation clearance	9.21 Activities	93-94	
Non-indigenous vegetation clearance		95	95
Discharges, disturbance, and diversions			97
Noise and vibration	9.16 Noise 9.17 Blasting and Vibration	98-99	
Dust	9.19 Dust	100-101	100-101
Indigenous bird nesting		102-103	102-103
Fuel storage and refuelling			104-105

Table 5: NES-PF Section Jurisdiction

10. PROPOSED OPTIONS

Based on the discussions within this report, the following are potential options for the management of amenity plantings, shelterbelts, NES-PF plantation forestry and non NES-PF plantation forestry.

Option 1: Status Quo

Given the age of the ODP, and the presence of the NES-PF the current provisions are out of date and no longer effective. Additionally some provisions are in conflict with or duplicate parts of the NES-PF and are required to be amended. Therefore, if part of the Plan needs to be amended, then this provides an opportunity to improve the other parts of the Plan.

Option 2: Amend the existing Plan.

With the presence of the NES-PF some changes from the Operative District Plan are mandatory. On top of the above mandatory changes, other amendments that should be considered for the Proposed District Plan include:

- Separating the different variables out of the general ‘amenity plantings’ definition. This can be achieved by either entirely removing woodlots, orchards, vineyards and other plantings of this nature out of the ‘amenity planting’ classification, and into another classification such as ‘Plantation’ or a yet to be decided on term to avoid confusion with the NES-PF ‘Plantation Forestry’ term. Another method which could be used is to only remove plantings (woodlots, vineyards, etc.) which are over one hectare in size (definition currently states four hectares) and place this into a ‘plantation’ definition or other proxy, and all plantings under the one hectare size to be included into the ‘amenity plantings’ classification.
- A new ‘plantation forestry’ definition should be included, which content mirrors that of the NES-PF. This could also be carried out with a ‘forestry quarrying’ definition as well.
- To provide an exception within the Proposed District Plan for forestry quarrying within any quarrying rules as this have been provided for under the NES-PF.
- To increase the maximum shelterbelt width as specified in the definition from 20 metres to 30 metres, or to have this quantum reflected in a permitted activity rule. This would make it consistent with the values in the NES-PF.
- Provisions addressing setbacks from waterways can be removed as this aspect is dealt with by the regional council.
- To maintain railroad and road crossing intersection line of sight restrictions across all planting types, with any distances to be reviewed and amended as required by the Transport Scope.
- To maintain height restrictions for all plantings when in close proximity to runway vectors, with any heights and locations being dealt with as part of the Airfields Scope.

- Regarding all plantings within the current Port Hills Summit Road Protection Area, they will continue to be classified as non-complying.
- Conditions for rules will continue to be similar to those that currently exist, these being but not limited to:
 - o Species restrictions.
 - o Whether the purpose is for beautification, and uses local native plants.
 - o If the planting is to manage wilding tree spread.
 - o For the purpose of soil conservation.
 - o If the plantings will be harvested.
 - o The type of planting in specific areas.
 - o The presence of particular landscape features (e.g. Cooper's Knob, Gibraltar Rock)
- Most activities will have a have a permitted, restricted discretionary, non-complying hierarchy depending on the type of planting, the location of the planting, and conditional matters. More specifically:
 - o Amenity plantings and Shelterbelts would generally be permitted unless located in an ONL, then depending on the characteristics of the activity would either be restricted discretionary or non-complying. Regarding locating within a VAL, this would be permitted, but subject to conditions.
 - o Other plantations would generally be permitted unless located in an ONL or VAL, then depending on the characteristics of the activity (e.g. orchards and vineyards may be less restricted than woodlots) would either be restricted discretionary or non-complying in an ONL. Activities within a VAL would be controlled. Generally if the plantings are native then the activity would be permitted.
 - o Plantation Forestry would generally be permitted unless located within a VAL where it would be controlled, or an ONL where it would be non-complying.
- Strong policy protection would need to accompany these activities classification, for instance an 'avoid' policy which seeks to prevent the establishment of any new plantations (depending on attributes) or plantations forestry in ONL areas, unless the particular area's landscape value has already been compromised by plantings. Additionally the plantings would not result in additional areas of the district having their view compromised.
- Rules dealing with Plantation Forestry in and around SNAs will be removed as this is covered by the NES-PF. It would be appropriate for similar rules as to those contained within the NES-PF be included in the Proposed District Plan addressing non-NES-PF plantings.
- Forestry exclusion zones should be removed from any future plans as they conflict with the NES-PF.
- Provisions controlling wilding tree spread would see the addition of the European Larch to the restricted species list, as an additional species of risk as indicated by the NES-PF. Species restrictions and any other wilding tree spread provisions would extend their area of control to the Malvern Hills Zone to reflect the area of containment specified in the pest management strategy. There is also the potential option to use the NES-PF wilding tree calculator and place this in the district plan to control non-NES-PF plantation forestry

plantings. However, the Consents Team would not wish for this to occur as this may make the provisions overly complex.

- A potential tie in with the Wildfire Risk Management Scope is to make it a requirement to obtain an approved fire management plan as a condition of establishing a permitted NES-PF plantation forestry or plantation activity.
- As transportation is not covered by the NES-PF, this aspect will need either specific provisions addressing the potential effect of transport movements from forestry sites, or to ensure that the general transport provisions cover this.
- Removal of all plantation forestry earthworks rules, but retain them in some form for other activities.
- As per the above, all noise and vibration rules dealing with plantation forestry will need to be removed, but retain them in some form for other activities. If a plantation forestry were to breach the permitted standard in the NES-PF then it becomes restricted discretionary. This classification may require the Proposed District Plan to include some matters of discretion or conditions. However, this aspect is best addressed via the Noise and Vibrations Scope.
- Any plantings within a noted cultural site should be restricted discretionary.

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12. APPENDIXES

APPENDIX A – DEFINITIONS

Operative Selwyn District Plan Definitions

Plantation
means any group of trees planted on a site, whether intended to be harvested or not, which are not classed as amenity plantings or shelterbelts. A plantation may be comprised of exotic or indigenous species and includes but is not limited to: forests planted for harvesting, conservation, soil erosion control, pest or wilding tree management, and any orchard, vineyard or woodlot which does not comply with the definition of amenity planting (refer also to the definition of Existing Plantation).
Amenity Planting
means any tree or trees planted in the immediate vicinity of a house or principal building, primarily to provide shelter or aesthetic appeal, or to visually screen any building as a means of mitigating potential adverse environmental effects. Amenity plantings include any woodlot, orchard or vineyard planted in close proximity to a house or principal building, primarily to supply the residents on-site. The total area of any woodlot, orchard or vineyard which is classed as amenity planting shall not exceed 4 ha.
Shelterbelt
means any trees planted primarily to provide shelter for stock, crops or buildings from the prevailing wind(s). Shelterbelts are not more than 20 metres in width and are not clear felled.
Ecological Significant Sites
Appendix 12 outlines the process the Council will use to identify whether a site is a “significant area of indigenous vegetation or habitat of indigenous fauna”, under section 6 (c) of the Resource Management Act.
Earthworks
include any disturbance, to, or excavation, removal or deposition of, soil, earth or any other mineral derived from the ground. For the purpose of <u>Rule 1, Earthworks</u> , do not include disturbing soil associated with the following activities: digging post-holes, cultivation, tending or landscaping gardens, planting trees or removing dead or diseased trees. It does include disturbance of earth associated with harvesting trees.

NES-PF Definitions

Plantation forest or Plantation forestry
: means a forest deliberately established for commercial purposes, being— (a) at <u>least 1 ha of continuous forest cover of forest species</u> that has been planted and has or will be harvested or replanted; and (b) includes all associated forestry infrastructure; but (c) <u>does not include</u> — (i) a <u>shelter belt of forest species</u> , where the tree crown cover has, or is likely to have, an average width of less than 30 m; or (ii) forest species in urban areas; or (iii) <u>nurseries and seed orchards</u> ; or (iv) <u>trees grown for fruit or nuts</u> ; or (v) long-term <u>ecological restoration planting</u> of forest species; or (vi) willows and poplars space planted <u>for soil conservation purposes</u>
Shelter belt
means a row or rows of trees or hedges planted to partially block wind flow
Afforestation
(a) means planting and growing plantation forestry trees on land where there is no plantation forestry and where plantation <u>forestry harvesting has not occurred within the last 5 years</u> ; but (b) does not include vegetation clearance from the land before planting

Earthworks

- (a) means disturbance of the surface of the land by the movement, deposition, or removal of earth (or any other matter constituting the land, such as soil, clay, sand, or rock) in relation to plantation forestry; and
- (b) includes the construction of forestry roads, forestry tracks, landings and river crossing approaches, cut and fill operations, maintenance and upgrade of existing earthworks, and forestry road widening and realignment; but
- (c) does not include soil disturbance by machinery passes, forestry quarrying, or mechanical land preparation

Forestry Quarrying

- (a) means the extraction of rock, sand, or gravel for the formation of forestry roads and construction of other plantation forestry infrastructure, including landings, river crossing approaches, abutments, and forestry tracks,—
- (i) within a plantation forest; or
- (ii) required for the operation of a plantation forest on adjacent land owned or managed by the owner of the plantation forest; and
- (b) includes the extraction of alluvial gravels outside the bed of a river, extraction of minerals from borrow pits, and the processing and stockpiling of material at the forest quarry site; but
- (c) does not include earthworks, mechanical land preparation, or gravel extraction from the bed of a river, lake, or other water body

Outstanding Natural Features and Landscapes

means natural landscapes and features that—

- (a) are identified in a regional policy statement, regional plan, or district plan as outstanding, however described; and
- (b) are identified in the policy statement or plan by their location, including by a map, a schedule, or a description of the area

Visual Amenity Landscape

means a landscape or landscape feature that—

- (a) is identified in a district plan as having visual amenity values, however described; and
- (b) is identified in the policy statement or plan by its location, including by a map, a schedule, or a description of the area

Indigenous vegetation

means vegetation that is predominantly vegetation that occurs naturally in New Zealand or that arrived in New Zealand without human assistance

Significant Natural Area

means an area of significant indigenous vegetation or significant habitat of indigenous fauna that—

- (a) is identified in a regional policy statement or a regional or district plan as significant, however described; and
- (b) is identified in the policy statement or plan, including by a map, a schedule, or a description of the area or by using significance criteria

APPENDIX B – RELEVANT DISTRICT PLAN PROVISIONS

VEGETATION AND ECOSYSTEMS — OBJECTIVES	
B1.2.2	No wilding tree spread in the high country.
VEGETATION AND ECOSYSTEMS — POLICIES	
Policy B1.2.2	Avoid irreversible damage to or destruction of significant ecological sites.
Policy B1.2.3	Ensure exotic tree species which are prone to wilding spread in the high country, are only planted with an effective plan to remove wilding trees prior to seeding.
Policy B1.2.4	To avoid, remedy or mitigate the adverse effects of wilding trees on the High Country landscape by actively supporting and encouraging coordinated action between Environment Canterbury, the Department of Conservation, University of Canterbury, LINZ, MAF, Forest Research Institute, Selwyn and Other District Councils, landholders and other interested parties to remove existing wilding trees and prevent further spread.
WATER — OBJECTIVES	
B1.3.6	Land use activities, and particularly earthworks, forestry, vegetation clearance and modification, and agricultural activities, are managed within catchments and riparian areas to protect water quantity and quality, aquatic habitat, and natural character.
WATER — POLICIES	
Policy B1.3.1	To pursue integrated, catchment based approaches to the management of the District's water resources in conjunction with the Regional Council.
Policy B1.3.4	Manage land to protect water resources and avoid, remedy, or mitigate adverse effects on surface water quality and quantity, and aquatic habitat from activities and development, including: Activities locating close to waterbodies; or Activities which may result in surface run-off of contaminants, or leaching of contaminants into groundwater.
Policy B1.3.5	Retain vegetation, in particular indigenous vegetation, along the riparian margins of the coast, rivers, lakes and wetlands. Where large quantities of indigenous vegetation are removed, ensure they are replaced with the same or similar species.
Policy B1.3.6	Encourage large scale earthworks, structures or tree planting to be setback from lakes or rivers, unless the activity must be located in the riparian margin.
Policy B1.3.8	Ensure any earthworks, flood protection works, structures or trees that must be located in riparian margins, or access by stock to riparian margins: Allow legal public access along the waterbody where appropriate if such access exists, or is desirable for recreation or Mahinga Kai; and Take precautions to prevent the introduction of weeds into areas where they are not already present; and Mitigate any adverse effects on the natural character of the waterbody; and Avoid adverse effects on trout and salmon habitats
Policy B1.3.10	Protection or enhancement of wetlands, their ecological integrity and functioning, their cultural amenity and recreational values, and the preservation of their natural character
OUTSTANDING NATURAL FEATURES AND LANDSCAPES – OBJECTIVES	
B1.4.1	The Outstanding Natural Features and Landscapes of the District are recognised and protected from inappropriate use and development while still enabling people to provide for their economic and social well-being.
OUTSTANDING NATURAL FEATURES AND LANDSCAPES — POLICIES	
Policy B1.4.1	Provide for the mix of physical and natural elements that are often contained in Outstanding Natural Features and Landscapes to continue.

Policy B1.4.2	Recognise that landscapes will change over time and allow changes to landscapes provided that they complement the landscape and retain its core values.
Policy B1.4.3	Control the effects of clearance of indigenous vegetation in the Outstanding Landscape Areas and encourage the restoration and enhancement of indigenous vegetation generally, and the mitigation of practices which are adversely impacting on indigenous vegetation cover.
Policy B1.4.5	Recognise the Port Hills as an Area of Outstanding Natural Landscape, and protect the following features: (a)The visibility of prominent landforms – ridges, spurs, rocky outcrops and volcanic dykes. (b)The summit and its outcrops such as Gibraltar Rock, and Cooper’s Knob, which form part of the ‘Ring of Seven Ladies.’
Policy B1.4.6	Avoid locating any dwelling, any other large structure or building, or any exotic plantation, shelterbelt or amenity planting in the area from 30.46m vertically below the Summit Rd to the summit of the Port Hills unless it must be located in that area and cannot reasonably be located elsewhere.
Policy B1.4.10	Recognise exotic plantations as part of the land uses on the Port Hills and, wherever practical, encourage these plantations to be: (a)Planted in patterns which reflect the contours of the landscape; (b)Planted in places which do not screen the visibility of the landforms listed in Policy B1.4.5 as viewed from any public road; and (c)Interspersed with other land uses and vegetation cover.
Policy B1.4.13	(a)Recognise Te Waihora/Lake Ellesmere and its margins as an Outstanding Natural Feature; and (b)Ensure that any structures, earthworks or tree planting located along the margins of the lake, or any structure located across the surface of the lake do not detract from its natural character or the views across the lake or from the lake across the Plains; and (c)Control the clearance of existing areas of indigenous vegetation and wetlands, and encourage the restoration and enhancement of these areas in and around the vicinity of the lake.
Policy B1.4.15	Recognise the following Areas of Outstanding Landscape and Outstanding Natural Features within the Malvern Hills area, as shown on the Planning Maps: The upper slopes of the Russell Range; The south face of Flagpole Hill; The ridge of the Rockwood Range; The rock outcrops at Glenroy.
Policy B1.4.18	Avoid locating plantations (exotic or indigenous) in the Areas of Outstanding Landscape in the Malvern Hills, unless it is the only practical option to manage soil erosion or the spread of plant pests on that land.
Policy B1.4.19	If a plantation is planted under Policy B1.4.18, ensure it is planted to reflect landform patterns and shapes and maintain the landscape values of the area as much as practical.
Policy B1.4.21	Recognise and protect the Areas of Outstanding Landscape in the high country, shown on the Planning Maps, and the following Outstanding Natural Features and sites with landscape significance to Tāngata whenua: Moana Rua/Lake Pearson and St Bernard Hill Ribbonwood Fan Red Hill and Red Lakes Torlesse Range Fighting Hill Woolshed Hill

	Gorge Hill, Prebble Hill and Flock Hill formation Castle Hill.
Policy B1.4.22	Recognise pastoralism, outdoor recreational activities and associated pasture improvements, shelter belts and small-scale earthworks and structures, as appropriate activities in Areas of Outstanding Landscape in the high country.
Policy B1.4.26	Control forestry planting in the high country generally and avoid exotic tree planting in the Areas of Outstanding Landscape and the Forestry Exclusion Areas in the high country, unless it is the only practical option to manage soil erosion, wilding tree spread or the spread of plant pests on that site.
Policy B1.4.27	If an exotic plantation is planted under Policy B1.4.26, ensure it is planted to reflect landform patterns and shapes and maintain the landscape values of the area as much as practical.
Policy B1.4.29	Recognise Fighting Hill as a site which has special landmark significance to Tāngata whenua and as a site which is susceptible to plant pests, and encourage future management of that site which accommodates the interests of both the landholder and Tāngata whenua, wherever practical.
Policy B1.4.31	Recognise the surrounding high country area as a backdrop to the Areas of Outstanding Landscape and maintain the rural character of that area by: (a) Keeping residential density and site coverage with buildings, at a low level which maintains the predominance of vegetation cover and the sense of sparse and isolated pockets of human settlement which is characteristic of the high country. (b) Encourage new dwellings and other principal buildings to be located in clusters in the high country, preferably in existing clusters, where practical. Where this is impractical, ensure the location of any new building node is managed in accordance with Policy B1.4.24 . (c) Encouraging new buildings and structures to be constructed from material with low reflectance values. (d) Wherever practical, encouraging plantations to be planted to reflect landform patterns and shapes; and generally in quantities which maintain the predominance of a pastoral landscape.
Policy B1.4.32	Encourage buildings, earthworks, shelterbelts and plantations to be designed and sited to maintain the panoramic views of the Upper Waimakariri Basin from along SH 73 and the Midland Railway.
Policy B1.4.33	Keep the area identified on the planning maps at the southern end of Moana Rua/Lake Pearson free of structures and plantations (exotic or indigenous) to maintain the view of the lake from SH 73.

Relevant Rural Volume Rules

2.1 Shelterbelts and Amenity Planting		
	Rule	Summary of Provision
Permitted		
2.1.1	The planting of any trees for amenity planting, shelterbelts shall be a permitted activity if all of the following conditions are met:	
	2.1.1.1	In the areas shown on the Planning Maps as the High Country, the following tree species are not planted: Lodgepole pine (<i>Pinus contorta</i>) Scots pine (<i>Pinus sylvestris</i>)

		<p>Corsican pine (<i>Pinus nigra</i>)</p> <p>Douglas fir (<i>Pseudotsuga menziessi</i>)</p> <p>Mountain pine (<i>Pinus mugo/unaciata</i>)</p>
	2.1.1.2	In the area shown on the Planning Maps as the High Country, the tree(s) are not located within any area also shown on the Planning Maps as an Area of Outstanding Landscape or a Forestry Exclusion Area
	2.1.1.3	<p>In the area shown on the Planning Maps as the High Country, any shelterbelt planted on land adjoining SH 73 or the Midland Railway is either:</p> <p>(a) A maximum of two rows in width and planted perpendicular to the road boundary; or</p> <p>(b) Set back a <u>minimum distance of 300m from the road boundary</u>;</p>
	2.1.1.4	<p>The tree(s) are planted at least:</p> <p>(a) 20m from the edge of any waterbody listed in Appendix 17; and</p> <p>(b) 10m from the edge of any other waterbody (excluding aquifers).</p>
		<p>Note: For the purposes of Rule 2.1.1.4, the edge of any lake or wetland is measured from:</p> <p>The edge of the space of water which the lake or wetland covers at its annual highest level without exceeding its margin; or</p> <p>If the lake level is controlled by artificial means, the space of land which the waters of the lake or wetland cover at its maximum permitted operating level.</p> <p>The edge of any other waterbody is measured from the edge of the bed of the river. The bed is defined in section 2 of the Act as- <i>“the space of land which the waters of the river cover at its fullest flow, without overtopping its banks.”</i></p>
	2.1.1.5	<p>No tree shades:</p> <p>(a) Any part of the carriageway of any road between 1000 and 1400 hours (inclusive) on the shortest day of any calendar year; and</p> <p>(b) Any property under different ownership between 1000 and 1400 hours (inclusive) on the shortest day of any calendar year;</p>
	2.1.1.6	No tree is planted so that on maturity it encroaches within the line of sight for any railway crossing or road intersection, as shown in <u>Appendix 11</u> .
	2.1.1.7	Any tree is planted and maintained so that it does not encroach within the height restrictions for West Melton Airfield or Hororata Domain, as shown in <u>Appendix 19</u> .

	2.1.1.8	In any area listed in Appendix 5 and shown on the Planning Map as a Silent File Area, any disturbance of soil or earth by the tree planting(s) is limited to disturbance of soil over areas and to depths where that soil has been previously disturbed by cultivation, planting (trees, pasture or crops), building or earthworks;
	2.1.1.9	In the area listed in Appendix 5 and shown on the Planning Maps as Wāhi Taonga Management Area C39(a), any disturbance of soil or earth by the tree planting(s) is limited to the disturbance of soil over areas where that soil has been previously disturbed by tree plantings. Any disturbance within those areas shall be limited to a maximum depth of 20cm;
	2.1.1.10	In any area listed in Appendix 5 and shown on the Planning Maps as a Wāhi Taonga Site or any Wāhi Taonga Management Area not listed in 2.1.1.9, the tree planting(s) do not involve the disturbance, damage to, removal or destruction of any object, artefact or other symbol of pre-European settlement, occupation or use of that site;
	2.1.1.11	In the area shown on the Planning Maps as the Port Hills Zone, the tree(s) are not located within the Summit Road Protection Area as defined in Appendix 24 .
2.1.2	Planting any tree species which does not comply with Rule 2.1.1.1 [tree type] shall be a restricted discretionary activity.	
2.1.3	Under Rule 2.1.2 , the Council shall restrict its discretion to consideration of:	
	2.1.3.1	The potential for wilding spread from the species planted on that site;
	2.1.3.2	The effectiveness of any proposed wilding management plan;
	2.1.3.3	The design and siting of any amenity plantings, shelterbelts or visual screening in the High Country (outside the area of Outstanding Landscape) to: (a) Reflect and complement the landform patterns and shapes of the landscape; and (b) Maintain a landscape where plantations are carefully negotiated with existing land uses, so as to avoid a continuously forested landscape; and (c) Maintain panoramic views of the Upper Waimakariri Basin from SH 73, where these views exist by ensuring plantations are setback from the road, Midland Railway Line and plantation blocks are spaced to maintain views between them.
	2.1.3.4	Whether the area contains any “Significant Ecological sites” worthy of protection under the criteria listed in Appendix 12, and if so, (a) Whether the plantation may affect the site; and (b) How the site may be protected.

	2.1.3.5	Any potential adverse effects of planting the area on any rainfed wetland or tarn and how those effects may be mitigated.
	2.1.3.6	Approval of a fire management plan.
	2.1.3.7	Any positive effects which may offset any adverse effects.
	2.1.3.8	Any monitoring or review conditions.
		Note: In using its discretion under <u>Rule 2.1.3</u> , the Council will consider the recommendations in N.J. Ledgard & E. R. Langer (1999) "Wilding Prevention – Guidelines for Minimising the Risk of Unwanted Wilding Spread from New Plantings of Introduced Conifers", where appropriate.
2.1.4	Planting any tree in a position which does not comply with <u>Rule 2.1.1.4</u> shall be a restricted discretionary activity.	
2.1.5	Under <u>Rule 2.1.4</u> the Council shall restrict its discretion to consideration of the effects of the proposed planting as to shading.	
2.1.6	Any tree planting which does not comply with <u>Rule 2.1.1.5</u> shall be a restricted discretionary activity.	
2.1.7	Under <u>Rule 2.1.6</u> the Council shall restrict its discretion to consideration of:	
	2.1.7.1	The effects of the proposed shelterbelt on restricting views of the Upper Waimakariri Basin from SH 73 or the Midland Railway including (but not limited to); (a) Whether expansive views either side of the shelterbelt would remain; (b) Whether the shelterbelt will screen the view of any lake, Silent File area, Wāhi Taonga Site, Wāhi Taonga Management Area, Mahinga Kai Site, or any area of Outstanding Landscape.
	2.1.7.2	The length of the shelterbelt;
	2.1.7.3	The need to provide effective stock or crop shelter; and
	2.1.7.4	Any positive effects which may offset any adverse effects.
2.1.8	Any activity which does not comply with <u>Rule 2.1.1.8</u> , <u>2.1.1.9</u> or <u>2.1.1.10</u> shall be a restricted discretionary activity	
2.1.9	Under <u>Rule 2.1.8</u> the Council shall restrict its discretion to all of the following matters:	
	2.1.9.1	Any inappropriate disturbance or other potential adverse effects on any site of significance within a Silent File area, as advised by local Rūnanga;
	2.1.9.2	In the area listed in <u>Appendix 5</u> and shown on the Planning Maps as Wāhi Taonga Management Area C39(a), any inappropriate disturbance or other potential adverse effects on any site of significance, object, remnant or artefact, as advised by local Rūnanga and the New Zealand Historic Places Trust Pouhere Taonga;
	2.1.9.3	In any area listed in <u>Appendix 5</u> and shown on the Planning Maps as a Wāhi Taonga Site or any Wāhi Taonga Management Area not listed in 2.1.9.2, any damage to, destruction or

		removal of, any object, remnant or artefact, as advised by local Rūnanga;
	2.1.9.4	Other than in Wāhi Taonga Management Area C39(a), any potential costs to the landholder of not being able to undertake the proposed activity on that site;
	2.1.9.5	Any alternative options available to undertake the activity in another form or on another site and the costs and practicality of these options
	2.1.9.6	Any positive effects which may offset any adverse effects; and
	2.1.9.7	Any monitoring or review conditions.
2.1.10	Any shelterbelt or amenity planting that does not comply with <u>Rule 2.1.1.2</u> shall be a discretionary activity if any one of the following standards and terms is met:	
	2.1.10.1	The shelterbelt or amenity planting is planted for landscape enhancement or beautification, using indigenous species which are found in that area;
	2.1.10.2	The shelterbelt or amenity planting is planted for soil conservation purposes;
	2.1.10.3	The shelterbelt or amenity planting is planted to manage the spread of wilding trees or exotic plant pests and the applicant has demonstrated that there is no practical alternative management option for that site;
	2.1.10.4	The planting is a shelterbelt and is located within a Forestry Exclusion Area; or
	2.1.10.5	The planting is amenity planting and is located within an area of Outstanding Landscape in the High Country.
2.1.11	Any activity which does not comply with <u>Rule 2.1.1.3</u> shall be a discretionary activity.	
2.1.12	Any activity which does not comply with <u>Rule 2.1.1.6</u> , <u>2.1.1.7</u> , <u>2.1.1.11</u> or <u>2.1.10</u> shall be a non-complying activity. ^{PC28}	

2.2 Plantations

	Rule	Summary of Provision
Permitted		
2.2.1	The planting of any plantation shall be a permitted activity if all of the following conditions are met:	
	2.2.1.1	The plantation is not located in the areas shown on the Planning Maps as the Port Hills, Malvern Hills, High Country or the Visual Amenity Landscape on the Port Hills, excluding vineyards and orchards located within the Visual Amenity Landscape;
	2.2.1.2	In any area listed in <u>Appendix 5</u> and shown on the Planning Maps as a Silent File Area, any disturbance of soil or earth by the plantation is limited to the disturbance of soil over areas and to depths where that soil has been previously disturbed by

		cultivation, planting (trees, pasture or crops), building or earthworks;
	2.2.1.3	In the area listed in Appendix 5 and shown on the Planning Maps as Wāhi Taonga Management Area C39(a), any disturbance of soil or earth by the plantation is limited to the disturbance of soil over areas where that soil has been previously disturbed by tree planting. Any disturbance within those areas shall be limited to a maximum depth of 20cm;
	2.2.1.4	In any area listed in Appendix 5 and shown on the Planning Maps as a Wāhi Taonga Site or any Wāhi Taonga Management Area not listed in 2.2.1.3, the plantation does not involve the disturbance, damage to, removal or destruction of any object, artefact or other symbol of pre-European settlement, occupation or use of that site;
	2.2.1.5	Any tree is planted at least: (a) 20m from the edge of any waterbody listed in Appendix 17 ; and (b) 10m from the edge of any other waterbody (excluding aquifers) Provided that Rules 2.2.1.5 (a) and 2.2.1.5 (b) do not apply to any trees planted for the purpose of bank stabilisation or prevention of soil erosion.
	2.2.1.6	No tree shades: (a) Any part of the carriageway of any road between 1000 and 1400 hours (inclusive) on the shortest day of any calendar year; and (b) Any property under different ownership between 1000 and 1400 hours (inclusive) on the shortest day of any calendar year.
	2.2.1.7	No tree of the plantation is planted so that on maturity it encroaches within the line of sight for any railway crossing or road intersection, as shown in Appendix 11 ; and
	2.2.1.8	Any plantation is planted and maintained so that it does not encroach within the height restrictions for West Melton Airfield or Hororata Domain, as shown in Appendix 19 .
Restricted Discretionary		
2.2.2	The planting or harvesting of plantations in areas shown on the Planning Maps as the Port Hills (excluding the Summit Road Protection Areas), Malvern Hills, High Country or the Visual Amenity Landscape on the Port Hills shall be a restricted discretionary activity if all of the following standards and terms are met:	
	2.2.2.1	The plantation is not located within any area shown on the Planning Maps as an Area of Outstanding Landscape, excluding the Port Hills, or a Forestry Exclusion Area in the High Country; and

	2.2.2.2	In the area shown on the Planning Maps as the High Country, trees planted do not include any of the following species: Lodgepole pine (<i>Pinus contorta</i>) Scots pine (<i>Pinus sylvestris</i>) Corsican pine (<i>Pinus nigra</i>) Douglas fir (<i>Pseudotsuga menziessi</i>) Mountain pine (<i>Pinus mugo/unaciata</i>)
2.2.3	Under Rule 2.2.2 the Council shall restrict its discretion to consideration of:	
	2.2.3.1	The design and siting of any plantation on the Port Hills to: (a) Maintain the uninterrupted skyline of the summit of the Port Hills as viewed from the Summit Road or any road on the Plains; (b) Avoid screening views of existing landforms and natural features, including Gibraltar Rock and Cooper's Knob from the Summit Road or any road on the Plains; (c) Avoid screening views from the Summit Road; (d) Reflect and complement the landform patterns and shapes of the landscape and the avoidance of artificial or unnatural lines; (e) Maintain diversity in the vegetation cover on the Port Hills, by encouraging plantations to be interspersed with other land uses, where practical; (f) Avoid, remedy or mitigate the potential for scarring of the landscape from earthworks and harvesting activities; (g) Avoid or mitigate any potential effects on indigenous vegetation and waterways; (h) Provide for the re-vegetation of any earthworks; (i) Avoid, remedy or mitigate the scale and extent of the proposed plantation where there are effects on amenity values, including any cumulative effects taking into consideration existing or consented plantations on an adjoining site; (j) To avoid, remedy or mitigate the visibility of any tracks or roads required for the management or harvesting of the plantation, having regard to existing contours.
	2.2.3.2	The design and siting of any plantation on the Malvern Hills to: (a) Maintain the distinctiveness of the skyline and ridges of the Malvern Hills; (b) Avoid screening the rocky outcrops at Glenroy or the volcanic ridge from Mt Misery to Windwhistle, as viewed from any road; and (c) Reflect and complement the landform patterns and shapes of the landscape; The design and siting of any plantation in the High Country (outside the area of Outstanding Landscape) to: (a) Reflect and complement the landform patterns and shapes of the landscape;

		(b) Maintain a landscape where plantations are carefully integrated with existing land uses, so as to avoid any semblance of continuous afforestation; and (c) Maintain panoramic views of the Upper Waimakariri Basin from SH 73, where these views exist, by ensuring plantations are setback from the road and plantation blocks are spaced to maintain views between them.
	2.2.3.3	Whether the area contains any “Significant Ecological sites” worthy of protection under the criteria listed in Appendix 12; and if so, (a) Whether the plantation may affect the site; and (b) How the site may be protected
	2.2.3.4	Any potential adverse effects of planting the area on any rain fed wetland or tarn on the site and how those effects may be mitigated;
	2.2.3.5	Any measures to mitigate potential soil erosion from earthworks associated with access tracks or harvesting;
	2.2.3.6	Any effects of the proposed mode and route of transport, and any improvements required to the road network to allow access into and out of the site for planting or harvesting trees.
	2.2.3.7	The timing and conditions for replanting or rehabilitating the site and surrounding area once the plantation is harvested, and any staging of the site rehabilitation for harvesting a large plantation;
	2.2.3.8	Approval of a fire management plan;
	2.2.3.9	Any positive effects which may offset any adverse effects; and
	2.2.3.10	Any monitoring or review conditions.
2.2.4	Any plantation which does not comply with <u>Rule 2.2.2.2</u> [tree type] shall be a restricted discretionary activity.	
2.2.5	Under Rule 2.2.4, the Council shall restrict its discretion to consideration of:	
	2.2.5.1	All of the matters listed in <u>2.2.3.1</u> to <u>2.2.3.11</u> ;
	2.2.5.2	The potential for wilding spread from the particular species planted; and
	2.2.5.3	The effectiveness of any proposed wilding management plan
		Note: Under <u>Rule 2.2.4</u> the Council retains its discretion to identify affected parties or require notification of the resource consent application, pursuant to the Act. In using its discretion the Council shall consider the recommendations in N.J. Ledgard and E. R. Langer (1999) “Wilding Prevention – Guidelines for Minimising the Risk of Unwanted Wilding Spread from New Plantings of Introduced conifers”, where appropriate.
2.2.6	Any activity which does not comply with <u>Rules 2.2.1.2</u> [silent file], <u>2.2.1.3</u> [Wāhi Taonga] or <u>2.2.1.4</u> [Wāhi Taonga] shall be a restricted discretionary activity.	
2.2.7	Under <u>Rule 2.2.6</u> , the Council shall restrict its discretion to the consideration of:	

	2.2.7.1	Any inappropriate disturbance or other potential adverse effects on any site of significance within a Silent File area, as advised by local Rūnanga;
	2.2.7.2	In the area listed in Appendix 5 and shown on the Planning Maps as Wāhi Taonga Management Area C39(a), any inappropriate disturbance or other potential adverse effects on any site of significance, object, remnant or artefact, as advised by local Rūnanga and the New Zealand Historic Places Trust Pouhere Taonga;
	2.2.7.3	Any damage to, destruction or removal of, any object, remnant or artefact contained within a Wāhi Taonga Site or any Wāhi Taonga Management Area not listed in 2.2.7.2, as advised by local Rūnanga;
	2.2.7.4	Other than in Wāhi Taonga Management Area C39(a), any potential costs to the landholder of not being able to undertake the proposed activity on that site;
	2.2.7.5	Any alternative options available to undertake the activity in another form or on another site and the costs and practicality of these options;
	2.2.7.6	Any positive effects which may offset any adverse effects; and
	2.2.7.7	Any monitoring or review conditions
2.2.8	Any plantation which does not comply with <u>Rule 2.2.1.6</u> [shading] shall be a restricted discretionary activity.	
2.2.9	Under <u>Rule 2.2.8</u> the Council shall restricts its discretion to consideration of effects of the proposed planting as to shading	
Discretionary		
2.2.10	Any plantation which does not comply with <u>Rule 2.2.2.1</u> [not in an ONL] shall be a discretionary activity if any one of the following standards and terms is met:	
	2.2.10.1	The plantation is planted for landscape enhancement or beautification, using indigenous species which are found in that area, and will not be harvested;
	2.2.10.2	The plantation is planted for soil conservation purposes and will not be harvested; or
	2.2.10.3	The plantation is planted to manage the spread of wilding trees or exotic plant pests and the applicant has demonstrated that there is no practical alternative management option for that site.
2.2.11	Any plantation which does not comply with <u>Rule 2.2.1.5</u> [Water edge] shall be a discretionary activity.	
Non-Complying		
2.2.12	Any plantation which does not comply with <u>Rule 2.2.1.7</u> [line of sight] shall be a non-complying activity.	
2.2.13	Any plantation which does not comply with <u>Rule 2.2.1.8</u> [height in airfield] shall be a non-complying activity.	

2.2.14	Any plantation located within an area of Outstanding Landscape, excluding the Port Hills, or a Forestry Exclusion Area in the High Country which does not comply with <u>Rule 2.2.10</u> [not comply with 2.2.2.1 [ONL area]] shall be a non-complying activity.
2.2.15	Any plantation located within the Summit Road Protection Areas defined in <u>Appendix 24</u> [ONL area] shall be a Non-Complying Activity.

APPENDIX C– NES-PLANTATION FORESTRY REVIEWED PROVISIONS

Provisions for Territorial Authorities

NES-Plantation Forestry		
		Summary of Provision
Part 1 Preliminary provisions		
6	Rules may be more stringent than these regulations:	
	6(2)	<p>Matters of national importance</p> <p>A rule in a plan may <u>be more stringent</u> than these regulations if the rule recognises and provides for the protection of—</p> <p>(a) outstanding natural features and landscapes from inappropriate use and development; or</p> <p>(b) significant natural areas</p>
Part 2 Regulation of plantation forestry activities		
<u>Subpart 1-Afforestation</u>		
9	Permitted activity	
	9(1)	Afforestation is a permitted activity if regulations 10, 11, 12, 13, and 14(1) and (2) are complied with.
10	Permitted activity condition: notice	
	10(1)	<p>The relevant regional council and territorial authority must be given written notice of—</p> <p>(a) the location where the afforestation will occur and the proposed setbacks (including a description of how these were calculated); and</p> <p>(b) the dates on which the afforestation is planned to begin and end.</p>
	10(2)	Notice under subclause (1) must be given <u>at least 20 and no more than 60 working days</u> before the date on which the afforestation is planned to begin.
11	Permitted activity condition: wilding tree risk and control	
	11(1)	<p>A wilding tree risk calculator score must be—</p> <p>(a) applied to any land on which afforestation of a <u>conifer species</u> is proposed; and</p> <p>(b) calculated in accordance with the wilding tree risk guidelines by a suitably competent person; and</p> <p>(c) completed no more than 6 months before notice is given under regulation 10</p>
	11(2)	<p>In subclause (1), suitably competent person means a person with—</p> <p>(a) tertiary qualifications in silviculture and forest ecology and at least 2 years' experience in the field of silviculture; or</p> <p>(b) at least 5 years' experience in silviculture that includes forest establishment.</p>

	11(3)	Afforestation of a conifer species must not be carried out in an area with a wilding tree risk calculator score of 12 or more.
	11(4)	The relevant regional council and territorial authority must be given a copy of the wilding tree risk calculator calculation sheet and score required under subclause (1) at the same time as notice is given under regulation 10.
	11(5)	All wilding conifers must be <u>removed at least every 5 years</u> after afforestation where established in wetlands or significant natural areas— (a) on the same property on which the afforestation activity occurs; and (b) on <u>any other adjacent properties</u> under the same ownership or management as that of the property on which the afforestation activity occurs.
12	Permitted activity condition: significant natural areas and outstanding features and landscapes	
		<u>Afforestation must not occur</u> within a significant natural area or an outstanding natural feature or landscape.
13	Permitted activity condition: visual amenity landscapes	
		<u>Afforestation must not occur</u> within a visual amenity landscape <u>if rules</u> in the relevant plan restrict plantation forestry activities within that landscape.
14	Permitted Activity: setbacks	
	14(1)	Afforestation <u>must not occur</u> — (a) within <u>10 m of the boundary of an adjoining property</u> that is not owned by the owner of the plantation forest or the land it is located on (unless that adjoining property is also plantation forest); or (b) except in the case of a dwelling located on the same property as the proposed plantation forestry to be afforested, within the greater of— (i) <u>40 m of a dwelling</u> ; and (ii) a distance where the forest species when fully grown would <u>shade a dwelling between 10 am and 2 pm</u> on the shortest day of the year, except where topography already causes shading; or (c) within <u>30 m of the boundary of land zoned in a district plan as a papakāinga or an urban area</u> ; or (d) within <u>10 m of a significant natural area</u> .
	14(2)	Afforestation <u>must not occur</u> where a plantation forest tree, when <u>fully grown</u> , could shade a paved public road between 10 am and 2 pm on the shortest day of the year, except where the topography already causes shading.
15	Controlled activity	

	15(1)	Afforestation is a controlled activity if regulation 10 is not complied with
	15(2)	For the purpose of subclause (1), control is reserved over the information on the activity required to be given in the notice under regulation 10(1)
	15(3)	Afforestation is a controlled activity if regulation 13 is not complied with
	15(4)	For the purpose of subclause (3), control is reserved over the effects on the visual amenity values of the visual amenity landscape, including any future effects from plantation forestry activities
16	Restricted discretionary activity	
	16(1)	Afforestation is a restricted discretionary activity if regulation 11, 12 , or 14(1) or (2) is not complied with.
17	Matters to which discretion is restricted	
	17(1)	If afforestation is a restricted discretionary activity under regulation 16(1) or (2)(a) for failing to comply with regulation 11 or 12, discretion is restricted to— (a) the level of <u>wilding tree risk</u> : (b) the <u>mitigation</u> proposed to restrict wilding conifer spread, including the species to be planted: (c) the effects on the <u>values of the significant natural area or outstanding natural feature or landscape</u> : (d) the <u>information and monitoring</u> requirements.
	17(2)	If afforestation is a restricted discretionary activity under regulation 16(1) for failing to comply with regulation 14(1) or (2), discretion is restricted to— (a) <u>the effects on adjacent</u> landowners, dwellings, land zoned in a district plan as a papakāinga, and urban areas: (b) <u>the effects of shading</u> , including icing on a paved public road: (c) the effects on the <u>values of the significant natural area</u> : (d) the <u>information and monitoring</u> requirements.
<u>Subpart 2-Pruning and thinning to waste</u>		
19	Permitted activity	
	19(1)	Pruning and thinning to waste is a permitted activity [territorial authority]
<u>Subpart 3-Earthworks</u>		
23	Permitted activity: territorial authority	
		Earthworks are a permitted activity
<u>Subpart 5-Forestry Quarrying</u>		
51	Permitted activity	
	51(1)	Forestry quarrying is a permitted activity if regulations 52(1) and (2), 53, 54(1) and (2) and 57 are complied with

52	Permitted activity conditions: notice	
	52(1)	If the volume extracted from a forest quarry <u>exceeds 200 m³ in any calendar year</u> , the relevant regional council and territorial authority must be given written notice of— (a) the place where the forestry quarrying is to be carried out and the proposed setbacks (including a description of how they were calculated); and (b) the dates on which the forestry quarrying is planned to begin and end.
	52(2)	Notice under subclause (1) must occur— (a) at least 20 and no more than 60 working days before the date on which the forestry quarrying is planned to begin; or (b) annually, in the case of ongoing forestry quarrying.
53	Permitted activity conditions: visibility	
		A forest quarry that is <u>within 2 km of a dwelling under different ownership or management</u> from that of the land on which the quarry is located and is visible from the dwelling— (a) must not quarry more than 5 000 m ³ of material within a 5-year period; and (b) must <u>not be closer than 500 m from any other quarry</u> at which forestry quarrying exceeds 200 m ³ per calendar year.
54	Permitted activity conditions: setbacks	
	54(1)	New forestry quarrying must not be undertaken <u>within 500 m</u> of— (a) a dwelling under different ownership or management from that of the land on which the forest quarry is located; or (b) the boundary of an urban area or a papakāinga.
	54(2)	Excavated overburden must not be deposited within 20 m of an adjoining property under different ownership or management from that of the land on which the forest quarry is located.
57	Permitted activity conditions: traffic management	
		Forestry quarry material must not be transported on a public road unless— (a) quarry material is being transported to a property under the same ownership or management as that of the plantation forest; and (b) debris and soil is removed from wheels of vehicles transporting quarry material before vehicles exit the property on which the quarry is located; and (c) the material is transported 2 km or less; and (d) vehicles carrying quarry material do not travel through any area zoned in a district plan or proposed district plan as— (i) an urban area; or

		(ii) primarily for rural residential or country living activities (however described).
60	Controlled Activity	
	60(1)	Forestry quarrying is a controlled activity if regulation 52(1) or (2) is not complied with.
	60(2)	Matters over which control is reserved: For the purpose of subclause (1), control is reserved over the information on the activity required by the notice under regulation 52(1).
61	Restricted discretionary activity	
	61(1)	Forestry quarrying is a restricted discretionary activity if regulation 53, 54(1) or (2), or 57 is not complied with
	61(2)	Matters to which discretion is restricted For the purpose of subclause (1), discretion is restricted to— (a) the timing, location, and duration of the activity: (b) the visual, dust, and noise effects on adjoining properties: (c) the dimensions of cut and fill: (d) the effects on traffic and public roading infrastructure: (e) the effects on adjacent landowners, dwellings, urban areas, and papakāinga: (f) the information and monitoring requirements.
Subpart 6-Harvesting		
63	Permitted activity	
	63(1)	Harvesting is a permitted activity if regulation 64(1) and (2) is complied with.
64	Permitted activity conditions: notice	
	64(1)	The relevant regional council and territorial authority must be given written notice of— (a) the place where harvesting will be carried out; and (b) the dates on which the harvesting is planned to begin and end.
	64(2)	Notice under subclause (1) must occur— (a) at <u>least 20 and no more than 60 working days before</u> the date on which the harvesting is planned to begin; or (b) a minimum of 2 days before the date on which harvesting required for salvage operations is planned to begin; or (c) <u>annually, in the case of ongoing harvesting operations.</u>
70	Controlled activity	
	70(1)	Harvesting is a controlled activity if regulation 64(1) or (2) is not complied with [at territorial authority level]
	70(2)	For the purpose of subclause (1), control is reserved over the information on the activity required by the notice under regulation 64(1). [matters which control is reserved]

<u>Subpart 7-Mechanical land preparation</u>		
	73(1)	Mechanical land preparation is a permitted activity [territorial authority level]
<u>Subpart 8-replanting</u>		
77	Permitted activity	
	77(1)	Replanting is a permitted activity if regulations 78(1) and 79 are complied with.
78	Permitted activity conditions: setbacks	
	78(1)	Replanting must not occur in any area closer than the stump line to an adjacent significant natural area.
79	Permitted activity conditions: wilding tree risk and control	
	79(1)	A wilding tree risk calculator score must be completed— (a) for any land on which replanting of a conifer species will occur, if that conifer species is different from the trees most recently harvested on the land; and (b) in accordance with the wilding tree risk guidelines by a suitably competent person; and (c) no more than 6 months before replanting described in paragraph (a) is carried out.
	79(2)	In subclause (1), suitably competent person means a person with— (a) tertiary qualifications in silviculture and forest ecology and at least 2 years' experience in the field of silviculture; or (b) at least 5 years' experience in silviculture that includes forest establishment.
	79(3)	Replanting of a conifer species must not be carried out if it is— (a) a different species from the trees most recently harvested on the land proposed for replanting; and (b) in an area with a wilding tree risk calculator score of 12 or more.
	79(4)	Subclause (3) does not apply if the trees most recently harvested on the same land proposed for replanting had a wilding tree risk calculator score— (a) completed in accordance with subclauses (1)(b) and (2); and (b) the same as or higher than that of the species proposed to be replanted
	79(5)	A copy of the wilding tree risk calculator calculation sheet and score required under subclause (1) must be given to the relevant regional and territorial authority on request.
	79(6)	All wilding conifers must be removed before replanting begins, and every 5 years following replanting, where established in wetlands or significant natural areas—

		(a) on the same property on which the replanting activity occurs; and (b) on any other adjacent properties under the same ownership or management as that of the property on which the replanting activity occurs.
81	Restricted discretionary activity	
	81(1)	Replanting is a restricted discretionary activity if regulation 78(1) or 79 is not complied with. [territorial authority level]
	81(2)	Matters to which discretion is restricted For the purpose of subclause (1), discretion is restricted to— (a) the timing, location, and species; (b) the effects of replanting and future plantation forestry activities on significant natural areas; (c) the mitigation actions to restrict wilding conifer spread; (d) the information and monitoring requirements.
Subpart 9-Ancillary activities		
83	Permitted activity [territorial authority level]	
	83(1)	Constructing, installing, using, maintaining, or removing a slash trap on land, including land within the riparian zone, is a permitted activity.
<u>Indigenous vegetation clearance</u>		
93	Permitted activity: territorial authority	
	93(1)	Vegetation clearance of indigenous vegetation associated with a plantation forestry activity is a permitted activity if subclause (2), (3), or (4) is complied with and the clearance does not occur within a significant natural area, except that a clearance of a forestry track described in subclause (2)(d) may occur in a significant natural area.
	93(2)	Vegetation clearance of indigenous vegetation may occur within an area of a plantation forest if the indigenous vegetation— (a) has grown up under (or may have overtopped) plantation forestry; or (b) is within an area of a failed plantation forest that failed in the last rotation period (afforestation to replanting) of the plantation forestry; or (c) is within an area of plantation forest that has been harvested within the previous 5 years; or (d) is overgrowing a forestry track, if the track has been used within the last 50 years.
	93(3)	Vegetation clearance of an area of indigenous vegetation located within or adjacent to a plantation forest may be carried out if— (a) the area of indigenous vegetation and the plantation forest are held in the same ownership; and

		(b) the cumulative clearance does not exceed 1 ha or 1.5% (whichever is the greater) of the total area of indigenous vegetation within or adjacent to the plantation forest in which the clearance is proposed, but excluding any vegetation clearance under subclause (2).
	93(4)	Vegetation clearance of indigenous vegetation that is incidental damage may occur in an area that is within or adjacent to any plantation forest, including a riparian zone.
	93(5)	In this regulation, incidental damage means— (a) damage where the ecosystem will recover to a state where it will be predominantly indigenous vegetation species common to the ecological district within 36 months of the occurrence of the damage; or (b) damage to indigenous vegetation canopy trees that are greater than 15 m in height, where the damage does not exceed— (i) 30% of the crown of any indigenous vegetation canopy trees and no more than 30% of those trees per 100 m of the indigenous vegetation perimeter length; or (ii) 10 m in continuous length per 100 m of a riparian zone length (with the applicable riparian zone width); or (c) if it occurs adjacent to a significant natural area, damage that does not significantly affect the values of that significant natural area.
94	Restricted discretionary activity: territorial authority	
	94(1)	The vegetation clearance of indigenous vegetation is a restricted discretionary activity if regulation 93(2), (3), or (4) is not complied with.
	94(2)	<u>Matters to which discretion is restricted</u> Discretion is restricted to— (a) the location of the activity; (b) the ecological effects due to— (i) the ecological significance of the indigenous vegetation; or (ii) the location and extent of indigenous vegetation removal; or (iii) the functioning of remaining indigenous vegetation, including edge effects and retention of corridors: (c) the mitigation measures proposed; (d) alternatives to clearance and disturbance of indigenous vegetation; (e) the information and monitoring requirements.
<u>Non-indigenous vegetation clearance</u>		
95	Permitted activity	
	95(1)	Territorial authority and regional council

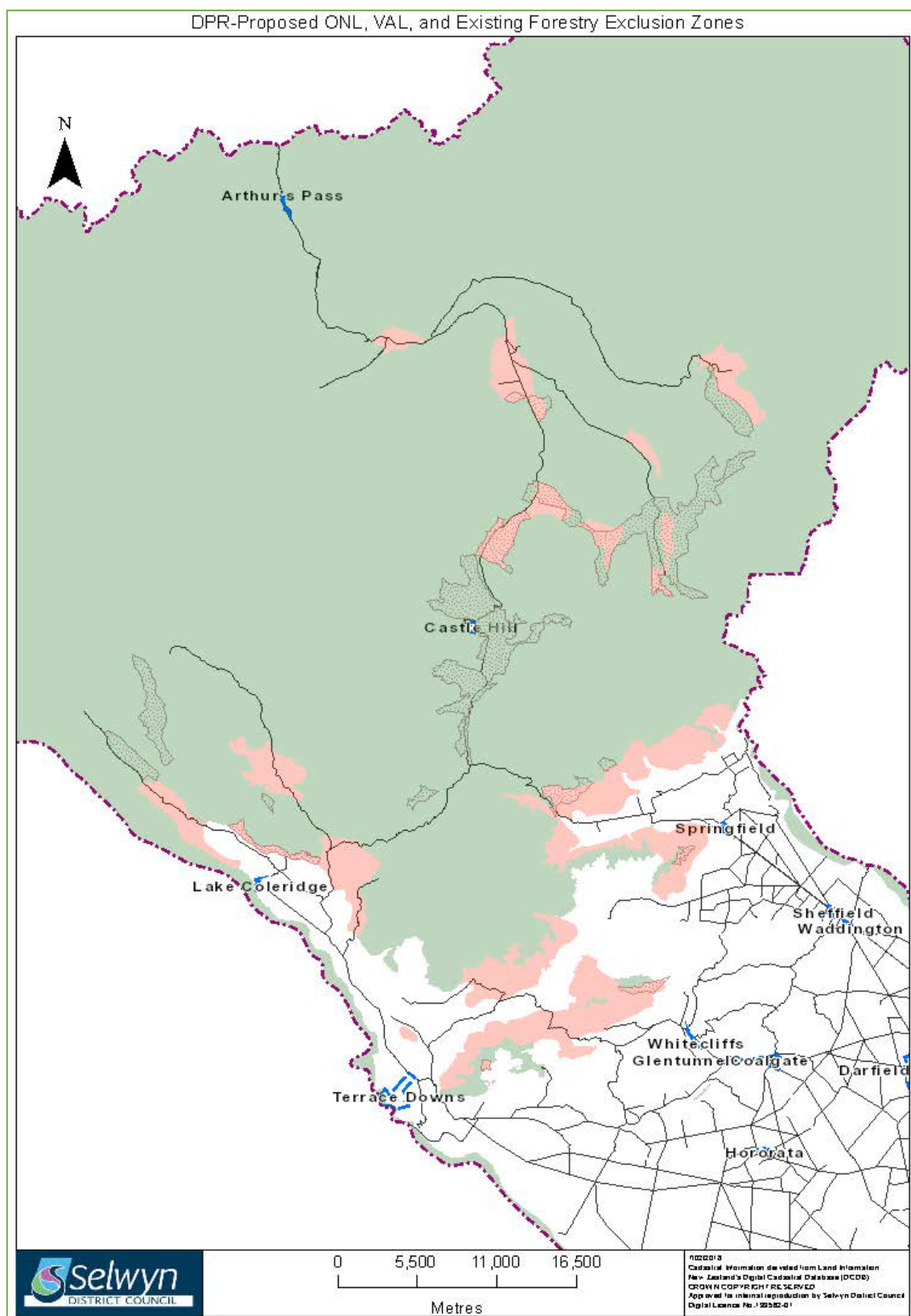
		(1) Vegetation clearance of non-indigenous vegetation associated with a plantation forestry activity is a permitted activity if all permitted activity conditions are met for the associated plantation forestry activity.
	93(2)	General: activity status, matters of control or discretion, and local authority (2) If vegetation clearance of non-indigenous vegetation does not comply with subclause (1), it has the activity status that applies to the associated plantation forestry activity.
	95(3)	The matters of control or discretion are those that apply to the associated plantation forestry activity, and consent is required from the local authority that has functions in relation to the associated plantation forestry activity.
<u>Noise and vibration</u>		
98	Permitted activity: territorial authority	
	98(1)	Noise and vibration associated with a plantation forestry activity is a permitted activity if it complies with subclauses (2) to (4).
Permitted activity conditions		
	98(2)	Noise associated with a plantation forestry activity must not exceed the following noise limits at any point within the notional boundary of any occupied building containing a noise-sensitive activity, except in the case of an occupied building located in the plantation forest or on an adjacent property under the same ownership or management as that of the plantation forest: (a) Monday to Saturday, daytime—75 dB LAeq (15 min) between 7 am and 7 pm, at any assessment point where forestry noise is received for 20 weeks or less in a year: (b) Monday to Saturday, daytime—70 dB LAeq (15 min) between 7 am and 7 pm, at any assessment point where forestry noise is received for more than 20 weeks in a year: (c) Sunday daytime—45 dB LAeq (15 min) between 7 am and 7 pm: (d) night time—45 dB LAeq (15 min) between 7 pm and the following 7am: (e) night time—75 dB LAFmax between 7 pm and the following 7 am: (f) 120 dB LZpeak for any blasting.
	98(3)	Vibration associated with a plantation forestry activity must not exceed the guideline values in Tables 1 and 3 of DIN 4150 inside any building, except in the case of a building located in the plantation forest or on an adjacent property under the same ownership or management as that of the plantation forest.
	98(4)	Blasting may be conducted only between 7 am and 7 pm on Monday to Saturday.

How noise measured and assessed		
	98(5)	Noise must be measured in accordance with NZS 6801 and assessed in accordance with NZS 6802.
	98(6)	Vibration must be measured and assessed in accordance with ISO 4866.
	98(7)	<p>In this regulation and in regulation 99,—</p> <p>DIN 4150 means the document referred to in item 11 of Schedule 2 (<i>DIN 4150-3:1999-02 Structural vibration – Part 3: Effects of vibration on structures</i>)</p> <p>ISO 4866 means the document referred to in item 12 of Schedule 2 (<i>ISO 4866:2010 Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures</i>)</p> <p>LAeq has the same meaning as in NZS 6801</p> <p>LAFmax has the same meaning as in NZS 6801</p> <p>LZpeak has the same meaning as in NZS 6801</p> <p>noise and vibration—</p> <p>(a) includes noise and vibration from forestry machinery, equipment, and vehicles undertaking activities to which these regulations apply; but</p> <p>(b) does not include—</p> <p>(i) noise and vibration from forestry vehicles on public roads; or</p> <p>(ii) vibration affecting heritage buildings or structures</p> <p>noise-sensitive activity—</p> <p>(a) means any—</p> <p>(i) residential activity, including activity in visitor accommodation or retirement accommodation;</p> <p>(ii) educational activity;</p> <p>(iii) health care activity;</p> <p>(iv) congregation within any place of worship;</p> <p>(v) activity at a marae; but</p> <p>(b) does not include an activity if it was not lawfully established</p> <p>notional boundary means—</p> <p>(a) a line 20 m from any side of a building; or</p> <p>(b) the legal boundary, where it is closer to the building</p> <p>NZS 6801 means the document referred to in item 6 of Schedule 2 (<i>NZS 6801: 2008 Acoustics – Measurement of environmental sound</i>)</p> <p>NZS 6802 means the document referred to in item 7 of Schedule 2 (<i>NZS 6802:2008 Acoustics – Environmental noise</i>)</p> <p>occupied building means a building that is regularly occupied by 1 or more people.</p>
99	Restricted discretionary activity: territorial authority	

	99(1)	Noise and vibration associated with a plantation forestry activity is a restricted discretionary activity if it does not comply with regulation 98(2) to (4) .
	Matters to which discretion is restricted	
	99(2)	Discretion is restricted to— (a) the timing, duration, and location of noise or vibration-generating activities: (b) the effects on noise-sensitive activities: (c) measures to avoid, remedy, or mitigate the adverse noise and vibration effects: (d) the information and monitoring requirements.
<u>Dust</u>		
100	Permitted activity [Territorial authority and regional council]	
	100(1)	The discharge of dust to air associated with a plantation forestry activity is a permitted activity if subclause (2) is complied with.
Permitted activity conditions		
	100(2)	There must be no airborne or deposited dust beyond the boundary of the property from which the dust is sourced that is noxious, dangerous, objectionable, or offensive.
	100(3)	In subclause (2), boundary of the property includes the legal boundary of property on which the plantation forestry activity occurs and any other properties adjoining that property under the same ownership or management.
101	Restricted discretionary activity [Territorial authority and regional council]	
	101(1)	The discharge of dust to air associated with a plantation forestry activity is a restricted discretionary activity if it does not comply with regulation 100(2).
Matters to which discretion is restricted		
	101(2)	Discretion is restricted to— (a) the timing, duration, and location of dust-generating activities: (b) measures to avoid, remedy, or mitigate the adverse effects of dust: (c) the information and monitoring requirements.
<u>Indigenous bird nesting</u>		
102	Permitted activity [Territorial authority and regional council]	
	102(1)	A plantation forestry activity occurring where nesting of the following indigenous bird species occurs must comply with the procedures required by subclause (2): (a) any indigenous bird species with a classification of Nationally Critical, Nationally Endangered, or Nationally Vulnerable in the document referred to in item 8 of Schedule 2 (<i>Conservation status of New Zealand birds</i>); and

		<p>(b) any of the following bird species as described in the document referred to in item 8 of Schedule 2 (<i>Conservation status of New Zealand birds</i>):</p> <p>(i) <i>Apteryx mantelli</i>, common name: North Island brown kiwi:</p> <p>(ii) <i>Falco novaeseelandiae novaeseelandiae</i>, common name: Eastern falcon:</p> <p>(iii) <i>Falco novaeseelandiae ferox</i>, common name: Bush falcon:</p> <p>(iv) <i>Gallirallus australis greyi</i>, common name: North Island weka.</p>
Permitted activity condition		
	(2)	<p>Procedures must be in place and followed to—</p> <p>(a) confirm and recognise the presence of indigenous bird species identified in subclause (1); and</p> <p>(b) on confirmation of presence, identify affected nest sites; and</p> <p>(c) provide relevant staff with training on recognising the presence of indigenous bird species if encountered during the plantation forestry activity; and</p> <p>(d) avoid or mitigate adverse effects on affected nest sites and indigenous bird species.</p>
103	Restricted discretionary activity [territorial authority and regional council]	
	103(1)	A plantation forestry activity is a restricted discretionary activity if regulation 102 is not complied with
Matters to which discretion is restricted		
	103(2)	<p>Discretion is restricted to—</p> <p>(a) the effects on indigenous birds and measures to mitigate those effects:</p> <p>(b) the information and monitoring requirements.</p>

APPENDIX D— PROPOSED ONL & VAL, AND EXISTING FORESTRY EXCLUSION ZONE MAP



*ONL area is green, VAL area is pink, and Forestry Exclusion Zone is textured overlay.

APPENDIX E-OTHER PROVISIONS

Canterbury Regional Policy Statement

Chapter 5: Land-use and Infrastructure	
5.3 Policies	
5.3.13 Spread of wilding trees (Wider Region)	
	Avoid, or minimise as far as practicable, the risk of wilding tree spread, through the location of planting, design of planting, species selection and management, once planting has occurred.
Methods	<p>The Canterbury Regional Council:</p> <p>Should:</p> <ol style="list-style-type: none"> 1. Collaborate with territorial authorities, landowners and forestry managers to implement wilding tree spread avoidance measures by: <ol style="list-style-type: none"> (a) the choice of planting sites; (b) the choice of tree species; (c) plantation design; (d) the implementation of land management regimes in areas at risk of wilding tree spread from new plantings. 2. Include provisions in a Regional Pest Management Strategy to assist in avoiding the risk of wilding tree spread, including consideration of specific non-regulatory methods such as rates relief, monitoring, and dissemination of information/education that may assist parties in controlling the further spread of wilding trees.
	<p>Territorial authorities:</p> <p>Will:</p> <ol style="list-style-type: none"> 3. Set out objectives and policies, and may include methods in district plans which minimise the risk of wilding tree spread.

Canterbury Land and Water Regional Plan

Definitions:

Plantation forest	means a forest of selected species of trees that are specifically planted and managed for a carbon sink or planted and managed specifically for harvesting and production of timber or other wood based products, and includes under-story that has established beneath the canopy and areas that are demonstrated to be failed plantings from the previous rotations.
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Christchurch District Plan

Definitions:

Amenity tree planting	means the planting and tending of trees to provide shelter, landscaping or screening around buildings, roads or open space, or for the mitigation of a natural hazard.
Plantation forestry	means the use of land and buildings for planting, maintenance and harvesting of timber tree species for commercial wood production.

Proposed Hurunui District Plan

Definitions:

Amenity tree planting	means the planting and tending of trees to provide shelter, landscaping or screening around buildings, roads, or public open space, or for the mitigation of a natural hazard.
Forestry	<p>means a forest of selected species of trees that are specifically planted and managed for carbon sequestration or planted and managed specifically for harvesting and production of timber or other wood based products, and includes:</p> <ul style="list-style-type: none"> (a) The understory that has established beneath the canopy; (b) Replanting of areas that are demonstrated to be failed plantings from previous rotations; (c) Tree alteration such as the pruning and thinning of trees; (d) Ancillary forestry earthworks; and (e) Harvesting and re-planting of trees. <p>but does not include shelterbelts amenity tree planting.</p>
Shelterbelt	means trees planted for the primary purpose of providing wind shelter. Shelterbelts do not include those windbreaks consisting solely of native species.

Ashburton District Plan

Definitions:

Amenity Tree Planting	means the planting of trees for aesthetic or amenity purposes in the immediate vicinity of existing or proposed buildings on the same site, but excluding shelterbelts, forestry, woodlots, commercial orchards or other tree crops.
Forestry Activity	means the use of land primarily for the purpose of planting, tending, managing and harvesting of trees for timber production in excess of onsite domestic or farm wood-supply.
Shelterbelt	means trees or vegetation planted primarily to provide shelter for stock or for other agriculture or horticulture purposes up to a maximum width of 15m but excluding amenity tree planting, horticulture and forestry activities.

APPENDIX F— FORESTRY OWNERS

Company	Location	Size	RC	Year	Details
Ahuriri Farm Ltd	PH (ONL)	171	R302527, (R303813) , R302191 (R303015) R304767	1997 1999 1996 1997 2001	97-TO ESTABLISH MAINTAIN & HARVEST 79 HA OF PINUS RADIATA IN ONL, approved. (99-TO EXTEND R302527 SO AS TO COMPLETE ESTABLISHMENT OF 79 HA OF PINUS RADIATA) 96-TO ESTABLISH & MANAGE 93 HA OF FORESTRY IN AREA OF ONL (97-TO EXTEND R302191 BY ESTABLISHING, MAINTAINING & HARVESTING AN ADDITIONAL 5 HA OF PINUS RADIATA, approved.) 01-Establish and Maintain 34.5h pinus radiata, Approved
Ben More Graziers Ltd	MH	735	R301023 R302422 ((R304791) (105316) (105035) 175379 (175440	1994 1998 2017	94-TO PLANT 492 HA IN FORESTRY, further info requested. now DoC property 98-TTO ESTABLISH, MANAGE AND HARVEST COMMERCIAL FORESTRY SEE 105316 FOR VARIATION AND ALL CONDITIONS, Approved, Old Selwyn Plantation Board Property (01- VARIATION TO CONDITIONS ON R302422 & R302423) (10-TO AMEND CONDITIONS OF R302422 & R302423 TO ACCOMMODATE SEPARATE OWNERSHIP OF ALL THREE BLOCKS, approved) (10-VARIATION OF R302422/23 TO AMEND CONDITIONS TO ACCOMMODATE SEPARATE OWNERSHIP) (17-To establish a plantation forest, Incomplete) 17-establish plantation, replace previous RC, approved. New planting has occurred, hard to determine what is forestry, and what is farm land.
Boyes W D & Sons Ltd	MH	361	R300502	1993	93-LAND USE CONSENT FOR COMMERCIAL FORESTRY, approved
Brooksdale Station Ltd	MH	50	R303018	1999	99-TO ESTABLISH, MAINTAIN & HARVEST PINUS RADIATA ON 40 HA , approved.

Canterbury Genetics Limited	MH	20	R303685	2000	00-TO ESTABLISH, MAINTAIN & HARVEST PLANTATIONS OF PINUS RADIATA TOTAL AREA NOT TO EXCEED 67 HA, Approved. now patchy
Canterbury Grasslands Ltd	OP	4			
Canterbury Land Company Limited	OP	5			
Circle K Ltd	IP	1			
Duncan Forestry Ltd	MH	72			
Environment Canterbury	IP/OP	170 60 59 16 12 8			
Fortuna Forest Products Ltd	PH	68			
Fowler FT	PH	4			
Gilbert Forestry Enterprises Ltd	OP	10 10			
Grayson Forestry	OP	10			
Gulf Central Properties Ltd	OP	1			
Harts Creek Farm Trust	IP	3			
Heddell Pastoral Ltd	MH	19			
Hewitt & Chilton Ltd	MH	0	R305328	2002	02-HARVESTING APPROX 4.5 HA OF WOODLOTS
Lake Hill Ltd	HC	199			
Lansdown Valley Ltd	PH	16			
Lansdowne Forestry Ltd	MH	303			
Major Insight Limited	OP	2			
Mares Properties(NZ) Ltd	PH	21			
Matariki Forests	MH	1596 909 583 523	R302423 (R304791) , (105316)	1998 2001 2010	98-TO ESTABLISH, MAINTAIN & HARVEST COMMERCIAL FORESTRY SEE 105316 FOR VARIATION AND ALL CONDITIONS, approved.

		417 129	(105035). R301535 125429 (135255), 125370.	2010 1996 2013 2013 2012	(01- VARIATION TO CONDITIONS ON R302422 & R302423) (10-TO AMEND CONDITIONS OF R302422 & R302423 TO ACCOMMODATE SEPARATE OWNERSHIP OF ALL THREE BLOCKS, approved). (10-VARIATION OF R302422/23 TO AMEND CONDITIONS TO ACCOMMODATE SEPARATE OWNERSHIP) 96-TO EXTEND LOWMOUNT PLANTATION TO THE NORTH-EAST BY 141 HA FOR COMMERCIAL FORESTRY, withdrawn . 13-earthworks and quarrying activities for 10 yrs, approved (13-change of conditions, approved). 12-earthworks for roading, quarrying, approved.
McArthur Farming Co Ltd	MH	64	R300974	1994	94-TO PLANT 63 HA OF FORESTRY OF A TOTAL BLOCK CONTAINING 196 HA, Approved
Miles Farming Co Ltd	HC	19	R302985	1997	97-TO RE-ESTABLISH COMMERCIAL FORESTRY ON 2 BLOCKS TOTAL 15 HA HARVESTED IN 1985 IN RU C ZONE
Mt Algidus Ltd	HC	40	(115326) 125193	2012 2012	(12-TO ALLOW CLEARFELLING, REPLANTING AND THINNING OF FORESTRY - Changed to Certificate of Compliance 22/2/12 . Withdrawn see 125193- withdrawn) 12- on hold , To harvest & replant plantation & establish new woodlots. This replaces 115326, the original application for Certificate of Compliance which did not comply.'
PF Olsen Tisa Pty Ltd	MH	780			
Pineview Dairy Farm Ltd	OP	28			
Roecombe Farm Ltd	MH	22			
Searlkinn Farm Ltd	OP	47 4			

Selwyn District Council	OP/IP	39			
Selwyn Forestry No 1 Limited	OP	26			
Selwyn Forestry No 2 Limited	OP	29			
Selwyn Plantation Board	OP	0	R301536 R305391	1996 2002	96-TO ESTABLISH AND MANAGE 1081 HECTARES OF COMMERCIAL FORESTRY, withdrawn 02-TO RETAIN 100% COMMERCIAL FORESTRY ON A 14.6 HA LOT CREATED BY SUBDIVISION R304973, approved. (No longer forestry)
Shellwood Ltd	OP	10			
Snowshoes FT	PH	22			
Stoneyhurst Timbers Limited	MH	112	R300230	1992	92-FORESTRY & LIVESTOCK GRAZING, approved
Terracefields Farm Ltd	OP	3			
The Crossing Limited	OP	13			
The Point Station Ltd	OP	41			
Tri-cat Commercial	OP	10	R300731+ (R300768 - 779)	1993 1993 (12)	93-TO SUBDIVIDE 125 HA INTO 12 BLOCKS FOR FORESTRY, approved (93-FORESTRY ON LOT 1 -12)
Trustpower Ltd Canterbury Generation	MH	48	R302749	1998	98-TO ESTABLISH MAINTAIN & HARVEST 320 HA OF COMMERCIAL FOREST, approved.
University of Canterbury/ Trans Tasman Forestry Ltd	MH	300	155230	2015	(B) 15-To clear wilding pines by logging and aerial spraying, replanting with Pinus radiata, Pinus ponderosa or Pinus radiata X Pinus ponderosa hybrid, including earthworks associated with a new track and harvesting platforms., approved. (University of Canterbury land, plantation loots to be spreading)
Windwhistle Holdings Ltd	OP	160			potential garden planting
Private Owners	Location	Size	RC	Year	
McKay	IP	128			
Harris	MH	77			
McElrea	MH	55			

King	MH	53			
Ferguson	MH	53			
Harris	MH	49			
McCorkindale	PH	45			
MCMillan	PH	44			
Dalzell	MH	44			
Nell	HC (ONL)	26			
Inwood	PH (ONL)	23			
Davies	MH	22	R305993	2003	03-TO HARVEST & TRANSPORT LOGS FROM A 4 HA PINE PLANTATION, approved
Allen	OP	19			
Royds	PH (ONL)	18	(165337), R301049 , R302901	1994 1997	(16-Subdivision to create two rural lots) 94-TO ESTABLISH & MANAGE 36.2 HA OF FORESTRY , 97-TO ESTABLISH & MANAGE A FURTHER 21 HA OF COMMERCIAL FORESTRY IN AREA OF OUTSTANDING LANDSCAPE (SEE R301049)
Robertson	MH	16			
Gordon	PH	13			
Sorensen	OP	13			
van der Wilt	OP	12			
Sullivan	PH (ONL)	11			
Witterick	OP	10			
Hussey	OP	10			
Grossi	OP	10			
Irwin	OP	10			
Gilbert	OP	10			
Oakley	MH	10			
Lappage	OP	9			
Odea	OP	9			
Harris	OP	8			
Deans	HC	8			
Foster	OP	7			
Collier	MH	7			
Oakley	MH	7			
Scarlett	OP	6	155350 (155351)		To carry out an open space boundary adjustment. See L/U 155351. (To retain dwelling on an undersized lot. See S/D 155350)

Schotanus	OP	5			
Bradley	OP	5			
Crehan	OP	10			
Dalzell	MH	5			
Rofe	PH (ONL)	4			
Van Ameyde	IP	4			
Harris	OP	4	R303058	1999	99-THE USE OF APPROX. 250 HA OF LAND FOR ESTABLISHMENT, MANAGEMENT & HARVESTING OF COMMERCIAL FORESTRY, approved
Whale	OP	4			
Van Dijk	OP	4			potentially harvested areas
Greenwood	OP	4			
Loe	OP	4			
Westerman	OP/MH	4	R304952	2001	01-TO ESTABLISH, MANAGE AND HARVEST 5 HA PLANTATION, withdrawn . property crosses in both OP and MH zones with plantations on both
Oakley	MH	4			
Haycock	PH (ONL)	3			
Ogg	IP	3			
Jolly	IP/OP	6			
Van Vliet	OP	3			
Cuthbert	OP	3			
Abbot	IP	2			could be a fruit trees, as spaced a little more than normal
Eggleston	OP	2			
Dillon	OP	2			
Blaikie	OP	2			
Leonard	OP	2			
Briscoe	PH (ONL)	1			
Franklin	IP	1			
Rietveld	IP	1			
Nelson	IP	1			
Perkins	OP	1			
Chapman	OP	1			
Dakin	PH (ONL)	0	R305303	2002	02-19h forestry, establish, maintain, harvest, approved. Too small left

Mannering	IP	0	R303533	1998	98-TO ERECT DWELLING ON 4 HA IN GREEN BELT IN CONJUNCTION WITH AN OAK PLANTATION, approved.
CULLEN	OP now L2	0	R300042	1991	91-TO PLANT 24.3HA FOR COMMERCIAL FORESTRY ON A BLOCK CONTAINING 78.2055HA, now Kirwee L2A
Willis	IP Now LZ	0	R301262	1994	94-TO ESTABLISH & MANAGE A 2.4 HA WOODLOT IN RU I ZONE, approved (1/524 Springston Rolleston Road)Now a LURP Zone, no forestry
Clapp	IP	0	R302138 (R303733)	1996 1999	96-TO ERECT DWELLING IN COMNJUNCTION WITH NURSERY & PASTORAL FARMING (99-TO GROW BERRIES, WOODLOT & PASTORAL FARMING ON 4 HA -VARIATION ON R302138)