Selwyn District Landscape Study

Landscape Characterisation and Evaluation Report
Prepared for Selwyn District Council

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Boffa Miskell

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Cover photograph: Rakaia/ Mathias River confluence, Pfluger, 2008

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1.0 Introduction

Selwyn District Council has engaged Boffa Miskell Ltd to assist in determining whether the existing provisions and associated planning maps relating to Outstanding Natural Features and Landscapes are efficient and effective and therefore appropriate to be carried forward into a proposed District Plan, or if amendments to align provisions with current best practice landscape protection and management outcomes for Selwyn District are necessary.

The **Selwyn District Landscape Study** has been carried out in three stages:

1. Landscape Characterisation;
2. Landscape Evaluation; and
3. Landscape Engagement / Consultation (to be completed).

A key goal of the Landscape Study is to ensure that Outstanding Natural Landscapes (ONLs) and Outstanding Natural Features (ONFs), as well as Visual Amenity Landscapes (VAL), proposed in the District Plan are consistent with each other in terms of their value and boundary identification.

1.1 Purpose

The preparation of the Landscape Study is in response to the Council's obligations under the Resource Management Act (RMA) and Canterbury Regional Policy Statement (CRPS). As part of the review of the CRPS in 2010, Environment Canterbury (ECAN) completed a statutory review of the management of its landscapes and natural features in accordance with the requirements of the RMA[1]. The regional Outstanding Natural Features and Landscapes (ONF/L) review was used as one of the sources to inform this Selwyn District Landscape Study.

No comprehensive landscape study has been undertaken for Selwyn District in the past, with only the highcountry areas and Malvern Hills being included within a study prepared by landscape architect Graham Densem in 2001[2] and a landscape assessment of the lower Port Hills in 2006[3]. Therefore, this Landscape Study is a review of this existing information, while acknowledging all of the district's landscapes within one comprehensive assessment.

Both the characterisation and evaluation stages of this Landscape Study essentially build on the District's previous landscape assessments, as well as the Canterbury Regional Landscape Study prepared for Environment Canterbury, as well as existing information in the public realm. Recent relevant case law is considered as well as advances in the understanding of the concept of 'landscape' since the introduction of the RMA 1991 and the New Zealand Coastal Policy Statement (NZCPS) 2010.

[1] Canterbury Regional Landscape Study Review (July 2010) Boffa Miskell.

[2] Selwyn District Plan Review High Country Section: Landscape Recommendations (November 2001) Graham Densem Landscape Architecture.

[3] Landscape Assessment of the lower Port Hills in Selwyn District (May 2006) Andrew Craig (Peter Rough Landscape Architects)

1.2 Landscape

Landscape, as defined by the New Zealand Institute of Landscape Architects (NZILA), is the "cumulative expression of natural and cultural features, patterns and processes in a geographical area, including perceptions and associations" (NZILA, 2010). While all landscapes are dynamic and continually change, the rate of change varies under different physical, social and economic conditions.

Defining landscape character relies on an understanding of work done by various specialists, analysis of topographic and various other mapping and spatial data (datasets), field survey and photography, aerial photography, as well as engagement with key stakeholders, iwi/hapū, landowners and the wider community. For this particular study, much of the work has been based on a desk top analysis with field work to verify findings on a broad level. The mapping of ONF/Ls and VALs has been undertaken at a broad, district-wide scale, based on a variety of material at different scales. Engagement is intended to be carried out as a separate step.

Within the Selwyn District (refer to **Figure 1**), the rate of change in the landscape varies from the less apparent natural changes in vegetation and landform such as areas of high country and within National Parks (such as Arthurs Pass), to the more evident natural changes along the dynamic coastline and river corridors. Conversely, there are also changes associated with land-based production activities such as farming, forestry or extractive industries; developments providing for peri-urban or rural residential lifestyle; and the provision and upgrading of utility services and industrial or community infrastructure.

The description of landscape and subsequent landscape characterisation, undertaken as a first stage in the preparation of this Study, provides valuable information on the key attributes that contribute to landscape character. This involves the review of a range of existing information, including other research documents, field work and input from related technical experts. However, description and characterisation alone gives little assistance to the identification of the importance of values attributed to the landscape and associated influences directing the management of landscape change. To inform a rational decision on what constitutes landscape values and associated management techniques, including areas requiring legal protection such as ONF/L, criteria and justification must also be made explicit.

Within landscape character areas there are often sites or features that are significant components of the wider landscape and have often been identified by various specialists as having some particular importance. Such areas may encompass geological formations, stands of native forest, stretches of coastline, or important historic or cultural areas or features. These areas and features add depth and meaning to the landscape and contribute to landscape character. Communities identify with them and seek to recognize them in some way – through naming them and representing them in art and literature, for example. Once these characteristics have been identified, then values can be assigned and a special status or protection in terms of resource planning and management can be applied if necessary. This occurs through identifying the areas and features in regional policy statements and district plans and developing specific policies and rules around them.

Effective landscape management is underpinned by landscape assessment. If robustly and rigorously applied, landscape assessment should inform both the approach and decision making process relating to how landscapes are, or can be managed.

1.3 Study Approach

As outlined, this Landscape Study was undertaken as an independent technical assessment by Boffa Miskell Ltd's landscape planners as well as limited cultural advice, ecological expertise and planning services. It also includes input from Selwyn District Council staff where necessary. This Landscape Study comprises three main stages.

The first part of the Landscape Study is to prepare a **Landscape Characterisation** of the Selwyn District. This first stage comprises a district-wide landscape characterisation, by which the district's landscapes are classified into broad land-types and character areas, drawing from land typing analysis conducted by Landcare Research on a regional scale[4]. This stage also includes a review of current landscape studies that have informed the Council's operative District Plan.

The second stage comprises an **evaluation** of the district's different landscape values, including the identification of landscapes in accordance with Sections 6 and 7 of the RMA. This stage has led to recommendations on which areas should be identified as ONF/L. The Landscape Study also provides an understanding of threats to ONF/L that should be considered in the development of rules within the District Plan and identification of other sensitive areas that should have specific management mechanisms applied through the District Plan rules, such as VAL. This was then reviewed by internal cultural, ecology and planning advisors.

The third stage of the Landscape Study will involve **engagement** with affected landowners and stakeholders, most notably on the conclusions of Stage 2. This consultation will in the first instance target affected landowners (i.e. a landowner who has proposed outstanding natural features or landscapes on their land). Consultation will then extend to target other interested stakeholders. In particular, engagement with manawhenua is intended to take place via Selwyn District Council and their work with Mahaanui Kurataiao Ltd on behalf of local Papatipu Rūnanga.

2.0 Statutory Context

2.1 Resource Management Act

The Resource Management Act (RMA) is the principal statute governing the management of New Zealand landscapes. The relevant directives within the Act regarding the protection and management of landscapes are set out in part II, and include:

> *Section 6(b): The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development.*

Natural features and landscapes that do not meet the criteria for being ranked as 'outstanding' can nonetheless qualify for protection under other clauses in section 6 or are required to be "maintained and enhanced" either as "amenity values" or part of the wider "quality of the

[4] And contained within the Canterbury Regional Landscape Study Review (July 2010) Boffa Miskell.

environment" encompassed under RMA section 7(c) or section 7(f) respectively. In addition, landscapes or rivers or lakes that were not "outstanding natural features and landscapes" would still be required to have their "natural character" preserved under RMA section 6(a), or significant areas of indigenous vegetation or habitats of indigenous fauna protected under section 6(c). Natural Character matters relating to the coastal environment and wetlands, lakes and rivers and their margins are the subject of separate reports.

Also, other related topics such as Section 6(e) relating to the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga are the subject of a separate report, despite aspects of this crossing into landscape considerations.

As part of the wider environment to be managed under Part 5 of the RMA, adverse landscape effects resulting from inappropriate activities must be avoided, remedied or mitigated.

2.2 New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement (NZCPS) is a national policy statement under the RMA. The purpose of the NZCPS is 'to state policies in order to achieve the purpose of the act in relation to the coastal environment'.

The NZCPS has highlighted the need for the identification and mapping of special landscapes occurring within the coastal environment. Policy 1 of the NZCPS gives direction to defining the extent and characteristics of the coastal environment. Policy 15 refers to natural features and landscapes and requires that natural features and landscapes within the coastal environment are identified and assessed. For the purposes of this Landscape Study, only Policy 1 and Policy 15 will be relevant, although the extent of the coastal environment and its natural character will be determined through a separate process with Council.

2.3 Canterbury Regional Policy Statement

The Canterbury Regional Policy Statement 2013 (CRPS) provides a regional level approach to objectives, policies and methods to resolve the resource management issues of the Region and to achieve the integrated management of the natural and physical resources of Canterbury. Chapter 12 sets out the issues, objectives, policies and methods in relation to Landscape. Of particular relevance to this study is the identification of an issue around the inconsistent identification and management of ONF/L around the region and thus variable levels of protection of values.

To address this issue, the CRPS includes objectives seeking the identification of ONF/L and their recognition and protection, and also the identification and management of other landscapes of importance for natural character, amenity or historic and cultural heritage reasons. The third objective seeks consistency of assessment of landscapes.

Policy 1 requires identification of ONF/L including recognition of the values set out in Appendix 4 to the Statement (which sets out the ONF/L at a regional scale from the 2010 Regional Landscape Study). To achieve this policy, territorial authorities are required to set out objectives, policies and methods, including maps, to identify ONFL at the time of a relevant district plan review, or within 7 years of the CRPS becoming operative; whichever is sooner.

Policy 3 provides for identification of other important landscapes that are not outstanding natural landscapes, for natural character, historic cultural, historic heritage and amenity purposes. This is not a mandatory requirement for territorial authorities.

Consistency of identification is managed through policy 4 which states:

> *12.3.4 Consistency of identification and management of outstanding natural features and outstanding natural landscapes*
>
> *Seek to achieve regional consistency in the identification of outstanding natural features and landscape areas and values by:*
>
> *1. considering the following assessment matters which address biophysical, sensory and associative values when assessing landscapes in the Canterbury region:*
>
> *(a) Natural science values*
>
> *(b) Legibility values*
>
> *(c) Aesthetic values*
>
> *(d) Transient values*
>
> *(e) Tāngata whenua values*
>
> *(f) Shared and recognised values*
>
> *(g) Historic values*

The application of these assessment matters is a mandatory requirement for territorial authorities within the Canterbury Region.

2.4 Selwyn District Plan

The operative Selwyn District Plan includes identification of outstanding landscapes under an objective which states:

> *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.*

There are a range of district wide and location specific policies to recognise outstanding landscapes and apply rules to manage effects of activities on these landscapes. The operative Plan does not contain any criteria or assessment matters for the identification of landscapes.

The operative plan also includes the identification of wāhi taonga sites and areas that have been compiled to assist with evaluating manawhenua associate values in relation to ONLs

3.0 Landscape Characterisation Methodology

As a starting point, this assessment recognises that all landscapes have values and form an integral part of the environment. Accordingly, an understanding of landscape character can provide an important tool which assists with managing landscape change. Whilst a primary focus of this assessment relates to identifying areas or features with notable landscape values, it is often the wider everyday rural landscapes, away from modified and more urban areas, that are more vulnerable to extensive landscape change.

To identify landscape values, the Selwyn Landscape Study has relied upon professional judgement and drawn upon available information including GIS databases, but only a limited amount of field work. This application of professional judgment will subsequently sit within a process of community participation and validation through the District Plan Review process. Ultimately, land owners and the community, together with Council, will have input into the refinement of the landscape study and the implications for landuse.

In summary, the outputs from the Landscape Study, seek to develop an understanding of landscape values and provide guidance on how best to manage landscape character and landscape values, be it for protection, productivity, development, enhancement or rehabilitation.

3.1 Landscape Description

'Landscape description' involves a process of data compilation during which the layers or components that make up the landscape are identified. The data gathered can also include available GIS datasets which include: landform, soil, geology, drainage patterns, vegetation cover, land uses, built development, infrastructure, heritage sites, cultural meaning and associations as well as associations with water bodies such as lakes, rivers and the sea.

Relevant GIS information that has been used to inform the extent of information, included:

- Topographical Maps (LINZ)
- Digital contour information at 20 meter intervals (LINZ)
- Land Cover Database 4 (Terralink, based on 2012/2013 aerials)
- Aerial Photography
- Geology (NZLRI)
- Soils (New Zealand Land Resources Inventory)
- Geopreservation Sites and Areas (Geological Society of New Zealand)
- Land Typing (Landcare Research – used for the Regional Landscape Study, 2010, Environment Canterbury)
- Heritage Sites (New Zealand Historic Places Trust)
- Ngāi Tahu Cultural Sites of Significance (various sources including Te Rūnanga o Ngāi Tahu, ECan and SDC)
- Ecological Regions and Districts (Department of Conservation)
- Elevation and Slopes
- Existing digital mapping of landscape layers from Selwyn District Council

3.2 Land Typing

'Land types' are used to distinguish major physiographic land units on the basis of topography and lithology. In New Zealand, 'land typing' has proved a useful basis from which landscape characterisation has been based and forms a minimum requirement for identifying natural features and landscapes.

In Selwyn District there are 18 Land Types, which have been determined by Landcare Research and are contained within the Canterbury Regional Landscape Study Review (Boffa Miskell 2010). These can be divided into seven broad categories of which some are made up of accumulated land types:

- **Te Pātaka o Rākaihautū/Banks Peninsula**, comprising: L8 Port Hills Type.
- **Low Altitude Plains**, comprising: L1 Plains – Coastal Fringe Land Type; L2 Lower Plains Land Type; L3 Upper Plains Land Type and L4 Plains – Recent Floodplains and Low Terraces Land Type.
- **Foothills and Downlands**, comprising: L11 Northern Loess Mantled Soft Rock Hills and Downs Land Type; L12 Northern Soft Rock Hills and Down Land Type; L21 Northern Hard Rock Land Type and L23 Igneous Hill Country Land Type.
- **Front Ranges**, comprising H9 Northern Eastern Front Range Land Type.
- **High Country Limestone Hills**, comprising H6 Soft Rock Infaulted Basin and Valley Land Type.
- **Intermontane Ranges and Basins**, comprising H1 Major River, Valley Fill Land Type; H2 Glacial and Fluvial Valley Floor Land Type; H3 Glacial and Fluvial Basin Floor Land Type; H7 Isolated Mountain Land Type and H14 Central Sub Humid to Humid Mountain Range Land Type.
- **High Rainfall Divide**, comprising H19 Northern Main Divide and Associated Ranges Land Type and H20 Southern Main Divide and Associated Ranges Land Type.

3.3 Landscape Characterisation Process

Landscape character can be defined as 'a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse'. Put simply, landscape character is what makes an area unique.

'Landscape characterisation' is the term used for the process of identifying, mapping and describing landscape character. Each area of landscape can be understood as having an identifiable character based on its individual or cumulative natural and cultural expression. Characterisation provides a sound descriptive and analytical basis defining what makes an area of landscape distinct. Communities identify with 'their' landscapes and recognise them as having a particular combination of attributes and features that give them their distinctive 'character'.

Landscape characterisation also draws upon the work and descriptions prepared by scientists and other specialists to develop an understanding of 'sense of place'. Essentially landscape

character is the interrelationship of three broad factors – landform (encompassing land typing), land cover and land use. Within these broad factors there are many variables and it is the way in which these combine that gives broad areas of the landscape a cohesive and distinctive character.

Landscape characterisation, is a means to describe places in a way that is meaningful to the greater community and related to how people perceive and experience the landscape.

This element of the study is largely descriptive and objective. It draws on an understanding of the natural and cultural features, patterns and processes. Its focus is to identify distinguishing characteristics, which make one part of a district different from another. An understanding of the landscape characterisation of all landscapes at a district level provides a meaningful basis for the identification of significant and important landscapes within a subsequent landscape evaluation exercise.

In summary, the objectives of the Landscape Characterisation Stage are to:

- Analyse the landscape through review of GIS data, land typing, maps, aerial and land-based photographs and field survey;
- Identify and map landscape character areas;
- Describe each type and area of landscape objectively; and
- Identify and define key characteristics and forces for change within each landscape character area.

In total, eight Landscape Character Areas have been determined for the Selwyn District, these are:

1. Te Pātaka o Rākaihautū/Banks Peninsula
2. Coastal Plains (Te Waihora/Lake Ellesmere to Rakaia River Mouth)
3. Low Altitude Plains
4. Malvern Hills - Foothills and Downlands
5. Front Ranges (Big Ben and Torlesse Ranges)
6. Kura Tawhiti/Castle Hill Limestone Basin
7. Intermontane Ranges and Basins
8. Kā Tiritiri o Te Moana/Main Divide Ranges

A description of each Character Area is provided in the following section and the character areas are shown on **Figure 11**.

Please note that a full analysis of cultural values, sites and areas has not been undertaken as part of this study, however existing and publicly available information on cultural sites and values has formed part of this assessment. It is intended that a more comprehensive analysis will be integrated via engagement with manawhenua, and the work on Ngāi Tahu Cultural Sites of Significance being led by Mahaanui Kurataiao Ltd on behalf of Papatipu Rūnanga for Selwyn District Council.

4.0 The Landscape Character Areas of the Selwyn District

The landscapes of the Selwyn District (Refer to **Figure 1**) are amongst some of the most diverse in the country, from the rugged and isolated mountains of the main divide in the north-west to the low, settled and highly modified plains in the south-east. Comprising a central portion of the eastern South Island, the Selwyn District is one of the larger districts of the Canterbury Region and is broadly contained by two large braided rivers, the Waimakariri River to the north and the Rakaia River to the south.

At a broad scale, the landforms of the Selwyn District are extremely legible and expressive of its formative past. The transition from the flat modified plains through the foothills and downlands to the limestone basin and high divide ranges are very evident and provide a profound sense of place to each different landscape. Refer to **Figures 2-8**.

The distribution of wildlife and vegetation within the district reflects the varied climatic conditions geomorphology, and more recently, modification by humans. Extensive tracts of indigenous vegetation occur within the mountains, where vegetation sequences from valley floors through to alpine areas are clearly apparent, refer to **Figure 9: Recorded Natural Areas Map**. At lower elevations, and particularly on the Canterbury Plains, large areas of indigenous vegetation have been removed and replaced with plantation forestry, pastoral grazing or residential development.

Human occupation over the past 600-1,000 years has assisted in shaping these landscapes, adding an important layer of cultural and historic heritage. Refer to **Figure 10**.

The landscape within the Selwyn District is of immense significance to manawhenua, and in particular the Ngāi Tahu hapū of Ngāi Tūāhuriri and Ngāi Te Ruahikihiki, as well as their respective Papatipu Rūnanga – Te Ngāi Tūāhuriri Rūnanga and Te Taumutu Rūnanga. The entire landscape from Kā Tiritiri o Te Moana/the Southern Alps, down each of the main rivers of the Waimakariri, Waikirikiri/Selwyn and Rakaia, to Te Waihora/Lake Ellesmere and its associated coastal dunes and wetlands, as well as the adjoining parts of Te Pātaka o Rākaihautū/Banks Peninsula was utilised, and remain significant due to their place in the creation, migration, settlement and ongoing mahinga kai traditions of manawhenua. Numerous pā, kāinga, nohoanga and urupā (settlements and burials) as well as wāhi pakanga (battle sites), wāhi mahinga kai (food gathering sites) and ara tūpuna (trails) are spread across the district, concentrated around Te Waihora and along its major tributaries as well as the Waimakariri and Rakaia. These form a network that highlight both the traditional lifeways of Ngāi Tahu as well as sites and areas that provide for ongoing use and connection. In particular, it is the waterways of the district that provide its lifeblood, both traditionally and contemporarily, as well as the key travelling/transport routes linking the east and west coasts, that were critical to pounamu trade and traditional food and resource procurement.

The principal transportation route from Christchurch in the east through to the West Coast extends through Arthurs Pass in the west of Selwyn District. Several settlements along this important route, including Darfield, Springfield, Castle Hill Village and Arthurs Pass, act as service centres to locals and travellers.

4.1 Landscape Character Area 1: Te Pātaka o Rākaihautū / Banks Peninsula

Photograph 1: Selwyn District area of the Port Hills near Gebbies Pass

This Landscape Character Area encompasses the western segment of Te Pātaka o Rākaihautū/ Banks Peninsula, where it meets the district boundary on the Port Hills to the adjacent Christchurch City. The segment of Banks Peninsula / Port Hills included in this area extends from Lansdowne / Sign of the Bellbird in the north to Te Tara o Te Rangihikaia/Gebbies Pass / Valley in the south.

The western section of the Port Hills contains part of the outer slopes and crater rim of the Lyttelton volcano, which form a distinctive landform rising on the eastern side of the lower coastal plains. The prominent ridge of the crater rim reaches 573m at its highest point at Ōmawete/Coopers Knob.

Landform

To Ngāi Tahu, the peninsula is known as Te Pātaka o Rākaihautū or the great food store of the Waitaha ancestor Rākaihautū, captain of the Uruao canoe, in reference to the abundance of forest birds and timber that could be obtained from the peninsula forests. Another name for the peninsula, Kā Kōhatu Whakarakaraka o Tūterakiwhānoa links back to the very creation of the peninsula being the heaped up stones raked into place by Tūterakiwhānoa, grandson of Aoraki, following the capsizing of Te Waka o Aoraki – which forms the South Island. A later explorer Tamatea, captain of the Takitimu canoe, is responsible for volcanic rock outcrops when he called for fire from the north to warm him after being caught in a southerly storm.

These names and traditions explain the landscape features of mana whenua, critical to their understanding of the world, as well as their heritage and ongoing identity.

Banks Peninsula covers an elliptical area of approximately 50 x 30 kilometres. It was formed by two great low-angle basaltic “shield” volcanoes, firstly Lyttelton then Akaroa. The principal landform defining the Lyttelton volcano is the distinctive crescent shaped mass of the Port Hills stretching between the harbour mouth in the east and Gebbies valley in the south. The volcanoes were islands at the time of formation with the outwash plains eventually reaching them to form a Peninsula. The volcano is thought to have reached a height of about 1200 m before erosion started to wear it down. As the frequency of eruptions decreased, the speed of erosion accelerated, particularly of the softer ash in the centre of the crater, causing the crater to be widened and deepened. Later the crater was breached in the west at Gebbies Pass.

There is no evidence of glaciation on Banks Peninsula, but during the glacial periods of the last 2 million years, fine sand and silt formed by the grinding action of ice on rocks of the Southern Alps, was carried by winds, deposited and accumulated as loess, up to 20m thick on much of the Peninsula. The loess tends to be thickest below about 150 masl (metres above sea level), owing to having been eroded from the upper slopes and redeposited on the lower ones. Ongoing tunnel and gully erosion and landslips commonly affect loess slopes.

In profile, the Port Hills crater segment has characteristic deeply-eroded gentle dip slopes on its “outside” flanks, while inside the crater, the rocky scarp slopes are typically steep to moderately steep immediately beneath the uneven summit, exhibiting many tors and rocky outcrops.

Landcover

The vegetation originally covering the Port Hills reflected the variety in elevation (from sea level to 580m), rainfall (600 to 850 mm per year) and topography, while today’s land cover reflects historical modification and present land uses.

Several reserves fall within the Selwyn part of the western Port Hills with Kennedys Bush and Ahuriri Reserve/ Omahu Bush being two ecologically important areas. The reserves contain one of the best examples of the native podocarp forest that would have covered the majority of gullies and slopes prior to human modification. Ahuriri Reserve is the only substantial example of the lowland mataī/tōtara forest once common on the deeper, well drained soils of the plains and foothills. The remnant contains significant numbers of regenerating tōtara and mataī, as well as an abundance of other native trees and shrubs.

The majority of the western Port Hills slopes are grazed or in production forest today and have undergone substantial modification from their original land cover. The slopes and ridges mostly contain a mosaic of grassland, while regenerating shrublands can be found in some of the wetter gullies. The grazed slopes mostly contain exotic grasses with some interspersed tussocks in less intensively grazed areas. Exotic woody weeds, such as gorse and broom, are a regular occurrence.

In February 2016, a large fire on the Port Hills burnt much of the vegetation on the northern boundary of the district and damaged infrastructure, forestry and areas of native vegetation.

Landuse

In pre-European times, Ngāi Tahu, and Ngāti Mamoe and Waitaha before them, utilised this area of Te Pātaka o Rākaihautū. In particular, Te Tara o Te Rangihikaia/Gebbies Pass was a key transport route between Te Waihora (Lake Ellesmere) and Whakaraupō (Lyttelton Harbour), and the respective pā and kāinga of Waikākāhi, Ngāti Koreha and Mānuka (on the Te Waihora side) and Ōhinetahi, Whakataka and Rāpaki (on the Whakaraupō side). Mahinga kai largely focussed on the fish, waterfowl and wetland plants and resources associated with Te Waihora, but also included the forest birds and timber available in the forests of the hills. Volcanic rock, as well as other stone resources were also important in the area.

Historically, the pattern of agricultural development and subdivision on Banks Peninsula has been strongly influenced by agronomic features such as soil type, topography and climate as well as access and transport considerations. In the mid 1900's pastoralism was based on relatively extensive grazing of sheep and cattle with wool being the major income. The nature of the farming during this period had a significant impact on the landscape with the ability to closely graze livestock ensuring that forest and weeds were not able to regenerate. Where farming proved to be less economic over time, the landscape reverted relatively quickly back to regenerating forest, as can still be seen in many gullies today.

The typical farming block on the western Port Hills has become smaller through subdivision over time and residential development is an increasingly important land use today. Currently, the majority of settlements are confined to the lower-lying valleys and slopes, with the upper slopes and crater rim generally free of dwellings. Around Tai Tapu (Otahuna) and Lansdowne (Early Valley Road) a number of residential dwellings are found on lower slopes and spurs.

Forestry occurs in smaller to medium-sized blocks on the western slopes of the Port Hills within Selwyn District and the stands of conifers generally form a mosaic of land uses with pastoral farming. The forestry blocks generally follow the landforms, with many of them occurring in gullies. Some shelterbelts form distinctive lines around the toe of the lower slopes, in particular near settlement areas.

Key Landscape Characteristics

- Western segment of Lyttelton volcano landform
- Prominent rocky outcrops showing volcanic origins
- Land use mosaic of extensive grazing and small- medium sized forestry blocks
- Native vegetation largely confined to reserves and gullies with regenerating forest
- Settlement generally around the toe of slopes and lower ridgelines
- Key named peaks, passes, spurs and ridges: Ō-Rongomai (Cass Peak), Ō-Mawete (Coopers Knob), Te Moko Peke, Te Tara o Te Rangihikaia (Gebbies Pass), Ō-Turi , Mānuka pā and Ngāti Koreha pā significant to migration and settlement traditions of manawhenua and ongoing tribal identity.

4.2 Landscape Character Area 2: Coastal Plains (Te Waihora/Lake Ellesmere to Rakaia River Mouth)

Photograph 2: Te Waihora/ Lake Ellesmere

The Coastal Plains Landscape Character Area includes the coastal lagoon and wetland complex Lake of Te Waihora / Lake Ellesmere, west of Banks Peninsula and the coastal strip west to the Rakaia River mouth. The coastal environment predominantly comprises sweeping gravel beaches, interspersed with gravel beach ridges, and areas of back dune and lagoons, such as Muriwai/Coopers Lagoon. Te Waihora /Lake Ellesmere is Canterbury's largest and New Zealand's fifth largest lake – covering an area of approximately 20,000 ha – with approximately 75 kilometres of shoreline. The majority of the lake and shoreline is located in the Selwyn District. The active and major floodplain of the Rakaia River forms this Landscape Character Area's western extent, where a series of alluvial outwash gravels occupy this large river mouth. Elevation ranges from 0 to 20m and rainfall ranges from 600 to 800 mm per year.

Te Waihora / Lake Ellesmere and the coastal margin are flat and surrounded on the landward side by pastoral land, abutting the Low Altitude Plains Landscape Character Area to the north. Due to the low profile of this Character Area, large skies are experienced.

Landform

Te Waihora / Lake Ellesmere is a shallow coastal lagoon separated from the open ocean by Kaitorete Spit, a spit of sand and gravels. The lake is fed predominantly by spring-fed tributaries, as well as the rain-fed Waikirikiri/Selwyn River. Groundwater and rain drain from the Canterbury Plains, and is transported to the lake by a series of subterranean systems, numerous drains, spring-fed tributaries and the Waikirikiri / Selwyn River.

The name Te Waihora neatly describes its form and character literally meaning 'flat, spread out water'. It is also known as Te Kete Ika a Rākaihautū – The Fish Basket of Rākaihautū – giving reference to the abundance of native freshwater, estuarine and coastal wandering fish that occur at the lake, as well as linking to the creation and migration traditions of the Waitaha people that first inhabited the area. Due to its immense cultural significance and ongoing importance the ownership of the lakebed of Te Waihora was returned to Te Rūnanga o Ngāi Tahu as part of the Ngāi Tahu Claims Settlement Act 1998.

The coastal interface of this Landscape Character Area with the South Pacific Ocean incorporates the undulating gravel beach, sand dunes and associated interdune back swamps, gravel ridges and bars with wetlands on the margins of small lagoons where streams exit the Selwyn plains. The Rakaia River mouth is characterised by its active and distinctive braided patterns, formed by outwash gravels and small floodplain terraces.

The underlying geology of this character area reflects the historic alignment of the Waimakariri River and current influences of the Rakaia River outwash fans.

Several other lagoons fall within this character area, with the hapua lagoon at the Rakaia River mouth being the most prominent one. The smaller Muriwai/Coopers Lagoon is also of ecological as well as cultural value as a wetland ecosystem and mahinga kai – the bed of which is also owned by Te Rūnanga o Ngāi Tahu.

Landcover

Most of the Te Waihora / Lake Ellesmere and Muriwai/Coopers lagoon margins consist of herbaceous saline and freshwater vegetation of low growing, native rushes and sedges interspersed with pockets of exotic deciduous tree and shrub species such as willow and poplar. The coastal gravel beaches from Te Waihora /Lake Ellesmere to the Rakaia River are covered with dune species such as pingao and marram grass.

Landuse

The shores of Te Waihora /Lake Ellesmere retain a long history of settlement with a large number of historic and important cultural sites located around the lake and along the ocean interface. Settlements such as Taumutu and Whakamatakiuru/Fishermans Point, exist due to the fisheries and waterfowl resources the lake provides, including the significant commercial tuna/eel and pātiki/flounder fishery that continues to this day. Customary and recreational hunting and fishing also remains important to both Ngāi Tahu and the wider community. The beds of both Te Waihora /Lake Ellesmere and Muriwai/Coopers Lagoon are vested in the fee simple ownership of Te Rūnanga o Ngāi Tahu and are managed in accordance with management plans that control activities affecting the lakes, including ongoing commercial use. The lake and its wetland margins, including Muriwai/Coopers Lagoon, which lies to the southwest, provide very important habitat for many species of wetland and water birds including large numbers of migrant waders and native fish species. Te Waihora is internationally significant for the abundance and diversity of its birdlife and nationally significant for its wetland vegetation. Bird watching is a popular activity in this area.

Te Waihora is artificially opened to the sea near the boundary of the district to enable surrounding landuse, settlement, as well as fish passage. A water conservation order and resource consent governs the lake opening regime and seeks to protect the following outstanding features:

- habitat for wildlife, indigenous wetland vegetation and fish; and
- significance in accordance with tikanga Māori in respect of Ngāi Tahu history, mahinga kai and customary fisheries.

The Rakaia Huts township has numerous small dwellings and is located close to the Rakaia River. The Rakaia River mouth is a popular salmon fishing area areas and also includes a significant archaeological and wāhi taonga management area, being an important site of early Māori settlement.

Key Landscape Characteristics

- Large coastal lagoon and wetland systems supporting outstanding wildlife, indigenous wetland vegetation and fish.
- Sweeping gravel beaches along the coastal interface
- Flat, open pastoral, lake and seascape with large skies
- Bird watching within this relatively remote part of the district
- Numerous Ngāi Tahu sites of significance, including pā, kāinga, wāhi mahinga kai and wāhi tapu centred around key wetland, Waipuna and waterways such as Taumutu, Orariki, Whakamatakiuru, Pakoau, Kūaowhiti, Tūtakahikura, Waiwhakaheketupapaku and Muriwai.

4.3 Landscape Character Area 3: Low Altitude Plains

Photograph 3: Irrigation on the Selwyn Plains

The Low Altitude Plains Landscape Character Area forms the central portion of Kā Pākihi Whakatekateka o Waitaha/ the wider Canterbury Plains. This Character Area is defined by the foothills of the Malvern Hills in the north west, by the Waimakariri River to the North East, Te Waihora / Lake Ellesmere to the Southwest and is flanked on the South West by the Rakaia River.

This Character Area is defined by the flat, open and expansive plains which have little topographical relief. Elevation ranges from 0 to 150m. This highly modified landscape possesses a linearity, emphasised by the characteristic shelterbelts, dissecting roads and broad scale agricultural land use. The central natural landscape feature of the area is the Waikirikiri/Selwyn River and its tributaries including the Waianiwaniwa, Te Hororātā and Hawkins Rivers, which flow from the Malverns Hills to Te Waihora/Lake Ellesmere.

The Low Altitude Plains are dotted with a number of townships of varying intensity which service the rural community. Intensity and frequency of such settlements decreases with distance from neighbouring Christchurch City.

Landform

The Low Altitude Plains consist of flat to gently undulating, fertile, loamy to free draining soils, old greywacke gravel fans and floodplains of historic river alignments and glaciation events of the mountains in the North West. Generally, the Low Altitude Plains are open with distant views to the Port Hills of Banks Peninsula in the South East and the Torlesse, Benmore and inland Craigieburn Ranges in the North West.

The Waikirikiri / Selwyn River bed traverses the plains from the Torlesse Range foothills near the township of Coalgate for approximately 50km flowing into Te Waihora / Lake Ellesmere in the east. Due to the porous nature of the alluvial greywacke gravels of the riverbed, a portion of the Waikirikiri / Selwyn riverbed appears to be dry around the SH 1 bridge for much of the year, but the river water runs beneath the surface in a series of aquifers and subsurface river flows south east toward the ocean. Traditionally the Waikirikiri / Selwyn River has always flowed through the Whitecliffs area and from Chamberlains Ford area to Te Waihora / Lake Ellesmere.

The Low Altitude Plains are bound by the Rakaia and Waimakariri Rivers, which formed the outwash plains. Historically the Waimakariri River frequently flooded the greater plains, and at one point bisected the Low Altitude Plains from Darfield to Te Waihora / Lake Ellesmere. Remnants of the old river courses and outwash events through the Selwyn District can be identified through evidence of the deep greywacke gravel deposits, the remnant alluvial fan patterning and terrace landforms.

Landcover

Landcover throughout the Low Altitude Plains includes a mosaic of pasture which is predominantly modified from its original form, linear roads and small clusters of exotic plantation trees. Agricultural patterns of shelterbelts, fenced paddocks and irrigation pivots create a patchwork pattern on the land when viewed from the air. About 0.5% of original indigenous vegetation exists on the plains due to intensive largescale farming practices, successive clearance and land drainage practices, which have greatly modified the nature of the plains habitat. Small areas of native plantings are being re-established into the Waikirikiri / Selwyn River catchment area by charitable trusts and volunteer groups. There is also ongoing work to identify and protect existing remnant indigenous plant communities by landowners and other interested parties (SDC, ECAN and volunteer groups).

Land Use

Prior to European settlement, the Low Altitude Plains area was extensively used by Ngāi Tahu as a mahinga kai, particularly for the now locally extinct buff weka, kiore (Polynesian rat), as well as aruhe (bracken fern) and tuna (eel). The Waikirikiri was the central travelling route linking a network a food gathering sites as well pā/kāinga stretching along the length of the river from the lake to the Malvern Hills. Beyond here, further trails, food gathering and settlement sites led towards both the Waimakariri as well as the Rakaia and then inland to the key mountain passes that linked through to Te Tai Poutini (the West Coast), and facilitated the important pounamu (greenstone) trade.

Today, the Low Altitude Plains are characterised by the well-established townships of West Melton, Rolleston, Lincoln and Taitapu, which lie within a 20km radius from Christchurch City. Subdivision in the Inner Plains area of the District (identified in the Operative District Plan) adjacent to the City boundary and the larger Selwyn townships typically intensifies to smaller landholdings and lifestyle blocks. Less intense settlement patterns arise farther from major settlements, with the main centres on the Western plains consisting of Darfield, Sheffield, Springfield and Hororata; while Leeston, Southbridge, Doyleston and Dunsandel are located in the southern part of this area. The Low Altitude Plain's predominant land use is agriculture, with dairy farming being the dominant use. Dryland sheep farming is found on the shallow stony soils but in these areas irrigated dairy farming is becoming more prevalent.

Major transmission lines and towers intersect the plains from Rakaia in a South West transect heading toward Templeton on the western side of Christchurch City and northwards into Waimakariri District. The towers are prominent elements in the flat Low Altitude Plains landscape.

Key Landscape Characteristics

- Flat, open and expansive plains which have little topographical relief
- A largely linear landscape which is emphasised by the characteristic shelterbelts and dissecting roads, as well as the central spine of the Waikirikiri /Selwyn River
- Broad scale, highly modified agricultural land use
- Very little native vegetation
- Distant backdrops of the Te Whata a Rama/Torlesse, Benmore and inland Craigieburn Ranges

4.4 Landscape Character Area 4: Malvern Hills - Foothills and Downlands

Photograph 4: The downlands east of the Torlesse Range

The Foothills and Downlands Landscape Character Area forms the low-lying and open foothills which extend from the north-west of the Low Altitude Plains Landscape Character Area to the front ranges in the north east. Round Top (894m) forms the south western part of this Landscape Character Area with the Russell Range (941m) forming the northern backdrop. Beyond this Landscape Character Area to the north is the Front Ranges Landscape Character Area comprising the Big Ben and Te Whata a Rama/ Torlesse Ranges.

The Waikirikiri/Selwyn and Hawkins Rivers traverse the valley floors of this Landscape Character Area weaving their way southwards toward the Plains. The north western and western edges of this Landscape Character Area adjoin the settlements of Springfield, Sheffield and Coalgate while Windwhistle and Glenroy flank the southern edges of this area.

The Malvern Hills retain an undulating character which is further divided into areas of enclosed valley floors, rolling shoulder slopes, spurs and summits along the rolling shoulder slopes. The underlying geology of this Landscape Character Area is of volcanic origin and is related to the sheets of rhyolite lava found in the Te Kiekie/Mt Somers area north west of Ashburton.

Landform

The elevation of the Malvern Hills, at between approximately 300m to 1,211m, is much lower than the adjacent and adjoining inland ranges of Te Whata a Rama/ Torlesse and Big Ben Ranges (1,963m). However, the Malvern Hills provide an important gradual rise to the mountains further north.

Landcover

Within this Landscape Character Area, the lower slopes of the hills are predominantly low production grassland, however, there are frequent locations where scrub is apparent, mainly within gullies and on steeper slopes. Scrub here comprises predominantly matagouri, manuka, some gorse and broom, and some mixed native species found in gullies. Pockets of indigenous forest, notably manuka and kanuka are present on the northern slopes of the more elevated western parts of this area.

Pasture covers much of the remainder of the character area especially in the productive valley areas, with tussockland, gorse and regenerating indigenous vegetation also common in steeper areas. Plantation forestry has also been established in some parts, with some large plantations present in central and western areas.

Landuse

The Malverns Hills area was part of the inland trails, settlements and food gathering areas of Ngāi Tahu Whānui significant for various resources and species including koreke (extinct native quail), kāuru (made from cabbage tree root), āruhe, weka and tuna. These trails were also significant as part of the east-west coast travelling route that supported pounamu trade.

The current predominant land use is agricultural, with pastoral grazing with sheep and beef farming being dominant. Large plantations of production pine forestry are also present.

The transmission lines and towers intersect the Malvern Hills from Glenroy in a south-western transect toward Sheffield on the north-western side of this character area. The towers are prominent elements in the open rolling lower hill slopes of this landscape.

There is also a large open cast coal mine within the Malvern Hills and other small historic mines in the area.

Key Landscape Characteristics

- Low lying and open foothills with moderately divided valley systems and flat valley floors
- Small pockets of indigenous and regenerating scrubland and forest
- Areas of plantation forestry
- Pastoral grazing being a dominant land use
- Prominence of transmission towers
- Important Ngāi Tahu trails, settlements and food and resource gathering areas, such as Whakaepa (near Coalgate) that linked through to the Upper Waimakariri basin and onto the mountain passes to Te Tai Poutini and were part of the pounamu trade route.

4.5 Landscape Character Area 5: Front Ranges (Big Ben and Torlesse Ranges)

Figure 5: View of Torlesse Range from State Highway 73

This Landscape Character Area is located between the Foothills and Downlands, the Kura Tawhiti/ Castle Hill Basin and the Intermontane Ranges and Basins Landscape Character Areas. The distinctive north-south extending mountains in this area act as the front range that fringes the upper plains. To the northeast is the rugged Te Whata a Rama / Torlesse Range, with Castle Hill Peak and Mount Torlesse rising to just under 2,000m and to the southwest is the lower Big Ben Range, with Ben More rising to 1,655m. These two front ranges are divided by Porters Pass and State Highway 73 and are very visible from parts of the Low Altitude Plains. These ranges are often snow-covered and provide the skyline in longer distance views from the plains.

Landform

The landform of this Landscape Character Area is typically steep and highly dissected by minor glacial and continued erosion through alluvial and tectonic forces. With elevation ranging from 450m to around 2,000m the predominantly sedimentary basement rocks of these ranges are closely associated with the spine of the Southern Alps. Uniform greywacke and argillite rocks were formed from sea-floor deposits and have been uplifted to their current height. Extensive scree and boulders are evident at higher altitude, along with sharp crested peaks and relatively smooth flat-topped ridge crests.

The ranges have been separated from the main spine of the Southern Alps by a series of large rivers that dissect and drain this landscape. Deep colluvium and moraine deposits can be found throughout.

Landcover

The landcover of the front ranges has not been modified to the same extent as the plains below. The remaining native vegetation communities are generally restricted to steep slopes and gullies. They include mountain beech fragments (of various sizes), mixed broadleaf forests, mixed shrublands and tussock grasslands. Podocarp forests around the base of the foothills have been heavily logged and only very small fragments remain. The remainder of the area contains plantation forests and extensive pastoral grassland.

At higher altitudes, the landcover is predominantly exposed rocky outcrops with pockets of low alpine vegetation, scree and boulders. The peaks of the Torlesse Range are often snow-clad and highly visible from long-distance viewpoints on the plains.

The Korowai/Torlesse Tussocklands Park covers approximately 21,000 hectares centered on the Torlesse and Big Ben Ranges, in Selwyn's high country. This conservation area, which is managed by the Department of Conservation, contains extensive native vegetation, in particular alpine shrubs, such as *Dracophyllum*. The Torlesse and Big Ben ranges are high, dry mountain ranges with remarkable flora and fauna. Slim-leaved snow tussock/wï kura is common and the high-altitude tussock grasslands represent the eastern limit of mid-ribbed snow tussock. Unique scree plants are found, such as vegetable sheep (*Raoulia eximia*) and penwiper/porotaka (*Notothlaspi rosulatum*), Haast's scree buttercup (*Ranunculus haastii*), scree lobelia (*Lobelia roughii*) and scree pea (*Montigena novae zelandiae*).

Landuse

Kura Tawhiti and Te Whata a Rama which make up part of the Torlesse Range are key features of this landscape area for Ngāi Tahu, being significant maunga or mountains that could be seen from the settlements on the plains and that were also key food gathering areas for valued alpine and forest species.

Much of this Landscape Character Area is accessible for a variety of recreational pursuits including hiking and mountain biking. Plantation forestry and high-country grazing is also typical on the lower slopes. State Highway 73 provides the main access route through the mountain range to the West Coast, with Porters Pass being one of the popular viewpoints in the area. The Torlesse Range is very accessible from Christchurch and a very popular recreation area. The main access points into the park are the Kowai River (private), Porters Pass and Lake Lyndon Road. There are no settlements in the area, but occasional farm buildings/ homesteads are found.

Key Landscape Characteristics

- Highly visible Ranges including Kura Tawhiti and Te Whata a Rama, evident from the Low Altitude Plains and significant to Ngāi Tahu.
- Sharp crested peaks and smooth flat-topped ridge crests.
- Mosaic of landcover with extensive scree at higher altitudes and greater modification at lower altitudes.
- Tourist and recreation interest in the area (mountain biking, hiking).

4.6 Landscape Character Area 6: Kura Tawhiti/ Castle Hill Limestone Basin

Figure 6: Rocks at Castle Hill

The Kura Tawhiti/ Castle Hill Limestone Basin Landscape Character Area lies to the west of the Torlesse Range (Front Ranges Character Area) and east of the Craigieburn Range (Intermontane Ranges and Basins Character Area), and is distinguished by its specific underlying geology.

Castle Hill is one of Canterbury's iconic landscapes that is well-known by locals and tourists alike. The limestone outcrops that occur throughout the basin are a distinctive and recognisable part of this Landscape Character Area. Their prominence in this Landscape Character Area is amplified through the presence of State Highway 73, where they are frequently viewed from. The limestone ridges and rock outcrops are of particular prominence around Castle Hill and Spittle / Flock Hill, but distinctive formations cross the entire basin.

The Porter River drains the basin with a number of tributaries converging near Prebble Hill before flowing into Broken River.

Landform

The Castle Hill Basin with its karst and limestone outcrops is a classic area of Canterbury geology, which is considered a geological showpiece with its easy access from Christchurch and the presence of good and easily accessible limestone ridges and rock formations. Many fossils can be found across a number of important sites within the basin and there are representative

examples of the broad diversity of geological features, landforms, soil sites and active physical processes present.

The geology of the rocks at Castle Hill / Kura Tawhiti comprises tertiary limestone, mudstone, sandstone and tuffs which were eroded by water to form the distinctive sculptured landforms of a karst landscape. Cave Stream is an interesting example of a limestone cave, with an accessible stream running through it.

Land cover

While the wider basin is predominantly in agricultural use with exotic pasture, the DOC managed Castle Hill conservation area is botanically important because the limestone and related rocks support rare plants. The presence of a number of threatened plant species, such as the highly threatened buttercup *Ranunculus paucifolius* which is found on land adjacent to Kura Tawhiti / Castle Hill Conservation Area, led to the designation of the Lance McCaskill Nature Reserve.

The karst surface landforms provide a variety of habitats for plant species that are restricted to, or favour, growing on calcareous soils, such as scattered scrubland remnants among limestone boulders and crevices, sparse limestone scree vegetation, and calciphilic tor vegetation of mosses and lichens.

Furthermore, many bird species, several lizards and some invertebrates (mainly snails), for which the limestone tors and outcrops provide an important habitat, have been recorded in the Castle Hill Basin.

Land use

Much of the Landscape Character Area is used for pastoral grazing with levels of modification varying between the slopes and flat areas within the basin. The agricultural land use has a long-standing history and many farm buildings, such as those at Castle Hill Station.

Castle Hill Village is a small alpine settlement with a specific character that reflects an 'alpine chalet' theme with building design controls reflecting the alpine environment.

'Kura Tawhiti', which has Tōpuni status under the Ngāi Tahu Claims Settlement Act 1998, means 'the treasure from a distant land', and is an allusion to the kumara, an important food once cultivated by Māori in this region. The site was part of a trail network, where Ngāi Tahu tūpuna camped overnight and gathered food on their journeys from over 600 years ago. Numerous archaeological sites have been identified in the area, including numerous habitation caves and rock drawings.

The tors and bluffs of the basin provide high scenic values and are an integral part of the landscape. The site is a popular stopping place for travellers on the major east/west highway across the South Island. Furthermore, the area is also very popular with rock climbers, who come to the area in great numbers to climb at Castle Hill and Spittle Hill.

Key Landscape Characteristics

- Iconic and distinctive limestone outcrops, including significant archaeological and heritage sites for Ngāi Tahu, containing ancient rock drawings.
- Important karst landscape and impressive rock formations at Cave Stream.

- Open, dry basin with agricultural land uses on private land.
- Highly significant native limestone vegetation occurring in reserves.

4.7 Landscape Character Area 7: Intermontane Ranges and Basins

Photograph 7: Lake Coleridge within the Intermontane Ranges

The Intermontane Ranges and Basins Landscape Character Area extends between the Main Divide Ranges to the west and the Front Ranges to the east. This Landscape Character Area includes the typical 'High Country' that Te Waipounamu/ the South Island is renowned for.

While the Kura Tawhiti/ Castle Hill Limestone Basin with its prominent limestone outcrops is described as a separate character area, this area includes the wider Whakamatau/Lake Coleridge Basin at the confluence of two major braided rivers – the Rakaia and the Waitāwhiri/Wilberforce (including the catchment of its tributary, the Harper River). The braided Waimakariri and many of its lower tributaries, such as the Porter / Broken River area are also included in this area. The Black and Craigieburn Ranges are two of the major mountain ranges that fall within the character area.

Landform

To Ngāi Tahu, the Southern Alps are known as Kā Tiritiri o Te Moana – literally meaning 'the white caps of the ocean'. This name comes from the view of the mountains the earliest tūpuna (ancestors) saw when arriving from the sea on their waka – which to them looked like the peaks seen in a rough ocean. The alps also form the hull of the great canoe of Aoraki – Te Waka o Aoraki - which was wrecked when it struck an undersea reef and flipped upside down, forming the South Island (and providing its original name). Aoraki and his brothers who were on board climbed to the top of the upturned hull and became the highest peaks, including Aoraki/Mt Cook.

The elevations are lower than in the ranges to the west (around 2000m) and fluvial and erosional processes are more prevalent in the absence of recent glaciers around the peaks of the ranges. However, the signs of past glaciation are clearly evident in the landscapes of the basins and their landforms. Features of these basin landscapes include extensive glacial terraces, moraines, lakes and kettleholes, as well as outwash surfaces. Remaining lakes in the area include well-known Whakamatau/Lakes Coleridge, Moana Rua/Pearson and Ōpōrea-iti/Grassmere. The wide braided rivers are iconic features of the landscape and the eroding scree slopes and rock outcrops on the ranges create an impressive backdrop to the lower-lying valleys. Extensive fans are visible signs of more recent erosional processes.

Landcover

These relatively dry basins, valleys and mountains are one of Canterbury's distinctive landscapes with extensive scree slopes and stark contrasts between the less modified ranges and the farmed basins and valleys. Alpine areas have extensive scree slopes and basins that support interesting and diverse alpine ecosystems including tall tussocklands, herbfields and specialised scree communities that can withstand the harsh alpine climate.

Farmers on the various large high country stations have cultivated this land for generations. As a result, the indigenous plant communities have been modified by pastoralism and vegetation is now dominated by pasture and tussock grasslands. The low-growing nature of this vegetation found in the basins, along the river terraces and on the slopes of the ranges allows the landforms to dominate the landscape and define the horizons. This accentuates the vastness of these landscapes.

Many of the mountain ranges are within Department of Conservation (DOC) management, where beech forest is more prevalent, such as in the headwaters of the Avoca and Harper Rivers. Due to the rainfall gradient from the main divide and following historic burning / deforestation for farming more eastern areas do not support the same extensive forests as the Arthurs Pass area.

Landuse

Whakamatau/Lake Coleridge is a significant site for Ngāi Tahu, being part of the well known Rakaia 'pounamu trail' following up along the Waitāwhiri/Wilberforce River to Nōti Raureka (Brownings Pass) and down to Arahura on Te Tai Poutini (the West Coast). It is significant as a mahinga kai as well as nohoanga for the gathering of food, particularly tuna/eels. Other key sites in the area include Te Ruahikihiki (Lake Selfe), Ōtūmapuhi (Mount Algidus), Kohikaaroaroa (Harper River) and Otūtekawa (Avoca River), utilised as mahinga kai.

European history is closely associated with high country pastoralism, and evidence of this can be seen in the landscape with the presence of homesteads and associated buildings. Recently, through the tenure review process (Crown Pastoral Land Act 1998) some areas of high country land have been retired from grazing and their management has been transferred to DOC. The remainder have been transferred to freehold land, often resulting in intensification of agricultural land use in these lower-lying areas. There is limited settlement in this landscape, aside from the small high country village Lake Coleridge, and the isolated homesteads of the high country stations.

The Craigieburn Range is one of Selwyn's tourist attractions with a number of commercial and club ski fields that operate in this area during the winter months, including Porter Heights,

Cheeseman, Broken River and Craigieburn. During summer these areas are popular for hiking and mountain biking.

Key Landscape Characteristics

- Iconic High Country landscape
- Highly legible landforms shaped by past glacial and more recent fluvial processes
- Alpine mountain ranges with extensive scree slopes
- Braided rivers and lakes form vast basin landscapes
- Agricultural farming use, traditionally with extensive grazing
- Tourist and recreation interest in the area (skiing, mountain biking, hiking)

4.8 Landscape Character Area 8: Main Divide Ranges

Photograph 8: Snowy peaks in the High Main Divide Range

The Main Divide Ranges includes the steep and precipitous mountains of the Main Divide in Kā Tiritiri o Te Moana/the Southern Alps, which form the western boundary of the District. This Landscape Character Area transitions to the east into the Intermontane Ranges and Basins Landscape Character Area, where a lower rainfall and lower mountain ranges are prevalent. The area includes the prominent mountain ranges in the headwaters of the Waimakariri, Waitāwhiri/Wilberforce, Mathias and Rakaia Rivers that contain many well-known, glaciated peaks.

The Main Divide Ranges area is characterised by high mountains, deep valleys, high rainfall and indigenous vegetation. This Landscape Character Area, away from the Arthur's Pass valley, is the most remote and isolated with the lowest level of modification.

Landform

To Ngāi Tahu, the Southern Alps are known as Kā Tiritiri o Te Moana – literally meaning 'the white caps of the ocean'. This name comes from the view of the mountains the earliest tūpuna (ancestors) saw when arriving from the sea on their waka – which to them looked like the peaks seen in a rough ocean. The alps also form the hull of the great canoe of Aoraki – Te Waka o Aoraki - which was wrecked when it struck an undersea reef and flipped upside down, forming the South Island (and providing its original name). Aoraki and his brothers who were on board climbed to the top of the upturned hull and became the highest peaks, including Aoraki/Mt Cook.

The Selwyn District section of the Southern Alps comprises predominantly sedimentary rocks (predominantly greywacke and argillite) and have been severely glaciated and sculpted by erosional and tectonic forces. The mountainous landscape comprises glaciated eroded bedrock forms, arêtes, cirque basins, U-shaped glacial troughs, extensive areas of bare rock and scree and permanent ice and snow above 1400m in elevation.

Elevation within this Landscape Character Area extends from 550m in the southern reaches to up to 2400m, with rainfall ranging from 5,000 through to 8,000mmm a year.

Landcover

The land cover of this area varies between the high alpine ecosystems with specialised alpine plants and herbs, subalpine shrubland at mid elevations and beech forest covering the lower slopes. Important stands of New Zealand cedar/kaikawaka also exists in the headwaters of the Wilberforce River.

The wide braided rivers are generally dominated by wide gravel plains and islands, with specialised plant communities adapted to the challenging and ever-changing braided river bed environment. Overall vegetation modification is quite limited and weeds are generally confined to river valleys, where they are less prevalent than in more eastern areas.

Land Use

The main divide area was utilised by Ngāi Tahu as a travelling route connecting the east and west coasts and in particular supporting the valuable pounamu trade. Key trails include those following the three main rivers of the Rakaia, Waimakariri and Waikiriri. Perhaps the most significant is famous 'pounamu trail' that utilised Nōti Raureka or Brownings Pass, which followed the Rakaia River up past Whakamatau/Lake Coleridge then along the Waitāwhiri/Wilberforce River and up to the pass where it proceeded down the Arahura River. The pass itself is named after Raureka, a Ngāti Wairangi women who is famed with being the first to cross the pass and come into contact with Ngāi Tahu along the Rakaia, subsequently showing them her pounamu toki (adze) as well as the way back to the Te Poutini (West Coast). Today Nōti Raureka is still a popular walking trail as part of the well-known '3 passes' walk and is utilised each year as part of the Aoraki Bound journey run by Ngāi Tahu and Outward Bound.

Land use within this Landscape Character Area is overwhelmingly natural with very limited human intervention evident. Areas of human modification are focused on Arthur's Pass Village, where a series of houses, lodges and huts are present, as is the main road (State Highway 73) and railway line which travels through this deep valley. Elsewhere, human modification is very sparse and comprises occasional huts and small tracks. With majority of this Landscape Character Area being protected for conservation purposes, land use is restricted to recreational hiking, skiing and back country activities.

Key Landscape Characteristics

- Steep and precipitous mountainous environment
- A range of highly recognisable mountain peaks, cirques, tarns and glaciers
- Deep U-shaped river valleys
- Indigenous forest cover on lower slopes and alpine vegetation on more elevated slopes
- Very high rainfall over the Main Divide

- Arthurs Pass Village being the only settlement and main modification, including State Highway 73 and the railway line.
- Nōti Raureka (Brownings Pass) and its associated trails running to the head of the Waitāwhiri/Wilberforce River is significant to Ngāi Tahu as part of the pounamu trails connecting the east and west coast.

5.0 Landscape Evaluation Methodology

A fundamental output of this Landscape Study is the identification of any Outstanding Natural Landscapes and or Outstanding Natural Features that meet the 'outstanding' threshold under RMA Section 6(b).

The two criteria which must be met are that the landscape or feature is both 'natural' and 'outstanding'.

In terms of section 6(b), 'natural' usually means perceived naturalness rather than (for instance) the integrity or intactness of natural systems. These criteria for naturalness identified in case law (C180/1999 - WESI vs QLDC p. 57) include:

- relatively unmodified and legible physical landform and relief;
- the landscape being uncluttered by structures and/or obvious human influence;
- the presence of water (lake, river, sea);
- the presence of vegetation (especially native vegetation) and other ecological patterns.

The first two criteria of naturalness are necessary components of a natural landscape as they are indicators of human induced modification. However, the last two criteria are not essential as highly natural landscapes may have little or no water and vegetation cover in the absence of human modification, such as evidenced within parts of the Southern Alps. Notwithstanding this, it is accepted that the last two criteria may enhance naturalness in landscape terms, however their absence does not necessarily detract from naturalness.

Case law has found that the word 'outstanding' in 'outstanding natural features and landscapes' in section 6(b) means 'conspicuous, eminent, especially because of excellence' and 'remarkable' (C180 / 1999 - WESI vs QLDC p. 48). Usually an outstanding natural landscape should be so obvious (in general terms) that there is no need for expert analysis (C180/1999 - WESI vs QLDC p. 57).

5.1 Defining Landscape Values

Landscape values reflect the relative value to different landscapes or natural features held by society. A landscape may be valued by different people for a wide variety of reasons. Such values may also change over time. Most commonly, an assessment of landscape value underpins the traditional approach to conserving and protecting the most highly valued landscapes. This typically reflects formal acknowledgment through a recognised landscape classification process.

Landscape values can be described as the environmental or cultural benefits that are derived from various landscape attributes. These attributes will, in many instances, be the components and image of the landscape as established in the assessment of landscape character. In some instances, a particular landform may itself be considered to hold important value. It may be

that the character of a given landscape makes it a particularly striking representative of its kind or providing identity based on its uniqueness or rarity.

When judging landscape value, it is recognised that there are various ways in which landscapes may be appreciated and thresholds for value determined. The range of criteria that the Environment Court has reinforced for landscape practitioners to consider when evaluating landscapes is referred to as the Amended Pigeon Bay criteria or factors (C32/1999 – Pigeon Bay Aquiculture Ltd v CRC and C180/1999 – Waikatipu Env. Society v QLDC). These criteria or factors include:

1. the natural science factors - the geological, topographical, ecological and dynamic components of the landscape;
2. its aesthetic values, including memorability and naturalness;
3. its expressiveness (legibility) - how obviously the landscape demonstrates the formative processes leading to it;
4. transient values - occasional presence of wildlife; or its values at certain times of the day or of the year;
5. whether the values are shared and recognised;
6. its value to tāngata whenua; and
7. its historical associations.

In addition, the New Zealand Coastal Policy Statement – Policy 15 (2010) gives more specific direction when identifying and assessing natural features and landscapes of the coastal environment through having regard to:

1. Natural science factors, including geological, topographical, ecological and dynamic components;
2. The presence of water including seas, lakes, rivers and streams;
3. Legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes;
4. Aesthetic values including memorability and naturalness;
5. Vegetation (native and exotic);
6. Transient values, including presence of wildlife or other values at certain times of the day or year;
7. Whether the values are shared and recognized;
8. Cultural and spiritual values for tangata whenua, identified by working, as far as practicable, in accordance with tikanga Maori, including their expression as cultural landscapes or features;
9. Historical and heritage associations; and
10. Wild or scenic values.

Based on the above, there is now a level of national acceptance in the use of specified criteria as an assessment framework, however it is also increasingly recognised by practitioners that while they are useful, they also have certain limitations. Whilst factors or criteria were not intended to form a definitive or 'complete' list of landscape values, this is how they have often been used. Many of the criteria actually overlap and some could be more usefully seen as subsets of one another rather than as separate value categories. This can be confusing and lead to some values being given more weight than others, or 'double-counting'.

Recent case law (see C11/2009 – Unison Networks vs Hastings District Council) and a recent review by the New Zealand Institute of Landscape Architects (NZILA) have reordered the Pigeon Bay criteria into three categories. This focuses an understanding of landscape values into biophysical or natural science aspects, sensory and aesthetic aspects and other associative aspects. Biophysical, sensory and associative attributes can all be surveyed in a relatively objective way, using techniques that others can understand, repeat, review and critique. Condensing the Pigeon Bay criteria and NZCPS factors into these categories reduces the risk of emphasising some criteria at the cost of others and enables assessors to interpret the landscape values with greater validity and reliability.

The exercise of identifying ONF and ONL utilises the mapping of significant values on GIS where possible, which enables the ability to analyse where particular values overlap. The identification of an appropriate boundary reflecting the important biophysical, sensory and associative values identified can be conceived of as mapping the separate value attributes identified within each landscape character area (see Image 1). The evaluation must also recognise that not all values are able to be mapped (such as sensory or aesthetic values). From this, a judgement identifying the findings of the landscape evaluation is able to delineate areas that displayed notable high qualities of a range of biophysical, sensory and associative values.

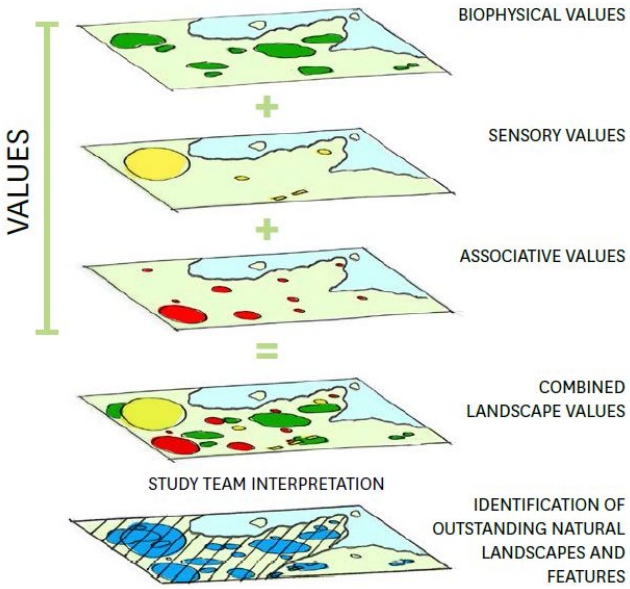

Image 1: Layering of landscape attributes to order to identify outstanding natural landscapes

When identifying the potential location of ONF/L it is recognised that the boundaries identifying valued areas of landscape, do not necessarily coincide with landscape character areas, the latter of which is based on determining areas of landscape with distinctive key characteristics. The following diagram (Image 2) illustrates the different relationships between landscape character areas and ONF/L which may occur:

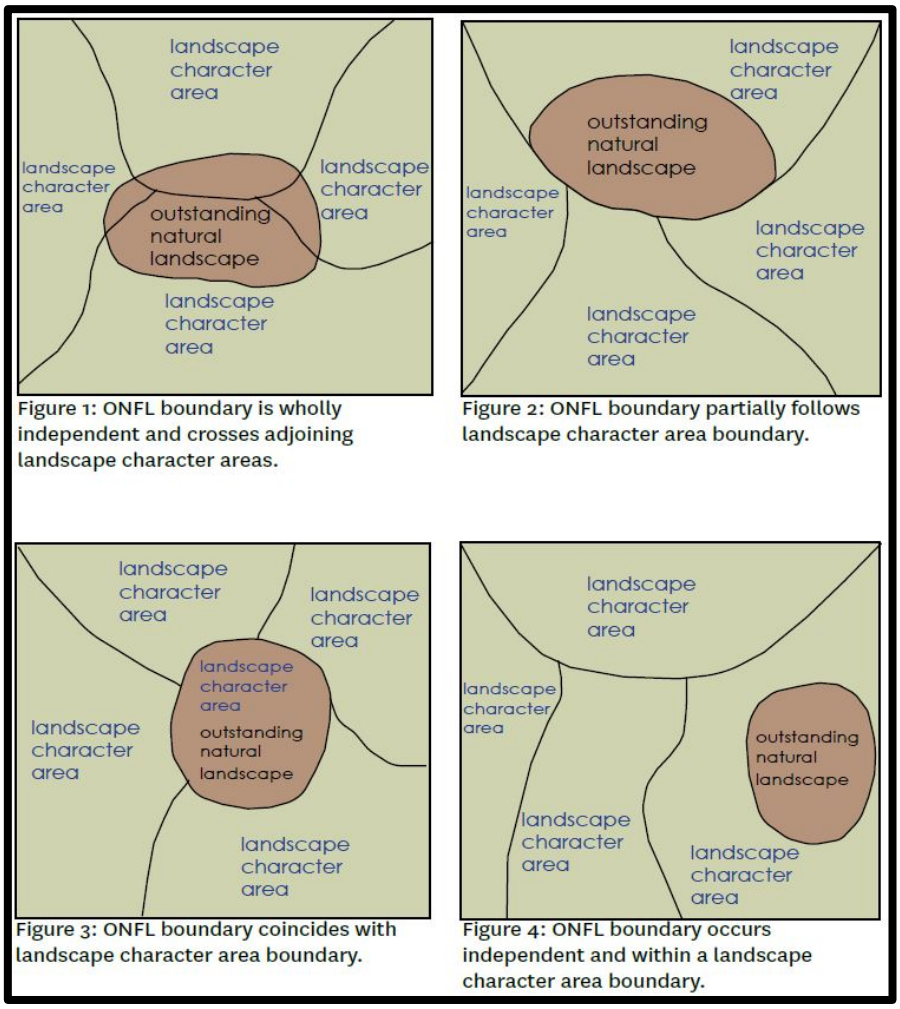

Image 2: Relationship between ONF/L and character areas

The process of determining ONF/L acknowledges that every attribute does not need to score very high to be considered as an ONF/L, although this will depend on the landscape under consideration. By undertaking this process, a threshold of values was also determined, which essentially concluded whether a landscape (or feature) was an ONF/L or not. ONF/L were only identified in relation to features or areas of landscape which scored at least high for biophysical, sensory and associative values.

5.2 Judging Landscape Values

In accordance with the above, consideration of data and findings from field work were used to determine an area of landscape's combined biophysical, sensory or associative value. This utilised the evaluation framework as set in **Table 1** in accordance with the relevant landscape attributes as described. A more detailed understanding of the landscape attributes considered including their definitions and reliance on relevant case law is also set out in **Appendix 2**:

Table 1			
Landscape Attributes		**Description**	**Assessment**
Biophysical	Abiotic	The presence of important or recognised geological, hydrological or topographical features	The underlying landform or natural feature are recognised as being important for scientific or educational purposes.
	Biotic	The presence of important native vegetation communities, wildlife or ecosystems	The area of landscape or feature contains important native vegetation communities, wildlife or ecosystems.
Sensory	Legibility	How obviously the feature or landscape demonstrates its formative processes	Geomorphological, hydrological, climate, vegetation, coastal and /or cultural processes are actively displayed in the landscape.
	Naturalness	The perception of the predominance of nature in the landscape	The landscape appears largely uncompromised by modification and appears to comprise of natural systems that are functional and healthy.
	Vividness	How striking or memorable an area of landscape is, including its role in the mental maps of a district or region	The landscape is widely recognised across the community with an ability to remain clear in the memory.
	Coherence	The way in which the visual elements or components of any landscape come together	The pattern of land cover and land use appears in harmony and is easily understood with no apparent random or significant discordant elements of land cover or land use.
	Transient values	The presence of wildlife or other values at certain times of the day or year	Changing elements, patterns and processes remain clearly apparent through times of the day or year.
Associative	Shared & recognized values	Whether the values are shared and recognised	The area of landscape or natural feature is widely recognised in the community and commonly referred to in art, literature or tourist maps.
	Tāngata Whenua values	Cultural and spiritual values for Tāngata Whenua	The area of landscape or natural feature contains cultural sites or values which are important to local iwi.
	Historic Heritage Associations	The presence of known historic or heritage associations	There are numerous and/or important historic sites identified within the area of landscape or feature.

In order to judge the relative value of landscape attributes the seven-point scale set out in **Diagram 1** was used alongside a description of the relevant landscape values which are identified:

***Diagram 1**: Landscape evaluation scale (Very Low through to Very High)*

At this stage of the assessment, the identification of ONF/L boundaries was primarily based on broad geomorphological and geographical patterns, see Diagram 2. Variations in land cover and land use are also taken into account as a secondary factor. This information was sourced from aerial photographs, and other GIS information, such as LCDB4 (Land Cover Data Base v.4). The process of community and land owner engagement including future consideration of associative values developed through community and Iwi engagement may further refine the areas of landscape defined.

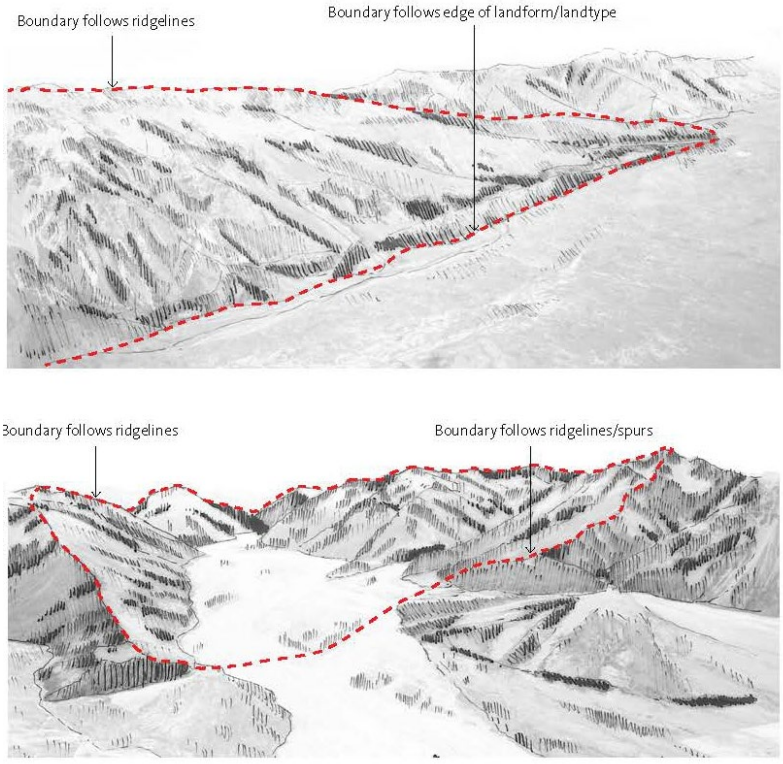

***Diagram 2**: Illustration depicting ONL and ONF boundaries*

For the purpose of this exercise, no particular distinction has been made between an Outstanding Natural Feature (ONF) and an Outstanding Natural Landscape (ONL), as they are covered under the same section of the RMA.

In general, landscape and features are differentiated as follows:

Landscapes are larger areas that are perceived as a whole and can include a number of features within them. Landscapes can be either experienced from within (e.g. from walking tracks) or seen as the whole of an outlook (e.g. looking towards the Front Ranges from the flat plains). Any mapped landscapes (or ONLs) will be identified at a district scale, underpinned by

the broader Regional ONF/L mapping contained within the Canterbury Landscape Review 2010.

Landscape features are discrete elements within a landscape, which are generally experienced from outside the features' boundaries. Features display integrity as a whole element and can often be clearly distinguished from the surrounding landscape. Generally, features are defined by their geomorphological landform boundaries. However, in some instances (such as areas of native bush) features are defined more readily by land cover characteristics.

6.0 Outstanding Natural Landscapes (ONL) in the Selwyn District

Within the Selwyn District, eight ONF/Ls have been identified and these are illustrated on **Figure 12**. These are all landscapes in their own right, each containing a range of biophsycial, sensory and associative values. Each ONF/L retains sufficient levels of naturalness to be considered a candidate for being outstanding.

A commonality of the ONF/LS is their high degree of naturalness, most notably within the more remote and rugged mountainous interior. Spiritual, cultural and historic values enrich each landscape and provide an important component into the areas associational aspects.

Based on the evaluation undertaken, the following ONF/Ls have been identified and mapped (see **Figures 12A-12H**). Their associated values and characteristics are described in the following sections, along with a description of the appropriate method of mapping each area.

Table 2 – Outstanding Natural Landscapes in the Selwyn District	
Landscape Area	
1	Te Pātaka o Rākaihautū / Banks Peninsula (Selwyn Section)
2	Te Waihora / Lake Ellesmere
3	Rakaia River
4	Waimakariri River
5	Malvern Hills
6	Front Ranges
7	Rakaia Catchment
8	Waimakariri Catchment

6.1 Te Pātaka o Rākaihautū / Banks Peninsula (Selwyn Section) ONL

Exceptional volcanic skyline and spurs with pockets of native vegetation.

Te Pātaka o Rākaihautū / Banks Peninsula (Selwyn Section) ONL		
Landscape Attributes	**Evaluation**	**Rating**
Biophysical	• Some of the best examples of volcanic features in the world are found on the peninsula as a whole and within this ONL there are notable volcanic features that contribute to the larger whole. • Long, finger-like spurs are the outer flanks of more recent Lyttelton volcanics. • Exposed interesting outcrops and rocky crags around the upper slopes and ridgelines have been identified as significant landforms, such as Gibraltar Rock and Coopers Knob. • Small fragmented pockets of native vegetation remain, such as Omahu Bush/ Ahuriri Reserve, Kennedys Reserve and areas on private land, within highly modified pasture and forestry areas. • Support valued native invertebrates, lizards and bird communities.	High
Sensory	• This ONL contains a section of the highly expressive geology of the crater rim of the broader Banks Peninsula ancient volcanos. • Exceptional skyline formed by the caldera rim; numerous volcanic features contribute to the legibility of the landscape's formative processes. • Grassy vegetation cover, while human induced, enhances the legibility of the underlying geomorphology and visibility of volcanic outcrops. • Landscape of Banks Peninsula as a whole, is unusual within the Canterbury Region for the small scale of its landscape and land use patterns. • Combination of simple landform, evidence of historic structures, such as the Sign of the Bellbird, and fragmented landcover patterns gives the peninsula its distinctive landscape character and high aesthetic value. • Provides a significant skyline feature from areas of the plains. • The topographical difference is immensely important as a contrast to the surrounding towns and its lowland plains. • Southerly storms approaching along the Canterbury Bight are impressive when viewed from the peninsula.	High
Associative	• Highly valued landscape of great importance. • State Highway 75 and other key tourist routes are of special relevance because of the number of people that experience the Peninsula from them. • The Summit Road and associated walkways are crucial viewpoints. • Many paintings reflect the high aesthetic value of the peninsula. • Tāngata whenua have a long spiritual and physical association with the peninsula landscape. • Key named peaks, passes, spurs and ridges: Ō-Rongomai (Cass Peak), Ō-Mawete (Coopers Knob), Te Moko Peke, Te Tara o Te Rangihikaia (Gebbies Pass), Ō-Turi , Mānuka pā and Ngāti Koreha pā significant to	High

	migration and settlement traditions of manawhenua and ongoing tribal identity. • Landscape 'steeped' in history and is important for both Maori and Pakeha. • Landscape contains elements of both natural and cultural heritage. • Resources of Banks Peninsula, including its totara forests, were important to supply the settlers on the Canterbury Plains.	

Overall landscape value	**OUSTANDING**

Mapped Extent:

Refer to **Figure 12A**. The Banks Peninsula character area contains large areas of ONL around the crater rim, upper spurs and vegetated gullies. The pasture-covered spurs without obvious structures were generally included in the ONL as a whole. In lower-lying, more modified areas, such as those containing large-scale plantation forestry and more obvious residential development, the landscape was considered to be VAL (see sections below). In some areas contour lines were followed where this provided an appropriate definition of landscape change, while landform and land use determined the remainder of the ONF/L and VAL boundaries. Overall, the recommended ONL extent has decreased and the VAL extent has increased.

Evaluation:

Based on the values above, part of **Banks Peninsula** has been identified as an ONL due to its very high legibility, high sensory and associative values. It is acknowledged that landscape qualities vary across an area of this size and the more modified areas were included in the VAL.

Banks Peninsula is a spectacular landscape which is highly expressive of its geological formation. This area has an extensive history of occupation from an early date and traces of this remain evident in the landscape. This is a landscape of exposed interesting outcrops and rocky crags around the upper slopes and ridgelines.

The Peninsula provides a significant backdrop to the Selwyn District when viewed from the Canterbury Plains. This rocky skyline is immensely important as a contrast to the settlements and intensively farmed lowland surrounds. Banks Peninsula is an important recreation area for the district and beyond.

Modifications within Banks Peninsula ONL include: roads, farm tracks, walking tracks, buildings and structures, pasture, forestry and other exotic vegetation, fencing and power lines.

6.2 Te Waihora / Lake Ellesmere (Selwyn Section) ONL

One of Canterbury's last major wetlands and an outstanding wildlife habitat with great importance to tāngata whenua as a mahinga kai area.

Te Waihora / Lake Ellesmere (Selwyn Section) ONL		
Landscape Attributes	**Evaluation**	**Rating**
Biophysical	• As a whole (including the portion of the lake within the Christchurch District), this is the largest wetland and one of the last major wetlands left on the Canterbury Plains. • Important salt marsh mudflats on the lake margins, coastal vegetation and habitats exist on the southern side of the lake. The vegetation and habitats on the northern margins are freshwater wetlands. • Canterbury's best example of a Waituna-type Lagoon (coastal lake). • Significant habitat for a range of indigenous flora and fauna. • Many notable rare plants along the lake shore. • Outstanding wildlife habitats of the lake are protected by National Water Conservation Order (1990) for Te Waihora / Lake Ellesmere.	Very High
Sensory	• Open, panoramic views are possible across the lake to the Southern Alps however, it is difficult to grasp the full extent of the lake due to the similar elevation of the surrounding access roads. • The lake level blurs and distorts the distant enclosing spit and lake horizon. • Seasonal changes are reflected by the changes in the wildlife present on the lake.	High
Associative	• Birdwatching, game bird hunting and fishing are of important recreational and amenity value in this area. • Immense cultural significance and ongoing importance of the ownership of the lakebed of Te Waihora was returned to Te Rūnanga o Ngāi Tahu as part of the Ngāi Tahu Claims Settlement Act 1998. • Numerous Ngāi Tahu sites of significance, including pā, kāinga, wāhi mahinga kai and wāhi tapu centred around key wetland, Waipuna and waterways such as Taumutu, Orariki, Whakamatakiuru, Pakoau, Kūaowhiti, Tūtakahikura, Waiwhakaheketupapaku and Muriwai.	Very High

Overall landscape value	**OUTSTANDING**

Mapped Extent:

Refer to **Figure 12B**. All of the lake (within the Selwyn District) and associated wetland areas are included in the ONL which has increased the extent of this ONL as originally shown in the operative plan. This is consistent with the mapped ONL extent within the Christchurch District which also includes the spit. Due to the size of the lake, it was agreed that in this context, the lake is considered to be a landscape rather than a feature.

Evaluation:

Based on the values above, **Te Waihora** / **Lake Ellesmere** has been identified as an Outstanding Natural Landscape. The lake is considered outstanding due to its very high biophysical and associative (tāngata whenua) values and high sensory landscape values.

The importance of Te Waihora / Lake Ellesmere is recognised by a National Water Conservation Order (1990) which seeks to 'protect the lake's outstanding wildlife habitats'. The lake, which is one of the last major wetlands left on the Canterbury Plains, is a very important habitat for a range of indigenous fauna, and supports many notable plants. The lake is of great importance to tāngata whenua as a mahinga kai area.

Modifications within Te Waihora / Lake Ellesmere ONL include: clearance of native vegetation, pastoral grazing and associated agricultural practices (eg drainage, effluent runoff from surrounding farmland), exotic vegetation and small scale structures including duck hunting blinds (mai mai's).

6.3 Rakaia River ONL

Dynamic and impressive braided river system, which clearly displays its formative processes.

Rakaia River ONL		
Landscape Attributes	**Evaluation**	**Rating**
Biophysical	• National Water Conservation Order (1988) seeks to 'protect the river's outstanding natural characteristics, outstanding wildlife habitat, fisheries, and recreational, angling, and jet boating features'. • Braided rivers are a 'naturally uncommon ecosystem' and have a threat status of 'endangered'. • Provides significant habitat for many fish species and indigenous braided river birds. • The Rakaia Gorge and terraces, with amethyst and garnet-bearing rhyolites and the braided river system are geopreservation sites of international significance. • The northern end of Rakaia Island contains the largest remnant of dry woodland forest remaining on the Canterbury Plains. • The Rakaia River mouth is of high ecological importance as river bird habitat and the lagoon is important from a geomorphological perspective.	Very High
Sensory	• A major braided river of the Canterbury Plains and one of the best examples of its kind in New Zealand. • The constrained gorge section and adjacent river terraces are highly legible landscape features. • Sinuous braided patterning set against the patchwork of the plains. • Views through to the Southern Alps behind. • Braided river system is dynamic and constantly changing in flood events.	High
Associative	• Braided rivers are an iconic element of the Canterbury landscape. • Sinuous braided pattern of the river has been recognised as distinctive and has inspired both literature and art. • Provides for many recreational activities, including jet boating, kayaking, rafting, fishing and hunting. • Important travel route to Maori which linked the east and west coasts of the South Island, mahinga kai and resource gathering area for tāngata whenua. • The area near the Rakaia River mouth contains numerous archaeological sites that reflect early Maori use in this area. • Extensive history of rural settlement along its river banks. • Important water resource in the region.	High

Overall landscape value	OUTSTANDING

Mapped Extent:

Refer to **Figure 12C**. The entire river from source to sea has been identified as an ONL (the southern bank falls within Ashburton District). The mapping includes the braided river bed and associated terraces but excludes the patchwork of agricultural land uses on the Canterbury Plains. The ONL extent has increased in size.

Evaluation:

Based on the values above, the **Rakaia River** has been identified as an Outstanding Natural Landscape. It is considered outstanding due to its high biophysical, sensory and associative landscape values. This landscape is also of great importance to tāngata whenua.

The Rakaia River is protected by a National Water Conservation Order (1988) which seeks to 'protect the river's outstanding natural characteristics, outstanding wildlife habitat, fisheries, and recreational, angling, and jet boating features'. Parts of Rakaia Island support native vegetation of very high ecological value.

The sinuous braided pattern of the Rakaia River bed contrasts with the modified plains landscapes, which is one of the characteristic Selwyn images, in particular when seen from the air. The Rakaia River was a part of a network of trails used by tāngata whenua on their journeys between the east and west coasts of the South Island and was an important mahinga kai and resource gathering area.

The Rakaia Gorge is an impressive landscape with its highly legible sequence of grassed terrace flats. The gorge is a popular destination for tourists and is highly valued for its recreational opportunities.

Modifications in the Rakaia River include: gravel extraction, informal tracks, exotic vegetation and bridges and transmission lines crossing the river.

6.4 Waimakariri River ONL

One of the best examples of a braided river in New Zealand.

Waimakariri River ONL		
Landscape Attributes	**Evaluation**	**Rating**
Biophysical	• The combination of a largely unmodified alpine catchment and wide gravel river bed through the lowland section of the plains is a characteristic of the Selwyn District (lower part and mouth of the Waimakariri River fall within the Christchurch District). • Braided rivers are a 'naturally uncommon ecosystem' and have a threat status of 'endangered'. • Bird and fish habitat associated with the braided river and with swamps in the hinterland of the active channel are of very high ecological value. • Wetlands associated with the river contain important native plant communities in the understorey of the willow canopy.	Very High
Sensory	• Major braided river of the Canterbury Plains and one of the best examples of its kind in New Zealand. • Waimakariri Gorge is a highly legible landscape feature. • Sinuous braided patterning contrasts with the geometric patchwork of the plains. The terraces form a distinctive river margin. • Visual/ physical connection from mountains to sea. • Braided river system is dynamic and constantly changing through flood events. • Variable weather in the headwaters and seasonal regime of flood, fresh and low flows leads to high variability in flow.	High
Associative	• Sinuous braided pattern of the rivers has been recognised as distinctive and has inspired both literature and art. • Provides for many recreational activities, including jet boating, kayaking, rafting, fishing, and hunting and informal recreation. • Important travel route to Maori which linked the east and west coasts of the South Island, mahinga kai and resource gathering area for tāngata whenua. • Important mahinga kai and resource gathering area for tāngata whenua. • Extensive history of settlement along its river banks. • Establishing bridges across the Waimakariri, and controlling the hazard from flooding were two of the key endeavours of early settlers.	High

Overall landscape value	**OUTSTANDING**
Mapped Extent: Refer to **Figure 12D**. The entire river within the Selwyn District has been identified as an ONL (the northern banks and lower Waimakariri fall within adjacent districts). The mapping includes the braided river bed and associated terraces but excludes the patchwork of agricultural land uses on the	

Canterbury Plains. In the upper reaches (above the gorge) the Waimakariri River forms part of the Waimakariri Catchment ONL (described below). This is a new ONL within SDC.

Evaluation:

Based on the values above, the **Waimakariri River** has been identified as an Outstanding Natural Landscape. It is considered outstanding due to its high biophysical, sensory and associative landscape values. This landscape is also of great importance to tāngata whenua.

The sinuous braided pattern of the Waimakariri River bed, which traverses the patchwork of the plains landscape, is an iconic Selwyn District image. The Waimakariri River is a naturally uncommon braided river system and coupled with a largely unmodified alpine catchment and wide gravel river bed through the lowland section of the plains, retains very high biophysical values.

The Waimakariri River formed part of a network of trails used by tāngata whenua on their journeys between the east and west coasts of the South Island and was an important mahinga kai and resource gathering area. The river is also valued for its recreational opportunities in proximity to rural townships.

Modifications within the Waimakariri River include: gravel extraction, tracks, exotic vegetation including some plantation forestry, erosion and flood control and bridges and transmission lines crossing the river.

6.5 Malvern Hills ONL

Downlands and foothills to the east of the higher Front Ranges with easy access to the sub-alpine environment.

Malvern Hills ONL		
Landscape Attributes	**Evaluation**	**Rating**
Biophysical	• Widespread areas of indigenous vegetation and birdlife, including a large area at Thirteen Mile Bush to the west of the Big Ben Range, as well as in the headwaters of Rockwood Stream and Washpen Stream. • The tops and parts of the slopes of the downland ranges contain low producing grassland. • Parts of the ONL are within the highly unmodified area contained in the Korowai Torlesse Tussocklands Park managed by DOC. • The Rockwood Range is notable, as it is formed by a volcanic canyon and also contains caves. This landform is varied and the hills are expressive of their formation. • The Selwyn River/ Waikiriri has its headwaters in this area, before flowing through its gorge section and entering the plains.	High
Sensory	• Rolling foothills and downlands landform to the west of the foothills, provide a contrast to the flat Canterbury Plains. • Views gained across the Canterbury Plains and to the Front Ranges are memorable. The downlands form the midground to views from SH 77 and 73. • Waterfalls and streams, including Washpen Falls and Rockwood Stream, are attractions on private land where public trails are provided. Similarly, indigenous forest can be explored on tracks. • Seasonal changes are evident but are not as expressive in the foothills and downlands as in the higher, snow-capped Front Ranges and alpine areas. • Weather patterns, such as the cloud formations created by north-westerly weather and the gale winds blowing down the river gorges, are characteristics of these foothills.	High
Associative	• Rolling, rounded and forested slopes form the background for many paintings of the Canterbury Plains landscape. • Valleys and ridgelines of Selwyn's foothills forests offer easy access to forest and alpine environments. • The location of this ONL, at the foot of the Southern Alps within an hour's drive of Christchurch, makes these areas popular with trampers, mountain bikers, picnickers, hunters and campers. • Important Ngāi Tahu trails, settlements and food and resource gathering areas, such as Whakaepa (near Coalgate) that linked through to the Upper Waimakariri basin and onto the mountain passes to Te Tai Poutini and were part of the pounamu trade route. • Relics from European settlement include buildings relating to the pastoral history of the area, lime kilns and sawmilling remnants.	High

Overall landscape value	OUTSTANDING

Mapped Extent:

Refer to **Figure 12E**. The ONL within this character area is largely confined to the western part of the hills around Thirteen Mile Bush, where large areas of indigenous vegetation occur. The tops of the Lady Barker Range and Rockwood Range are also identified as an ONL, mostly based on a contour line approach, which represents the change in land use and activities. The areas of indigenous vegetation around the headwaters of Rockwood and Washpen Streams are also included in the ONL. The remainder of the Lady Barker and Rockwood Ranges, in particular the northwestern slopes that contain extensively grazed pasture are included in the VAL (discussed below) that connects the tops of these two ranges around Quartz Hill.

The tops of the foothills and downlands on the southern side of SH73 west of Springfield, such as the Russell Range, and the indigenous forest of Kowai Bush and around Paterson Stream are identified as ONL, while the remainder of the lower grazed slopes to the east of the front ranges form part of the VAL based on their lower natural values. The ONL extent has increased in size.

Evaluation:

Based on the values above, **parts of the Malvern Hills** have been identified as an Outstanding Natural Landscape due to the high biophysical, sensory and associative landscape values found in the area.

The rolling foothills and downlands landforms are very legible within the landscape and form the mid-ground to views of the higher foothills from the Canterbury Plains to the east. The valleys and ridgelines of Selwyn's foothills forests offer easy access to fantastic forest and alpine environments. Their location along the edge of the high country within an hour's drive of Christchurch, makes these areas popular with trampers, mountain bikers, picnickers, hunters and campers.

Some of the former Forestry Exclusion Areas have now been incorporated within either an ONF/L or VAL overlay, therefore their original purpose has been recognised and protected from a landscape perspective.

Modifications in the Malvern Hills includes: plantation forest, pastoral grazing, walking tracks, farm tracks, fencing and exotic vegetation.

6.6 Front Ranges ONL

Impressive mountainous landform and land cover patterns, contrasting strongly with the highly modified patterns of the plains below.

Front Ranges ONL		
Landscape Attributes	**Evaluation**	**Rating**
Biophysical	• A majority of the Front Ranges are contained within the Korowai/Tussocklands Conservation Park managed by DOC which is notable for its outstanding flora and fauna. • Widespread areas of indigenous vegetation cover this area including mountain beech/tawhairauriki forest and tussock grasslands which are in particularly good condition with relatively low weed invasion. • Relatively intact alpine plant communities, including species adapted to scree habitats such as herb and cushion plant communities.	Very High
Sensory	• Extensive greywacke scree slopes and distinctive rocky outcrops are found along the summits and ridges. • Erosion is particularly visible on the constantly moving, exposed scree slopes, and where water has carved gullies into the shingle. • Large scree slopes occur along the entire length of the front ranges. • The dissected, steep Torlesse Range forms the most striking of the Front Ranges and creates an impressive backdrop to the Canterbury Plains. • Views gained from State Highway 73 when travelling west across the Canterbury Plains is one of the memorable impressions of the Front Ranges. • Porters Pass is a viewpoint along this popular tourist route, providing easy access to Castle Hill Peak and beyond. • Steep mountainous landform and land cover patterns contrast strongly with the highly-modified patterns of the plains below. • Built modification in the area is very limited. • Snow-capped peaks are clearly visible from the plains and a seasonal occurrence.	Very High
Associative	• Distinctive landforms of the range, steep shingle slides, rocky ridges and forested slopes form the background for many paintings of the Canterbury Plains landscape. • Front Ranges provide high recreational values for locals and tourists for their easy access to snow in the alpine environment and day walks. • Area has significance to Ngāi Tahu. • Integral part of a network of trails used by tangata whenua to access mahinga kai and pounamu resources of the West Coast. • Charles Torlesse was the first European to climb the slopes of the range. • Historic sites in the area include the old pack track used by the Porter brothers, Avoca Homestead and the Mt Torlesse Coal Mines.	High

Overall landscape Value	OUTSTANDING

Mapped Extent:

Refer to **Figure 12F**. The Front Range ONL includes all of the Torlesse and Big Ben Ranges, which extend in a north-south direction across the district to form the distinctive boundary between the plains/ lowlands to the east and the intermontane basins to the west. The extent of this ONL has increased in size.

Evaluation:

Based on the values above, the **Front Ranges** have been identified as an Outstanding Natural Landscape due to the very high biophysical, sensory and high associative landscape values found in the area, including its high aesthetic, historic and tāngata whenua values.

The Torlesse Range is the most striking of the front ranges. Its jagged craggy skyline is an iconic Selwyn landmark and is clearly visible from the plains particularly when travelling west along SH 73. Both the Big Ben and Torlesse Ranges have high botanical values and a large part of this landscape is within the Korowai/Tussocklands Conservation Park, managed by DOC. The Torlesse Range is of significance to tāngata whenua and is valued for its recreational opportunities which include tramping, hunting, winter climbing and backcountry skiing.

Modifications in the Front Ranges includes: walking tracks, backcountry huts, State Highway 73, railway line and fencing, as well as some weed invasion in lower-lying areas.

6.7 Rakaia Catchment ONL

Massive landscapes, full of drama with clear impressive views through to the Alps and their headwaters.

Rakaia River Catchment ONL		
Landscape Attributes	**Evaluation**	**Rating**
Biophysical	• Large areas of this landscape are within Rangitata/Rakaia Head Waters Conservation Area (extending into adjacent districts) and Craigieburn Forest Park under Department of Conservation management. • The Rakaia and Wilberforce Rivers are braided rivers that are amongst the best examples of this river type in New Zealand. • Braided rivers are a 'naturally uncommon ecosystem' and have a threat status of 'endangered'. • Contains largely unmodified river valleys, including the upper braided sections of the Mathias River and headwaters of the Wilberforce River. • Wide shingle river beds, upper river valleys and parts of the Lake Coleridge Basin contain significant wetland areas and exceptional breeding and feeding habitat for braided river birds. • Glacially sculpted landforms are legible signs of the geological past which include lateral moraines, hummock fields, truncated benches and spurs, incised side-streams, outwash plains, and roches moutonnées. • Numerous geopreservation sites which are excellent examples of relict glacial lake features, such as the Goldney Hill rock avalanche deposit near Lake Coleridge. • Variety of alpine habitats, such as subalpine shrublands, tussock, herb/fell fields and tarns form a diverse mosaic, predominantly protected by the conservation status of the area. • Significant stands of New Zealand cedar/kaikawaka(*Libocedrus bidwillii*) are found in the headwaters and tributaries of the Wilberforce River (beech gap). • Kea (*Nestor notabilis*), one of New Zealand's most notable mountain birds, is a common sight in the ranges of the Main Divide.	Very High
Sensory	• Extensive braided patterning of the rivers, their terraces and large tributary fans are highly legible landscape features expressive of their formation. • Spectacular alpine landscape with high diversity including impressive glaciated peaks, bush clad mountains, pristine mountainous streams and braided rivers form a vivid landscape of high visual quality. • Upper valleys of these rivers are large-scale landscapes, full of drama with clear impressive views through to the peaks of the Alps. • Exceptional panoramic views are available and are an integral and widely celebrated image of the Canterbury High Country landscape. • The Southern Alps form the backbone of the South Island and are arguably amongst the most spectacular landscapes in the country. • The mountainous headwaters in this catchment have special wilderness character, an expansive and vast valley setting and landscape features that are of a high degree of naturalness. • Ever changing nature of the braided rivers and their impressive scale following heavy rainfall are important transient values.	Very High

	• Seasonal change of the mountainous landscape including snow-capped peaks to dry, golden tussock lands, as well as dramatic weather changes and cloud formations are key ephemeral values. • Lake Coleridge provides an attractive open area in the high country.	
Associative	• Lake Coleridge and the Craigieburn Range in the eastern part of the ONL are very popular recreation areas with comparatively easy access from the east. • Many paintings and photographs have been produced showing the mountains and rivers of the area. • Rivers and lakes are of outstanding recreational value, providing world class fishing and boating opportunities. • The area, and its rivers in particular, form part of a network of mahinga kai and resource gathering trails which tāngata whenua developed to link the east and west coast of New Zealand. • History of pastoral high country settlement and early explorers. • The mountains are seen as ancestors by the tāngata whenua. • Nōti Raureka (Brownings Pass) and its associated trails running to the head of the Waitāwhiri/Wilberforce River is significant to Ngāi Tahu as part of the pounamu trails connecting the east and west coast. • Lake Coleridge is a statutory acknowledgement area	Very High

Overall landscape value	**OUTSTANDING**

Mapped Extent:

Refer to **Figure 12G**. The Rakaia Catchment extends as far north as the Craigieburn and Black Mountain Range and includes the Mathias, Wilberforce, Avoca and Harper River catchments. Notable features within the ONL include Lake Coleridge and its associated basin. The ONL extent has increased in size to include all the river valleys and mountain ranges above the basin, as well as the lake and highly legible river terraces. Part of the Lake Coleridge Basin has been identified as a VAL, which encompasses the more obviously cultivated areas around Glenthorne Station north of Lake Coleridge, Mount Oakden and Peak Hill and Lake Coleridge Stations on the southern and eastern side of the lake. The plantation forestry on Mt Barker, extending to the Acheron River, is also included in the VAL area.

Evaluation:

Based on the values above, the **Rakaia Catchment** including the Main Divide, Mathias, Wilberforce and Harper Rivers, and the Craigieburn Ranges have been identified as an Outstanding Natural Landscape. These landscapes are considered outstanding as they contain very high biophysical, sensory and associative landscape values. This includes exceptional natural science values, very high legibility, aesthetic and high tāngata whenua, shared and recognised and historic landscape values.

The Main Divide Ranges within the Rakaia Catchment are in the heart of the Southern Alps. It is a dramatic landscape of geological, biological, recreation and cultural significance. It is home to spectacular mountains with glaciers, steep slopes and wide braided rivers. The upper river valleys and surrounding mountain ranges form a memorable landscape, full of drama. The floors of the main valleys are covered with post-glacial gravels, including many large highly legible fans.

The remote landscape in the headwaters is largely inaccessible, while the eastern parts around the Lake Coleridge Basin and Craigieburn Range are popular with hunters, trampers and skiers. It is an attractive landscape which is widely celebrated and provides inspiration for many artists and writers. Brownings Pass at the head of the Wilberforce was used by Maori to trade pounamu/greenstone from Westland to Canterbury across the Main Divide.

Some of the former Forestry Exclusion Areas have now been incorporated within either an ONF/L or VAL overlay, therefore their original purpose has been recognised and protected from a landscape perspective.

Modification within the Rakaia Catchment includes: roads and bridges over rivers, farm tracks and buildings associated with high country farming in the area, fencing, walking tracks, powerlines, airstrips, power generation infrastructure, backcountry huts, ski fields and small scale quarries.

6.8 Waimakariri Catchment ONL

Dramatic and spectacular landscape of pristine lakes, rivers and majestic mountains.

Waimakariri River Catchment ONL		
Landscape Attributes	**Evaluation**	**Rating**
Biophysical	• Landscape includes Arthur's Pass National Park at the headwaters of the Waimakariri River and ranges within Craigieburn Forest Park, Castle Hill Scenic Reserve/Conservation Area and Lochinvar Forest Conservation Area. • Waimakariri and Castle Hill Basins contain a large number of legible landscape features that are highly expressive of their glacial and fluvial formation. These features include moraines, rôches moutonnées, hanging valleys, terraces and fans. • The Winding Creek moraine on the north bank of Rata Stream, beneath Broken Hill is considered an internationally significant geopreservation site. • Contains many nationally significant geopreservation sites including the Turkey Flat alluvial fan, the Carrington Peak moraine and the Cox River rockslide. • Contains largely unmodified river valleys, including the headwaters and upper braided sections of the Waimakariri River. • Fossils are found with Castle Hill Basin, which are examples of the broad diversity of geological features, landforms, soil sites and active physical processes present. • Geology of Castle Hill Basin comprises tertiary limestone, mudstone, sandstone and tuffs which were eroded by water to form the distinctive sculptured landforms of a karst landscape. • Cave Stream is an interesting example of a limestone cave, with a publicly accessible stream running through it. • Extensive areas of red tussock grassland, intact shrublands in alpine areas and indigenous forest (predominantly beech) are notable from an ecological perspective. • Variety of alpine habitats, such as shrublands, tussock, herb/fell fields and tarns form a diverse mosaic, predominantly protected by the conservation status of the area. • Castle Hill Basin is important habitat for rare and specialist limestone plant species which contains some of the rarest and most endangered plants in Canterbury. Scientific reserve established to protect the Castle Hill Buttercup (*Ranunculus paucifolius*). • Important area for some bird species, such as the New Zealand Falcon (*Falco novaeseelandiae novaeseelandiae)*. Kea (*Nestor notabilis*), one of New Zealand's most notable mountain birds, is a common sight in the ranges of the Main Divide. Endangered great spotted kiwi can be found in Arthur's Pass National Park. • Many of the lakes within the catchment are important habitats for numerous birds and fish species. Some of them are wildlife reserves.	Very High

Sensory	• Arthur's Pass is the northern extent of permanent glaciation in the Alps and this alpine environment clearly shows the glacial, fluvial and erosional processes that formed it. • Legible landforms in the upper Waimakariri River valley were formed and sculpted by the Waimakariri Glacier. • Tors, bluffs and limestone outcrops of the Castle Hill Basin are legible landscape features with distinctive formations of high scenic value and are an integral part of the landscape. • Limestone patterns within the Castle Hill Basin read coherently within this landscape. Limestone outcrops create distinctive shadow patterns at various times of the day. • High level of openness and naturalness with limited built modification, occurring only in confined nodes, can be found in this quintessential Canterbury high country landscape. • Panoramic views obtained from the majority of key transportation routes, including SH73 and the Midland Railway line. • Dramatic and spectacular landscape of pristine lakes, rivers and majestic mountains are highly diverse. Impressive peaks, bush clad mountains, pristine mountainous streams and braided rivers form a vivid landscape of high visual quality with the backdrop of distant peaks present. • Ever changing nature of the braided rivers and their impressive scale following heavy rainfall are important transient values. • Seasonal change of the mountainous landscape including snow-capped peaks to dry, golden tussock lands, as well as dramatic weather changes and cloud formations are key ephemeral values.	Very High
Associative	• Many tourists stop to visit the mountains, rivers, lakes and waterfalls of Arthur's Pass National Park as it is an easily accessible recreation area close to the State Highway. • Striking landscape, which has a combination of memorable elements, such as the braided river, lakes and mountain ranges have been captured by many paintings and photographs. • Climbers, families, scientists and travellers are drawn to the significant recreational opportunities in this catchment including many campsites, tramping tracks, backcountry huts, skifields, rivers and lakes. • Limestone outcrops are considered by climbers to offer some of the best 'bouldering' in New Zealand. • Cave Stream Reserve contains an easily accessible cave system which is a popular tourist attraction. • The TranzAlpine train journey offers another option to experience this landscape, in addition to the scenic highway route. • Traditional knowledge of trails, rock shelters and rock drawings, and places for gathering kai (food) in the Castle Hill Basin form an integral part of past and present tribal identity. Landforms of Castle Hill / Kura Tawhiti have special significance to Ngai Tahu and has Topuni status. • Mountains are seen as ancestors by the tāngata whenua. • Arthur's Pass was an early trading route between the east and west coasts for greenstone/pounamu used by tāngata whenua • Maori told early European explorers of the location of Arthur's Pass as a potential crossing of the Alps. • Historic railway and road connections. • Castle Hill Basin was home to early high country runs and has historic farming associations and farm buildings.	Very High

Overall landscape value	OUTSTANDING

Mapped Extent:

Refer to **Figure 12H**. The ONL includes all of Arthurs Pass National Park and the upper part of the Waimakariri River, as well as all of the intermontane mountain ranges. Arthurs Pass Village and Castle Hill Village are excluded from the ONL as they are urban settlements with urban zoning. Apart from the village, the entire Castle Hill Basin is included within the wider ONL due to the high overall value of the limestone basin landscape, despite a higher level of modification on the valley floor which has increased the extent of the ONL.

Outside the Castle Hill Basin, the more modified valley floors with cultivated paddocks are excluded from the ONL, being defined as the VAL near Flock Hill, Craigieburn, Grassmere and White Hill Stations, Cass and Cora Lynn settlements.

Evaluation:

Based on the values above, the **Waimakariri Catchment** has been identified as an Outstanding Natural Landscape. This landscape is considered outstanding as it contains very high biophysical, sensory and associative landscape values. This includes the Castle Hill Basin and a number of conservation areas that have particularly high natural science, legibility, aesthetic, tāngata whenua, shared and recognised and historic landscape values.

The Waimakariri Catchment is visually contained by majestic mountains including the Main Divide in Arthur's Pass National Park, which was the first national park in the South Island. It is a dramatic landscape of geological, biological, recreation and cultural significance. It includes spectacular mountains with large scree slopes, steep gorges and wide braided rivers. The floors of the main valleys are covered with post-glacial gravels, especially many large fans. Although the entire landscape has been intensely glaciated, today only small glacier remnants remain around Mt Rolleston and the head of the Waimakariri Valley (these are the northern-most glaciers in the South Island).

While Castle Hill Basin retains distinctive characteristics including the scale, number and extraordinary appearance of limestone landforms, it is considered to be a part of the wider Waimakariri River Catchment ONL due to its relationship with the broader mountainous landscape. The limestone outcrops provide habitats for a range of threatened plant species. Kura Tawhiti is the site of the first scientific reserve in New Zealand, established specifically to protect the Castle Hill Buttercup. The distinctive outcrops are a popular destination for tourists and are highly valued by many rock climbing enthusiasts.

Arthur Dudley Dobson surveyed Arthur's Pass in 1864. When gold was discovered on the West Coast, the rush to link Christchurch with the gold fields in the west saw the road built in less than a year. This route remains today, as State Highway 73, and the adjacent railway runs through the middle of the catchment. The area is home to a range of tracks, ski areas and lakes which have significant recreational values. For tāngata whenua this landscape is extremely important. Kura Tawhiti has Topuni status, which is a legal recognition of the site's importance to the Ngai Tahu tribe. The catchment was an important part of a network of trails which facilitated pounamu/greenstone trade and resource gathering between the west and east coasts of the South Island.

Important and spectacular views of this ONF/L are experienced from key transportation routes, including SH73 and the Midland Railway line. These specific two routes, which navigate through the

dramatic mountainous landscape, connect the Selwyn District with the West Coast and are notable visitor corridors.
Some of the former Forestry Exclusion Areas have now been incorporated within either an ONF/L or VAL overlay, therefore their original purpose has been recognised and protected from a landscape perspective.

Modification within the Waimakariri Catchment includes: roads and bridges over rivers, farm tracks and buildings associated with high country farming in the area, fencing, powerlines and substations, airstrips, small scale quarries, backcountry huts, ski fields, tramping/ biking tracks, trig stations, oxidation ponds, bridges over rivers, railway and roading.

7.0 Visual Amenity Landscapes (VAL) in the Selwyn District

Landscapes and features that do not reach the threshold of being determined an ONF or ONL but that hold high amenity and environmental characteristics and values have been considered as Landscapes and Features with particular Visual Amenity within this report.

Under the RMA 1991, amenity is captured within Section 7 (Other matters), and notably within:

(c) the maintenance and enhancement of amenity values; and

(f) the maintenance and enhancement of the quality of the environment.

The RMA 1991 defines amenity as:

'those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes'.

The quality of the environment is not defined by the RMA 1991. The amenity and environmental quality focus of these investigations has been visual amenity from a specialist landscape perspective. This study has addressed the important visual amenity features or characteristics that occur outside the areas identified as outstanding.

The assessment has considered important visual amenity features or characteristics that occur outside the areas identified as ONF/L. 'Visual Amenity Landscapes' tend to be more culturally modified landscapes, where their aesthetic and scenic values are high. They tend to have high associative values.

Based on the evaluation, the following Visual Amenity Landscapes (VAL) have been identified and mapped. Maps showing these areas are contained in **Figures 12A – 12H**.

Generally, VALs border the edge of ONF/Ls and are the more culturally modified parts of the district.

Table 3 – Visual Amenity Landscapes (VALs) in the Selwyn District	
Landscape Area	
1	Te Pātaka o Rākaihautū/Banks Peninsula
2	Malvern Hills
3	Rakaia Catchment
4	Waimakariri Catchment

7.1 Te Pātaka o Rākaihautū/Banks Peninsula VAL

Landscape Characteristics and Values Summary
• Elevated and open pastoral hills provide an important backdrop to the Selwyn District and contrast with the varied land use practices across the Canterbury Plains. • Lower slopes of Te Pātaka o Rākaihautū/Banks Peninsula provide topographical relief and visual interest when viewed from the flat plains. • High transient sensory values, bought about by the different seasons and weather patterns. • State Highway 75 and other key tourist routes are of special relevance because of the numbers of people that experience the views of the lower slopes of the Peninsula from them.

Overall landscape Value	VAL
Mapped Extent: Refer to **Figure 12A**. The lower elevated, more culturally modified parts of Te Pātaka o Rākaihautū/Banks Peninsula, such as those containing large-scale plantation forestry and more prolific residential development, are considered to be VAL. The VAL extends in the majority of areas from the bottom of the ONF/L overlay to the topographical toe of the Banks Peninsula. Where modification was sufficiently high, no VAL mapping occurred.	

7.2 Malvern Hills VAL

Landscape Characteristics and Values Summary
• Memorable views of the Waimakariri Gorge are enjoyed by many locals and visitors to New Zealand travelling along the TranzAlpine railway which borders the northern-western edge of this VAL. • Rolling hills within these downlands provide an important sensory separation between the plains and the Front Ranges. • Landcover within this VAL generally consists of low producing grassland with interspersed tussocks and grey shrubs, visually contrasting with the more cultivated, green flats below. • These rolling, rural downlands form the foreground view towards the foothills and snow-capped peaks of the Front Ranges.

Overall landscape value	VAL
Mapped Extent: Refer to **Figure 12E**. This VAL includes the lower extent of the Russell Range to the west of Springfield and the rolling downlands south of the Front Ranges including Kowhai Bush Spur along with Wether Hills (south of Thirteen Mile Bush) and the northwestern slopes of the Lady Barker and Rockwood Ranges. These VALs visually express more modified land use and grazed pasture.	

7.3 Rakaia Catchment VAL

Landscape Characteristics and Values Summary
• Glacially sculpted landforms are visually impressive signs of the geological past. • Lake Coleridge Basin has very high visual attractiveness, with areas of more modified pasture around the high country stations where a higher level of cultivation takes place. • Exceptional panoramic views of both the surrounding mountains and river plains are experienced from these more modified areas, as they provide openness and visual diversity. • High country farming operations in these areas form a cultural element with rural outlook and more exotic vegetation amongst the highly natural mountain slopes and wild river valleys. • Views within these VALs are an integral and widely celebrated image of the Canterbury High Country landscape.

Overall landscape value	VAL
Mapped Extent: Refer to **Figure 12G**. Part of the Lake Coleridge Basin has been identified as a VAL, which encompasses the more cultivated areas around Glenthorne Station north of Lake Coleridge, Mount Oakden and Peak Hill and Lake Coleridge Stations on the southern and eastern side of the lake. The plantation forestry on Mt Barker, extending to the Acheron River, is also included in the VAL area.	

7.4 Waimakariri Catchment VAL

Landscape Characteristics and Values Summary
• The valley floors are scenic even though they contain areas of more modified pasture around the high country stations. • Important panoramic views can be gained from State Highway 73 and the railway line, where the surrounding mountains are experienced from within these more modified valley floors. • The openness and visual diversity provided throughout the valley floors contributes to the overall composition of the landscape. • The high country farming operations in these areas form a cultural element with rural outlook and more exotic vegetation amongst the highly natural mountain slopes and wild river valleys. • The views across the upper Waimakariri River from State Highway 73 and rail (near Bealey) towards the snow-capped peaks are particularly memorable

Overall landscape Value	VAL
Mapped Extent: Refer to **Figure 12H**. The more modified valley floors with cultivated paddocks have been defined as VALs near Flock Hill, Craigieburn, Grassmere and White Hill Stations, Cass and Cora Lynn settlements.	

8.0 Pressures and Threats to Selwyn's Landscape Values

The Selwyn District Landscape Study 2017 has identified a number of Outstanding Natural Landscapes (RMA section 6b). These areas contain a range of landscape values that are considered to be 'outstanding' at a district scale.

As part of the study there has been identification of potential pressures and threats, which may adversely affect these landscapes and their values. All of the outstanding natural landscapes identified are highly sensitive to change and should be carefully managed through rules in the District Plan, in order to protect the 'outstanding' landscape values.

The Banks Peninsula, Te Waihora/Lake Ellesmere, Malvern Hills, Front Ranges, Rakaia and Waimakariri Rivers and Catchments landscapes are subject to differing pressures, which are outlined and addressed below. At a generic level, landscape change is often, but not always, brought about by economic drivers. Traditional pastoral farming activities and the relatively recent large-scale conversions to dairy has strongly influenced and shaped Selwyn's landscapes and will continue to lead to changes in the rural environment.

Generally, threats to landscape values arise where:

- activities go through a significant change and/or become larger in scale and therefore a more dominant and singular feature of the landscape e.g., large scale forestry compared with small scale tree planting interspersed with indigenous outcrops and open pasture;
- housing is developed in locations that detract from open and natural characteristics or in more intensive clusters that contrast with the mosaic pattern or open coastal character that currently exists;
- planting and/or structures obscure or alter the outline of natural landforms;
- earthworks alter natural contours;
- cumulative change i.e. landscape change arising over time from incremental development or "creep" where an existing modification in the landscape is used to justify further change.

More specifically, these effects are often related to some key activities, such as earthworks, loss of areas of significant indigenous vegetation, and the placement of buildings, structures and tree plantings in the landscape. These individual threat types have been addressed separately below.

8.1 Earthworks

Earthworks can leave exposed and cut surfaces which often contrast with surrounding vegetation and natural contours. In particular, if earthworks are carried out on slopes, the scarring can be visually prominent with an adverse effect on the surrounding landscape. Cuttings on steep slopes which are prone to erosion can also create unnatural patterns that in

turn amplify excessive scaring. The location, shape, volume and size of earthworks generally determine their visual impact, but other factors, such as extent and treatment of cut, batter and spill on slopes are also important aspects that can influence the landscape outcomes of larger-scale earthworks.

Large scale earthworks can include but is not limited to quarrying, land development and roading. Quarrying within ONLs should be avoided as the land, buildings, plant for the purpose of extracting natural materials, storage and transportation could lead to significant visual and physical effects that causes degradation of landscape values.

8.2 Buildings, Structures and Utilities

Buildings, structures and utilities can modify or dominate a landscape depending on their location in relation to topography and vegetation, and their colour, materials, finish, height and scale.

In addition, buildings such as dwellings can result in modification of the surrounding land area as a result of consequential changes such as domestication of the landscape with gardens, washing lines, driveways etc. Threats to landscapes can also arise from cumulative effects from a variety of activities, such as a change in farming practices (dairy conversion), subdivision, or from incremental development over time, such as sprawl or 'creep' of development where an existing modification in the landscape leads to further co-location of modification. Fragmentation of the landscape should be avoided where the physical and visual connections between natural features and elements could be affected.

It is unlikely that some parts of the identified ONF/Ls in the district would be intensively developed for residential use due to their remoteness and often difficult access. The exceptions to this may be Arthur's Pass Village and Castle Hill Village. It may be appropriate to identify areas within or adjacent to these urban (village) zones that are suitable to absorb further residential development to ensure future development is planned in a strategic manner rather than proposed sporadically in the wider rural area around these villages.

Ridgelines are particularly sensitive to the locations of buildings, structures and utilities since their appearance on the skyline is often visually prominent from a variety of viewpoints. The expressiveness of particularly legible landforms may be modified by buildings, structures and utilities, if they visually dominate their surroundings.

Buildings and structures can include farm buildings, sheds, backcountry huts, ski field buildings and associated infrastructure such as chairlifts, etc. Utilities can include hydro dams, irrigation canals, telecommunication towers, electricity pylons, wind turbines, masts and solar panels.

When considering the effects of buildings and structures within an ONL, consideration should be given to:

- Type of building/structure and the effects on the landscape character;
- Location in relation to the landform and topography and specific landscape features that are particularly legible within the ONL;
- Scale, form, and finish of any building/structure, including colour, reflectivity and materials;

- Impact on coherence of landscape character or pattern of natural features such as indigenous vegetation, ridges, limestone outcrops etc;
- The nature and extent of existing development within the vicinity or locality;
- Whether or not the proposal is likely to lead to the introduction of urban/ domestic elements into the landscape, inconsistent with rural amenity values.
- The extent to which the number of dwellings or the building coverage on a site would visually dominate or contrast with existing character and amenity values;
- The need for any increased height of a building/structure in order to undertake the proposed activity and how this may detract from views and outlook from adjoining properties or from public roads and places;
- Cumulative effects and potential to visually dominate the landscape in general;
- The benefits that may be obtained from clustering of buildings/structures within the landscape;

8.3 Removal of Indigenous Vegetation and Vegetation Change

In some landscapes, it is the vegetation that contributes strongly to the area's landscape values. This can include exotic planting where it is of a smaller scale and has been planted in harmony with the topography and land cover features present in the landscape. In other cases, it is the presence of indigenous vegetation which contributes to the landscape values. The loss of this vegetation may have significant landscape and visual effects and could diminish an ONF/L. Although plantation forest can devalue a landscape or feature, they can (in combination with other attributes of the landscape), collectively meet the threshold of being 'outstanding', such as the higher elevation areas of Banks Peninsula that continue to have particularly high landscape values relating to the legibility of the volcanic landform, although measures to remove such detractors may also be explored.

From a landscape perspective consideration should be given to the extent to which the loss of indigenous vegetation will adversely affect:

- The natural science values of an ONL
- The overall natural character of an area, including its natural elements, patterns and processes;
- Indigenous ecosystem integrity and function;
- Cultural values;
- Natural character associated with the coast, a water body or wetland

Planting and Vegetation (including plantation forestry, viticulture, woodlots, shelterbelts and amenity planting)

Planting can have visual effects on the openness of the landscape and in some cases this reduction in openness can have adverse effects on the legibility of landscapes. Tree planting for commercial purposes is often linear in form with distinctive, unnatural edges and generally consists of exotic, single species. This results in an 'unnatural' appearance of plantation forests

compared with indigenous vegetation communities, which generally contain a variety of plants of different age, size, colour and texture, which follow the natural terrain with more natural edges and transitions.

The landscape effects of the larger scale, commercial plantation forests can also include the creation of access tracks and visual scaring of the landform during harvesting, especially in steep terrain. Currently, the Selwyn District Plan includes Forestry Exclusion Areas which prevent plantation forestry from being established in specific locations across the district. Whilst research into these areas confirmed that there were no specific criteria determining these extents, as a result of this review process, all of the Forestry Exclusion Areas have been reviewed and are now included within the ONF/Ls or VALs.

When considering the effects of tree planting the scale, location and layout in relation to the underlying landform, species composition and edge treatment should be considered. It is accepted that amenity planting and indigenous re-vegetation tends to avoid a large scale and uniform layout.

While small-scale woodlots, shelterbelts and erosion control planting may be widely accepted in sensitive landscapes, large scale commercial forestry could lead to significant visual and physical effects that causes degradation of landscape values. The creation of unnatural lines could have effects on the naturalness and legibility of outstanding landscapes, including viticulture. While there may be appropriate locations for smaller scale vineyards, it is recommended to control establishment of new vineyards within ONLs.

Location, visibility and encroachment (physical and visual), are important considerations on outstanding natural landscapes which would result in the visual obscuring of these landscapes. Sky-lining may also present an unnatural contrast which is inappropriate in outstanding landscapes. Consideration of cumulative effects when assessing scale may also assist in avoiding physical encroachment of trees in outstanding natural landscapes.

Consideration should be given to:

- The scale of planting;
- Mix of species and the effect on the naturalness of the landscape;
- Visual domination, and in particular effects on openness of the landscape;
- The potential for the planting to block views from roads and other public places;
- Effects on existing vegetation patterns;
- Layout, including spacing and pattern;
- Relationship to other areas of forestry and the potential for cumulative effects on landscape values;
- Potential to obscure or encroach upon important landforms;
- Location and visibility of tracks (covered by earthworks matters); and
- The purpose of the planting.

Landscape/Scenic Viewshafts

Views are a very important aspect of experiencing ONF/Ls and VALs especially along State Highway 73, 77 and the Midland Railway.
Currently in the operative plan, there are policies and rules relating to maintaining panoramic views of the upper Waimakariri basin from SH73 (where these view exist) by ensuring that forestry plantations (and shelterbelts) are setback 300 metres from the road. Also, the same rule applies to the Midland Railway Line. These rules are specifically relevant to the High Country Zone.

Within this updated Landscape Study, the vast majority of the High Country Zone is classified as either ONF/L or VAL. Panoramic views of the high country within the Waimakariri Basin are a key landscape value, especially from key transport routes such as SH73 and the railway line.

It is considered that due to the proposed overlays along these transport corridors in the High Country Zone, that the rules preventing potential screening be maintained.

To maintain views, consideration should be given to development of any kind within 300m along these corridors and not only restricted to forestry and shelterbelts. Built structures, such as agricultural sheds should also be located away from these transport routes. Signage along these corridors should therefore be minimal and be for the purposes of wayfinding.

The following tables (overleaf) outline key sensitivities and likely threats to each ONF/L and VALs:

Table 4 – Specific sensitivities to certain Outstanding Natural Landscapes

Outstanding Natural Landscape	Key Sensitivities to the identified values	Likely Threats	Comments
Banks Peninsula (Selwyn Section)	Visual sensitivity of the ONL	• Earthworks (of a significant scale); • Quarrying; • Buildings and structures; • Subdivision; • Utilities; • Forestry and shelterbelts; • Native vegetation clearance.	Development will adversely affect the landscape values. Small scale buildings and structures may be appropriate and consideration of these should include location, size, colour, scale and access. All new land uses that lead to a visual difference in the landscape should be controlled to avoid adverse landscape effects. Specifically, the following should be controlled: No further land use intensification should occur which would 'green' the landscape; No new earthworks of a significant scale or quarrying should occur; No new plantation forestry, viticulture or shelterbelts should occur. Ridges and the skyline (around the Summit Road) are particularly sensitive and should be protected from modification. All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued.
	Native vegetation (Kennedy's Bush Reserve, Omahu Bush Reserve, Ahuriri Reserve)	• Earthworks (of a significant scale); • Quarrying; • Buildings and structures; • Utilities; • Forestry;	All existing indigenous vegetation should continue to be protected and opportunities for enhancement and restoration pursued.

Outstanding Natural Landscape	Key Sensitivities to the identified values	Likely Threats	Comments
		• Native vegetation clearance.	
Te Waihora / Lake Ellesmere	Visual sensitivity of the ONL	• Earthworks; • Quarrying; • Buildings and structures on lake margins; • Utilities (such as powerlines crossing the lake); • Forestry and shelterbelts; • Native vegetation clearance.	Development around the perimeter of the lake should be restricted as it would adversely affect the landscape values. All new land uses that lead to a visual difference in the landscape should be controlled to avoid adverse landscape effects. Buildings, structures and utilities are not appropriate. No plantation forestry, viticulture or shelterbelts should occur on the lake edges. All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued.
	Native vegetation	• Earthworks (of a significant scale); • Quarrying; • Buildings and structures; • Utilities; • Forestry; • Native vegetation clearance.	All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued.
Malvern Hills	Visual sensitivity of the ONL	• Change in farming practices (e.g., dairy); • Large scale earthworks and quarrying; • Prominent buildings and structures; • Subdivision; • Utilities, including wind farms. • Forestry and shelterbelts;	Development will adversely affect the landscape values. All new land uses that lead to a visual difference in the landscape should be controlled to avoid adverse landscape effects. No further land use intensification should occur which would 'green' the landscape. No earthworks of a significant scale or quarrying should occur.

Outstanding Natural Landscape	Key Sensitivities to the identified values	Likely Threats	Comments
		• Native vegetation clearance.	Building and structure development on unmodified ridgelines /skylines can adversely affect the aesthetic values and should be avoided. Small scale buildings and structures may be appropriate and consideration of these should include location, size, colour, scale and access. No new plantation forestry, viticulture or shelterbelts should occur. All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued.
Rakaia River	Legibility of natural landforms and vegetation	• Earthworks and quarrying (gravel extraction, encroachment of farming practices); • Buildings, structures and utilities (including irrigation canals, hydro dams, etc.); • Forestry and shelterbelts on terraces and margins; • Native vegetation clearance.	Development along the length of the river should be restricted as it would adversely affect the landscape values. All new land uses that lead to a visual difference in the landscape should be controlled to avoid adverse landscape effects. No earthworks or quarrying should occur. Any flood protection measures should be managed to avoid excessive or significant changes to the river. Buildings, structures and utilities are not appropriate. No plantation forestry, viticulture or shelterbelts should occur along the river terraces and margins. All existing indigenous vegetation should be protected and opportunities for

Outstanding Natural Landscape	Key Sensitivities to the identified values	Likely Threats	Comments
			enhancement and restoration pursued.
	Visual openness of the Rakaia River	• Earthworks (of a significant scale); • Quarrying; • Buildings and structures; • Subdivision; • Utilities; • Forestry and shelterbelts; • Native vegetation clearance.	Development along the length of the river should be restricted as it would adversely affect the landscape values. All new land uses that lead to a visual difference in the landscape should be controlled to avoid adverse landscape effects. No earthworks or quarrying should occur. Buildings, structures and utilities are not appropriate. No plantation forestry, viticulture or shelterbelts should occur along the river terraces and margins. All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued.
Waimakariri River	Legibility of natural landforms and vegetation	• Earthworks and quarrying (gravel extraction, encroachment of farming practices); • Buildings, structures and utilities (including irrigation canals, hydro dams, etc.); • Forestry and shelterbelts on terraces and margins; • Native vegetation clearance.	Development along the length of the river should be restricted as it would adversely affect the landscape values. All new land uses that lead to a visual difference in the landscape should be controlled to avoid adverse landscape effects. No earthworks or quarrying should occur. Any flood protection measures should be managed to avoid excessive or significant changes to the river. Buildings, structures and utilities are not appropriate.

Outstanding Natural Landscape	Key Sensitivities to the identified values	Likely Threats	Comments
			No plantation forestry, viticulture or shelterbelts should occur along the river terraces and margins. All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued.
	Visual openness of the Waimakariri River	• Earthworks (of a significant scale); • Quarrying; • Buildings and structures; • Subdivision; • Utilities; • Forestry and shelterbelts; • Native vegetation clearance.	Development along the length of the river should be restricted as it would adversely affect the landscape values. All new land uses that lead to a visual difference in the landscape should be controlled to avoid adverse landscape effects. No earthworks or quarrying should occur. Buildings, structures and utilities are not appropriate. No plantation forestry, viticulture or shelterbelts should occur along the river terraces and margins. All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued.
Front Ranges	Visual sensitivity of ONL and viewshafts from SH 73, and the rail line	• Large scale earthworks and quarrying; • Prominent buildings and structures; • Subdivision; • Utilities, including wind farms. • Change in farming practices (e.g., dairy);	Development will adversely affect the landscape values. Buildings, forestry and other structures (such as utilities) that may affect views from SH73 and the railway line to maintain the 300m set back. All new land uses that lead to a visual difference in the landscape should be controlled to avoid adverse landscape

Outstanding Natural Landscape	Key Sensitivities to the identified values	Likely Threats	Comments
		• Forestry and shelterbelts; • Native vegetation clearance.	effects. No further land use intensification should occur which would 'green' the landscape. No earthworks of a significant scale or quarrying should occur. Building and structure development on unmodified ridgelines /skylines can adversely affect the aesthetic values and should be avoided. Small scale buildings and structures may be appropriate and consideration of these should include location, size, colour, scale and access. No new plantation forestry, viticulture or shelterbelts should occur. All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued.
Rakaia Catchment	Visual sensitivity of ONL	• Large scale earthworks for roading or subdivision and quarrying; • Prominent buildings and structures; • Subdivision; • Utilities, including wind farms; • Change and intensification in farming practices (e.g., overgrazing and dairy); • Forestry and shelterbelts (encroachment of weeds);	Development will adversely affect the landscape values. All new land uses that lead to a visual difference in the landscape should be controlled to avoid adverse landscape effects. No further land use intensification should occur which would 'green' the landscape. Change in farm activities e.g. pivot irrigation would change the character and detract from landscape values. No earthworks of a significant scale or quarrying should occur. Building and structure development on unmodified

Outstanding Natural Landscape	Key Sensitivities to the identified values	Likely Threats	Comments
		• Native vegetation clearance.	ridgelines /skylines can adversely affect the aesthetic values and should be avoided. Small scale buildings and structures may be appropriate and consideration of these should include location, size, colour, scale and access. No new plantation forestry, viticulture or shelterbelts should occur. All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued.
	Native vegetation	• Earthworks; • Quarrying; • Buildings and structures; • Utilities; • Change and intensification in farming practices (e.g., overgrazing and dairy); • Forestry and shelterbelts (encroachment of weeds); • Native vegetation clearance.	All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued. Intensification of areas that currently contain open characteristics through landform and land cover should be avoided. Includes incongruous earthworks, tracks, building locations. Encroachment of human modifications can adversely affect sensory values, such as the visual coherence of an untouched tussockland. This can affect the perceived naturalness of an area. Removal of native vegetation can result in adverse visual and landscape effects on biophysical and sensory values through erosion and the visual contrast between other uncleared areas. Removal of

Outstanding Natural Landscape	Key Sensitivities to the identified values	Likely Threats	Comments
			vegetation reduces the naturalness of an area.
Waimakariri Catchment	Visual sensitivity of ONL and viewshafts from SH 73 and the rail line	• Large scale earthworks for roading or subdivision and quarrying; • Prominent buildings and structures; • Subdivision; • Utilities, including wind farms; • Change and intensification in farming practices (e.g., overgrazing and dairy); • Forestry and shelterbelts (encroachment of weeds); • Native vegetation clearance.	Highly visible development on ridgelines may adversely affect the aesthetic values and natural form of ridgelines. Buildings, forestry and other structures that may affect views from SH73 and the railway line to maintain the 300m set back. Development will adversely affect the landscape values. All new land uses that lead to a visual difference in the landscape should be controlled to avoid adverse landscape effects. No further land use intensification should occur which would 'green' the landscape. Change in farm activities e.g. pivot irrigation would change the character and detract from landscape values. No earthworks of a significant scale or quarrying should occur. Building and structure development on unmodified ridgelines /skylines can adversely affect the aesthetic values and should be avoided. Small scale buildings and structures may be appropriate

Outstanding Natural Landscape	Key Sensitivities to the identified values	Likely Threats	Comments
			and consideration of these should include location, size, colour, scale and access. No new plantation forestry, viticulture or shelterbelts should occur. All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued.
	Native vegetation	• Earthworks; • Quarrying; • Buildings and structures; • Utilities; • Change and intensification in farming practices (e.g., overgrazing and dairy); • Forestry and shelterbelts (encroachment of weeds); • Native vegetation clearance.	All existing indigenous vegetation should be protected and opportunities for enhancement and restoration pursued. Intensification of areas that currently contain open characteristics through landform and land cover should be avoided. Includes incongruous earthworks, tracks, building locations. Encroachment of human modifications can adversely affect sensory values, such as the visual coherence of an untouched tussockland. This can affect the perceived naturalness of an area. Removal of native vegetation can result in adverse visual and landscape effects on biophysical and sensory values through erosion and the visual contrast between other uncleared areas. Removal of vegetation reduces the naturalness of an area.

While visual amenity landscapes do not reach the threshold of being identified ONF/Ls, but are still identified as holding high amenity and environmental characteristics and values, protection from certain activities based on visual change is still required.

Generally, these effects are often related to some key activities, such as earthworks, loss of areas of significant indigenous vegetation, and the placement of buildings, structures and tree plantings in the landscape.

Considerations should be given to the following values to retain the visual amenity:

- Keep visual coherence, perceived naturalness and overall openness;
- Avoid large buildings/structures and avoid building clutter;
- Limit subdivision as this leads to expectations of buildings and carving up of the land with “visual divisions” occurring;
- Limit earthworks and quarrying;
- Avoid intensification or change of farming use;
- Avoid shelterbelts and forestry due to linear form and limited viewshafts.

9.0 Landowner and Stakeholder Engagement

A placeholder section to contain summary of the process of engagement and the results of engagement.