NELSON
LANDSCAPE STUDY 2016
Landscape Evaluation

Boffa Miskell

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Executive Summary

This landscape evaluation forms part of the Nelson Landscape Study commissioned by Nelson City Council. It follows a landscape character assessment which has mapped and described 32 separate landscape and seascape character areas and consultation received in response to the preliminary evaluation. The purpose of this stage of assessment is to evaluate the different landscapes identified across the Nelson Region and provide a judgement of their respective values, sensitivities and threats to development.

Section A introduces the process of landscape evaluation. This includes an understanding of contemporary case law and best practice guidance used to define landscape attributes taken into account when judging landscape values. Such values are grouped into separate 'biophysical', 'sensory' and 'associative' attributes which are introduced together with a five point judgement scale. This section also concludes with an understanding of the key threats and sensitivities which may contribute to landscape change in Nelson including buildings and structures, earthworks, vegetation removal, revegetation, forestry and other tree planting.

Section B identifies areas of landscape considered to be conspicuous, eminent and remarkable in the context of Nelson to the extent that they potentially qualify as outstanding natural landscapes and feature in accordance with Section 6(b) of the Resource Management Act and Policy 15(a) of the New Zealand Coastal Policy Statement and Significant Landscapes / Features in accordance with Section 7 of the RMA. During this stage of the study, five separate outstanding natural landscapes and features have been identified as follows:

- The Bryant Range and Mineral Belt
- Haulashore Island and Arrow (Fifeshire) Rock / Te Urenui
- Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea and Mackay Bluff
- Pepin Island / Mahipuku Delaware Inlet / Wakapuaka
- Cape Soucis / Raetihi and Whangamoa Inlet

Section C provides an understanding of landscape values, landscape sensitivities, landscape threats and development considerations, which have been identified across the 32 separate landscape and seascape character areas in the Nelson region. This stage of the landscape study has been used to qualify an understanding of the nature of landscape values which can be identified. In addition to landscape values corresponding to separate landscape attributes, the nature of potential landscape sensitivities and landscape threats have also been identified to assist with defining appropriate mechanisms used to manage landscape change.

Section D concludes with an understanding of the available regulatory and non-regulatory tools which are available to manage landscape change. This covers the spectrum from formal classification of areas of Outstanding Natural Features and Landscapes to non-regulatory guidance used to assist land owners understanding and contribution to managing landscape change. The mechanisms together with their potential advantages and disadvantages has also been set out in **Appendix 1**.

A glossary and bibliography identifying the terminology used and key literature reviewed is included at the end of the report. A summary of the judgements relating to landscape attributes for each landscape and seascape character area to determine overall landscape values has been set out in **Appendix 2**.

Section A: Background

Introduction

The Nelson Landscape Study has been commissioned by Nelson City Council (NCC) to assist in developing planning measures for managing landscape change within the Nelson region. This stage of assessment forms a preliminary and technical landscape evaluation and follows an initial landscape character assessment which maps and describes the various landscape and seascape character areas across the region. Engagement with communities is required to validate this process and further understand the range of landscape values and their respective levels of importance.

Purpose

The primary purpose of this landscape evaluation is to identify the potential issues and options for managing the district's landscapes, including matters of national importance and other matters and policies identified under the Resource Management Act (RMA, 1991) and New Zealand Coastal Policy Statement (NZCPS, 2010).

Landscape evaluation has been undertaken to identify the potential values, sensitivities and threats which may occur within each landscape and seascape character area. This draws understanding from the landscape character assessment and has then informed the identification of potential outstanding natural features and landscapes. The flow chart overleaf shows the staged structure of the landscape study process; each stage informs the next. The landscape character assessment process has informed the preliminary landscape evaluation stage and has been subsequent informed through consultation.

Landscape Evaluation

The descriptions of landscape (landscape characterisation) provide valuable data on the attributes and key characteristics that contribute to landscape and seascape character. This involves the review of a range of existing information, including existing landscape studies for the district, field work, other research documents and input from related technical experts. However, description 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 landscapes requiring legal protection such as outstanding natural landscapes, criteria or justification must also be made explicit.

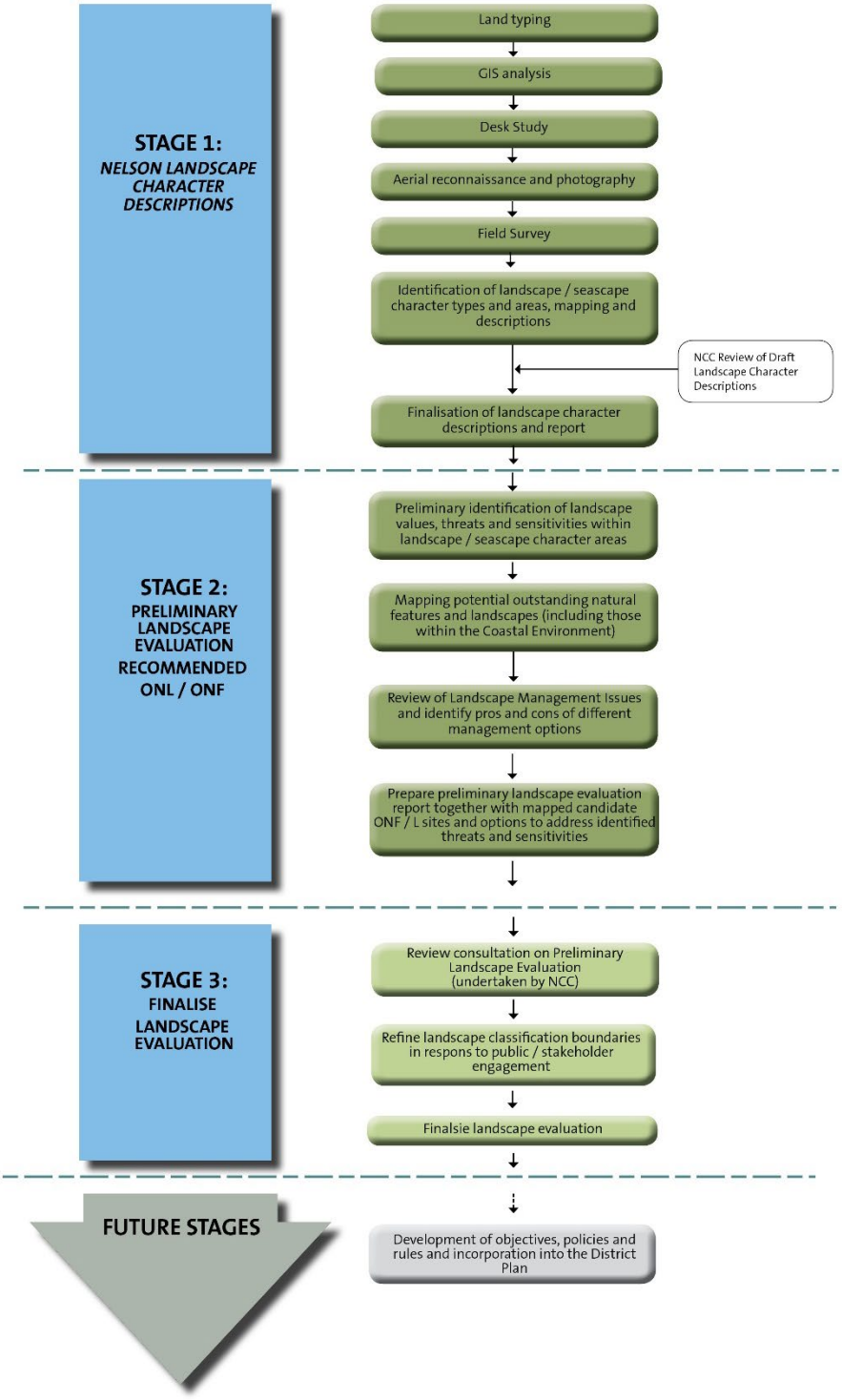
Landscape values derives from the importance that people and communities, including tangata whenua, attach to a place. When identifying landscape value, the landscape evaluation undertaken during this phase of the Nelson Landscape Study has relied on professional judgment. The findings of such evaluation will subsequently sit within a process of community participation and validation that leads to landscape policy development. Ultimately land owners and the community together with Council will be responsible for recognising and managing landscape values and change. Engagement with stakeholders therefore forms a crucial step through future stages of the landscape assessment process. Other specialist assessments such as identifying significant natural areas, tangata whenua and heritage values commissioned alongside this stage of the landscape study should also inform future reviews.

In summary, the output from this stage of the landscape study, seeks to develop an understanding of landscape values, landscape sensitivities and landscape threats. This is in

order to engage with stakeholders and provide guidance on how best to manage landscape character, be it for protection, productivity, development, enhancement or rehabilitation.

Methodology

The landscape evaluation forms Stage 3 of the Nelson Landscape Study and follows on from the preliminary landscape evaluation undertaken during Stage 2. The process of landscape evaluation used during this stage of the study is outlined below:



Landscape Values

Landscape values reflect the relative value to different landscapes or components of landscape held by society. A landscape may be valued 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 understood as the community's identified environmental or cultural benefits 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 be considered to have 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 by communities and thresholds for value determined. The range of factors that the Environment Court has reinforced for landscape practitioners to consider when valuing landscapes is referred to as the Amended Pigeon Bay criteria or factors (C32/1999 – Pigeon Bay Aquaculture Ltd v CRC and C180/1999 – Wakatipu 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 tangata whenua; and*
7) *its historical associations.*

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

(i) *Natural science factors, including geological, topographical, ecological and dynamic components;*
(ii) *The presence of water including seas, lakes, rivers and streams;*
(iii) *Legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes;*
(iv) *Aesthetic values including memorability and naturalness;*
(v) *Vegetation (native and exotic);*
(vi) *Transient values, including presence of wildlife or other values at certain times of the day or year;*
(vii) *Whether the values are shared and recognized;*
(viii) *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;*
(ix) *Historical and heritage associations; and*
(x) *Wild or scenic values.*

Based on the above, there is now a level of acceptance in the use of specified factors as an assessment framework; however, it is also increasingly recognised by practitioners that while they are useful, they also have certain limitations. Making such factors explicit can inform criteria which test the importance of landscape values. Whilst such factors and criteria are not intended to form a definitive or 'complete' list of landscape values, this is how they have often been used. Many of the factors 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'.

A recent review by the New Zealand Institute of Landscape Architects (NZILA, 2010) endorsed by previous environment court decisions (see C11/2009 – Unison Networks vs Hastings District Council) accept that the Pigeon Bay factors can be reordered into three categories, focusing on the landscapes' broad biophysical or natural science aspects, sensory and aesthetic aspects, and associative values. 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 Amended Pigeon Bay and NZCPS factors into these categories reduces the risk of emphasising some at the cost of others and enables assessors to interpret the landscape values with greater validity and reliability.

Biophysical Aspects

Biophysical aspects incorporate a landscapes natural science elements, including its geological, ecological and dynamic components which can be directly attributed to place.

The Natural Science aspects considered by the Environment Court were described in the Queenstown decision as "the geological, ecological and dynamic components of the landscape" (C180/1999 – Waikatipu Env. Society v QLDC). In broad terms, this identifies that natural science values can represent both landform (including geology, geomorphology and soils) and/or land cover (including native vegetation communities, wildlife and ecosystems) components.

Where biophysical aspects are relevant, the key components of the landscape will be present in a way that more generally defines the character of the place. Natural features in a good state of preservation are representative and characteristic of the natural geological and geomorphological processes and diversity of the region. Natural features that are unique or rare in the region or nationally, if few comparable examples exist. Natural features may also form a landscape feature or an element / component of the landscape.

Where possible, the analysis of biophysical aspects of landscape should use objective and quantifiable data to support a particular decision made were available. The Department of Conservation (DoC) together with Nelson City Council are the largest landholders in Nelson covering much of the eastern parts to the region and areas of Nelson's coastline. Accordingly, information available from various DoC and Nelson City Council publications was reviewed, including Recommendations for Protection and relevant Reserve Management Plans. Information from the Geopreservation Inventory has also been considered.

In summary, the key biophysical aspects of landscape value include the following:

- **Landform** components including the presence of important or recognised geological or topographical features
- **Land Cover** components including the presence of important native vegetation communities, wildlife or ecosystems

Sensory / Aesthetic Aspects

Sensory qualities are landscape phenomena which are perceived and experienced by people, such as the view of a scenic landscape or the distinctive smell and sound of the sea and foreshore. Aesthetic aspects of landscape are experienced through sensory qualities and involve judgmental and subjective interpretations of nature and beauty, as well as transient matters contributing to human perception.

The Oxford English Dictionary (2002) defines 'aesthetic' as 'concerned with beauty or the appreciation of beauty; of pleasing appearance'. This appreciation of beauty encompasses not only the visual aspects of a landscape, but also other sensory experiences, such as sound, smell and touch.

The aesthetic value aspects considered by the Environment Court were described in the Queenstown decision as "including memorability and naturalness" (C180/1999 – Wakatipu Env. Society v QLDC). This decision also included some discussion of the adequacy of this description. It was of the view that traditional scenic and visual considerations may be underplayed. It also noted that considerations such as pleasantness raised in the RMA definition of amenity values may also be relevant.

The memorability of an area of landscape is often closely associated with its **vividness** or symbolic contribution to an area due to its recognised iconic qualities. Vivid or striking landscapes are more typically widely recognised across the community and have the ability to remain clear in the memory. Highly memorable landscapes often comprise a key component of a person's recall or mental map of a region or district. It is not necessary for vivid landscapes to have a high degree of naturalness. A landscape may be vivid or striking through other recognised scenic associations.

By contrast, the perception of **naturalness** is where landscapes appear largely uncompromised by modification and appear to comprise of natural systems that are functional and healthy. Naturalness describes the perception of the predominance of nature in the landscape. The Environment Court has endorsed the view that a landscape may retain a high degree of aesthetic naturalness even though its natural systems may be modified. Similarly, landscapes that have high ecological values may not display such visual qualities.

In accordance with the above, the term 'natural' used in the context of landscape identification under RMA section 6(b) is not a direct term referring to the ecological intactness (e.g. EC C387/2011 – PC13 Mackenzie Basin) of an area. Rather it is inferring a visual or aesthetic view where a landscape might qualify as 'natural', i.e. it holds natural elements and organic patterns of colonising vegetation despite the fact that they might not be indigenous. Consequently, it is important to make a distinction between ecological naturalness (indigenous nature or pristine landscape) and landscape naturalness (perceptions of nature). Parts of the landscape can appear highly natural but are ecologically degraded. Landscape elements require prior knowledge in order to appreciate whether they are native or exotic, despite being perceived as highly natural.

To further assist in an assessment of the level of naturalness of a landscape, the Environment Court has determined four criteria for assessing naturalness (A78/2008, Long Bay – Okura Great Park Society v North Shore City Council):

- *Relatively unmodified and legible physical landform and relief;*
- *The landscape being uncluttered by structures and /or obvious human influences;*
- *The presence of water (lake, river, sea); and*
- *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 in Nelson within the Mineral Belt. 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.

In combination with the above, **legibility** forms a key factor considered when assessing sensory or aesthetic value. The Environment Court described this criterion as "how obviously the landscape demonstrates the formative processes leading to it" (C180/99 – WESI vs QLDC); in other words, the degree to which the processes (geomorphological, hydrological, climate, vegetation, coastal and cultural) are actively displayed in the landscape. Some landscapes (or natural features) clearly express past natural and cultural processes.

The criterion of legibility is closely linked to geological and geomorphological values. However, landscapes or features which are significant in terms of their geomorphological values, may not be expressive of these processes, whilst those which are highly expressive may not have a specific geomorphological value. Natural features and landscapes that exemplify the particular processes that formed them may also have strong historical connotations and a distinctive sense of place. Legibility need not necessarily relate to 'attractiveness', but clarity of natural and cultural processes is important.

Cultural legibility is also vital component of landscapes where many centuries of human endeavour can be unravelled through studying the present landscape. This can also often reflect an imposed landscape aesthetic which has modified the way we appreciate our 'natural' areas. In New Zealand this aspect of landscape has received only limited and belated attention and has led to increasing contemporary recognition of how modified our 'natural' landscapes really are.

Coherence forms a related aesthetic factor which can contribute to the value of a landscape. Coherence describes the way in which the visual elements or components of any landscape come together. People generally respond positively to a landscape they can read and understand. The patterns of land cover and land use are largely in harmony with the underlying natural landform pattern and there are no apparent random or significant discordant elements resulting from conflicting land uses. Landscapes with high levels of coherence will have their visual elements in harmony which reinforce each other. They will have unity, whilst they may be either visually diverse or relatively simple in terms of their elements. They 'hang together' in terms of their composition.

Transient values encompass wild associations and describe the contribution which wildlife, climate and hydrological processes make to landscape. A landscape may gain significance due to the way in which wildlife seasonally (or at times in the day) gathers or occupies a specific area. Similarly, locations that benefit from the rising or setting sun, time of day and seasons of the year may be elevated in value due to this 'transient characteristic'. This criterion is linked to those of the ecological values set and provide for the recognition of the contribution to wildlife – which may or may not have intrinsic scientific value – to the perception of landscape.

The consistent occurrence of transient features (for example the seasonal changes in the mountains or particular weather patterns and cloud formations) contribute to the character, qualities and values of the landscape. Some landscapes are widely recognised for their transient features and the contribution these make to the landscape. Where these characteristics occur regularly they become a recognised and integral part of the landscape.

In summary, the key sensory and aesthetic aspects of landscape value include the following:

- **Legibility** - how obviously the feature or landscape demonstrates its formative processes
- **Naturalness** - the perception of the predominance of nature in the landscape
- **Vividness** - how striking or memorable an area of landscape is, including its role in the mental maps of a district or region
- **Coherence** – where land cover and land use appear in harmony with the underlying landform and there are no significant discordant elements
- **Transient values** - including presence of wildlife or other values at certain times of the day or year

Associative Aspects

Certain natural features and landscapes are widely known and valued by the immediate and wider community for their contribution to 'sense of place' leading to strong community association or high public esteem. There should be a substantial measure of agreement between professional and public opinion as to the value of natural features and landscapes, for example, as reflected through writings and paintings or through favourite locations for visitors. The presence of existing protected sites is also likely to reflect shared and recognised values.

Research has shown that many professional landscape assessments frequently reflect the views of the general public (Kaplan, 1979). Nonetheless, it is fully accepted that in some circumstances the expert's perceptions may be different and the findings of this assessment should be validated through community engagement. Some of the main tourist attractions in the district are often considered to be 'iconic landscapes' such as mountain ranges or coastal areas. Certain types of recreation destinations reflect the landscape resource. Conservation areas and popular recreation opportunities within them have been considered under this set of values. Scenic reserves and a number of other protected areas reflect community recognition of an area's landscape quality affording them a high level of protection.

Some natural features and landscapes are clearly special or widely known and influenced by their connection to Maori values. These landscapes (or parts of them) have been identified as having particular regional importance to tangata whenua. The developing awareness of complexity of the 'cultural landscape' of the tangata whenua is covered under the cultural and spiritual values for tangata whenua evaluation criterion. Consultation with iwi undertaken by NCC through the preliminary landscape evaluation process has assisted with enriching understanding of associative values which contribute to landscape value alongside a more detailed review of the Te Tau Ihu: Statutory Acknowledgements which was identified by Iwi as a safe and legitimate source of information. Where such values have been identified, this may also add to increasing the significance attached to the sensory associations including the legibility of our landscapes and other related biophysical and aesthetic associations.

Cultural and historical values are based on traditional land uses such as gathering food and materials, traditional settlement patterns, architectural periods, or notable landmarks, events or figures. Some of them are specific sites of significance, others are wider areas that reflect a high degree of unity or integrity as a setting for historic sites or activities. Individuals and communities leave their different marks on the landscape and this inevitably changes through time. From our choices of architecture and land use to our memories of events, landscapes can tell stories of from where and from whom we came and why we

have responded to the physical environment in the ways we have. All landscapes are inextricably linked to historic processes.

In summary, the key associative aspects of landscape value include the following:

- **Shared and recognized values**
- **Cultural and spiritual values for tangata whenua**
- **Historic and heritage associations**

Professional Judgement

Professional judgement was employed to assess landscape values using the following five point scale:

Very Low	Low	Moderate	High	Very High

Consideration of terrestrial data together with on-site investigations and input from marine, freshwater and terrestrial ecologists at an integrated landscape and natural character workshop resulted in a preliminary judgement of a landscape's potential biophysical, sensory and associative values. The following criteria were used to further assist with understanding the assessment scale used:

Biophysical Values

	Judgement	
	Lower	**Higher**
Landform	• Extensively modified geological, geomorphological, hydrological elements, patterns and processes • Landform attributes which are indistinctive and / or common across the district or region	• Relatively intact geological, geomorphological hydrological elements, patterns and processes • Highly distinctive landform attributes which are unique or rare in the region or nationally with associated scientific or educational importance
Land Cover	• Most indigenous vegetation has been removed and / or has limited ecological value • Common or widely disbursed species, habitats or environments	• Primarily intact indigenous vegetation with important ecological value • Naturally uncommon or nationally threatened species, habitats or environments

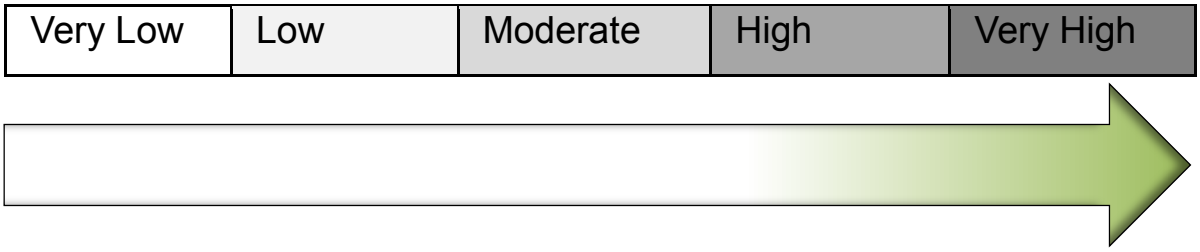
Sensory / Aesthetic Values

	Judgement	
	Lower	**Higher**
Vividness	• Unremarkable or ordinary landscape elements and patterns • Unlikely to remain clear in the memory or recalled in a mental map of the district or region	• Striking landscape elements or patterns • Likely to remain clear in the memory or mental map of the district or region
Naturalness	• Human intervention and / or modification dominates the area resulting in undifferentiated modified systems and / or built areas	• Area appears largely uncompromised by human modification and / or built elements and comprised of diverse natural systems that are functional and healthy
Legibility	• Landscape patterns, elements and processes have been heavily modified	• Formative landscape patterns, elements and process are clearly expressed
Coherence	• Many random or significant discordant landscape elements	• Landscape elements appear in harmony with no apparent random or significant discordant elements
Transient Values	• There is limited change evident across the day, season or year • Encounters with wildlife are unlikely	• Changing elements, patterns and processes remain clearly apparent throughout different times of the day, season or year • Frequent opportunities to encounter wildlife

Associative Values

	Judgement	
	Lower	**Higher**
Shared and recognized values	• The landscape or feature is not widely recognised in the community or likely to be visited by tourists	• The landscape or feature is widely recognised in the community • Commonly referred to in art, literature or tourist information
Cultural and spiritual values for tangata whenua	• Of limited value or importance to local iwi	• The area of landscape or natural feature contains cultural sites or values which are important to local iwi
Historic and heritage associations	• Limited historic and heritage associations	• Important historic / heritage sites and associations

Each landscape character area has been assessed in accordance with the above criteria. Identified landscape values have been set out in Section D with associated scores set out and summarised in **Appendix 2**[1]. Based on this exercise, landscape character areas with at least high overall value, were assessed in greater detail to determine whether all or part of such landscape character areas qualified as an outstanding natural landscape, outstanding natural feature, or significant landscape / features. .



Thresholds for Judging Outstanding Natural Features and Landscapes

A key output of this study is the identification of 'natural' features or landscapes 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'.

Natural

In terms of section 6(b), a natural landscape is understood as one which possesses a dominance of natural elements, patterns and processes over those created by humans. The Environment Court has endorsed this view, stating that the word natural does not necessarily equate with the words 'endemic' or 'pristine', whilst noting that such landscapes in a pristine state are 'probably rarer and of more value than in a natural state' (C180/1999 WESI vs QLDC p. 51).

Consistent with such Environment Court direction, a natural landscape or feature must be assessed as 'natural enough' to qualify as an 'outstanding natural landscape' or

[1]The 'Overall Landscape Value' represents a technical professional judgement and reflects an averaging of the judgements of values across identified landscape character areas .

‘outstanding natural feature’. For the purpose of this assessment, such natural landscapes or features will be predominantly characterised by unchanged landforms, functioning water, drainage and soil processes and tree, plant and animal patterns, compared to a landscape or feature where human developments such as buildings, earthworks, vegetation modification, fencing, roads, quarries, reclamations or subdivision prevail. This takes account of biophysical landscape attributes relating to ‘place’ together with associated sensory / aesthetic attribute relating to people’s perception of naturalness.

In the Mackenzie Basin Interim Decision (C387/2011) the Environment Court ‘provisionally endorsed’ the use of a scale of naturalness in quantifying the degree of naturalness which occurs (but subject to a caveat about naturalness being a cultural construct rather than a scientific term). The Environment Court viewed the concept of applying such a scale as having potential to standardize references to the degree of naturalness. In accordance with this direction, a landscape or feature must be considered to have at least a high level of naturalness (based on the five point scale used in this assessment) to ensure it is ‘natural enough’ to qualify as an ‘outstanding natural landscape’ or ‘outstanding natural feature’ in accordance with Section 6 (b).

In applying the definition of ‘natural’ which has been interpreted under RMA section 6(b), the Environment Court has also cautioned that an outstanding natural landscape is not necessarily an ‘outstandingly natural landscape’ (ENV 432/ 2010 Upper Clutha Tracks). An area of landscape without exceptional biophysical and accompanying sensory / aesthetic naturalness values, may continue to be identified as an outstanding natural landscape or outstanding natural feature simply because other sensory / aesthetic or associative landscape attributes are so remarkable that they lift the landscape or feature into this category.

Outstanding

The Environment Court has endorsed the finding 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).

The process of determining ‘outstanding’ natural landscapes or features acknowledges that not all landscapes or features need to score very high in every factor to be considered outstanding, although this will depend on the landscape or feature under consideration. The evaluation process used to determine whether or not a landscape or feature is outstanding, essentially adopts a threshold across accepted assessment criteria applied in the context of Nelson’s landscapes. This maintains a nationally recognised standard in concluding whether or not a landscape (or feature) is an outstanding natural feature or outstanding natural landscape.

In general terms, outstanding natural landscapes and outstanding natural features will usually be so obvious that there is no further need for expert analysis aside from determining where the particular landscape or feature begins and ends (C180/1999 - WESI vs QLDC p. 57). In this context, sensory / aesthetic values form the key criterion which determines whether or not a natural landscape or natural feature is outstanding. In accordance with this threshold, the judgement of ‘outstanding’ only applies to landscapes or features which score ‘very high’ in terms of their sensory / aesthetic values. Other attributes relating to biophysical and associative values also need to score at least ‘high’ accounting for the other natural, cultural, heritage and community associations which remain relevant.

A recent Supreme Court decision (SC 82/2013 EDS vs New Zealand King Salmon) has identified that where outstanding natural landscapes and features are identified in the Coastal Environment, any adverse effects must be avoided in accordance with NZCPS (Policy 15a). This has potential to set a particularly stringent threshold which relates to outstanding natural landscapes and features in the coastal environment to ensure adverse

effects are avoided on identified values which contribute to such features or landscapes being identified as outstanding. Within the coastal environment, significant adverse effects on natural features and landscapes must also be avoided and other adverse effects avoided, remedied or mitigated in accordance with Policy 15 of the NZCPS.

To identify natural features and landscapes which occur within the coastal environment, the boundary defining the inland extent of the coastal environment adopts the findings of the Nelson Coastal Study: Natural Character of the Coastal Environment (2015). This coastal environment boundary encompasses all seascape character areas (i.e. areas below MHWS) and all or part of relevant landscape character areas which extend along Nelson's coastal edge. The assessment defining this boundary was undertaken in accordance with NZCPS 2010 (Policy 1) concurrently with the Nelson Landscape Study.

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 be required to be 'maintained and enhanced' either as 'amenity values' or part of the wider 'environment' under RMA section 7(c) or section 7(f). Thus, for example, landscapes within the coastal environment or wetlands, rivers lakes and their margins that are not identified as 'outstanding landscapes' would still be required to have their 'natural character' preserved under RMA section 6(a). In addition, significant areas of indigenous vegetation or habitats of indigenous fauna would continue to be protected under section 6(c), as would: the relationship of Maori and culture and traditions with ancestral lands, water, sites, waahi tapu, and other taonga 6(e); and historic heritage 6(f).

Mapping Outstanding Natural Features and Landscapes

This exercise utilised the mapping of significant values on geographic information system (GIS) where possible, which enables the ability to analyse where particular values overlap. The evaluation must also recognise that not all values are able to be mapped (such as aesthetic values). From this, the landscape evaluation was able to delineate areas that displayed notable high qualities of a range of biophysical, sensory / aesthetic and associative values.

When identifying the potential location of ONF/Ls it is also recognised that the boundaries identifying valued areas of landscape, often do not necessarily coincide with landscape character areas based on determining areas of landscape with a distinctive key characteristics. The following diagram (Figures 1 – 4) illustrates the different relationships between landscape character areas and ONF/Ls which may occur:

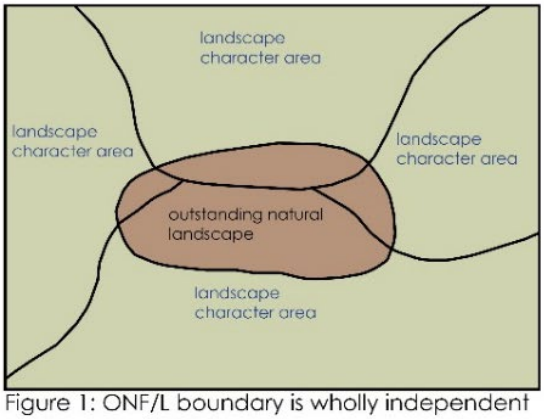


Figure 1: ONF/L boundary is wholly independent and crosses adjoining landscape character areas

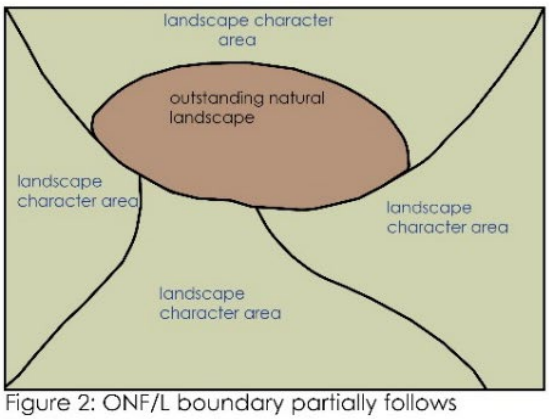


Figure 2: ONF/L boundary partially follows landscape character area boundary

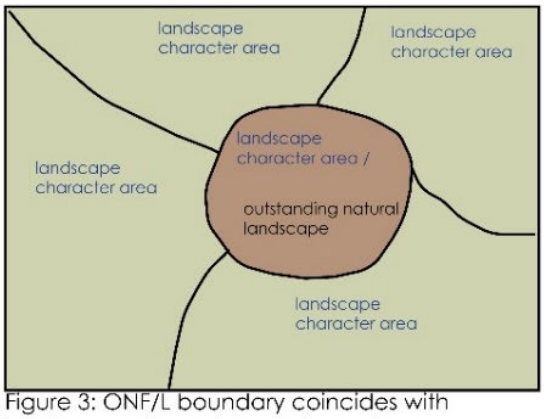


Figure 3: ONF/L boundary coincides with landscape character area boundary

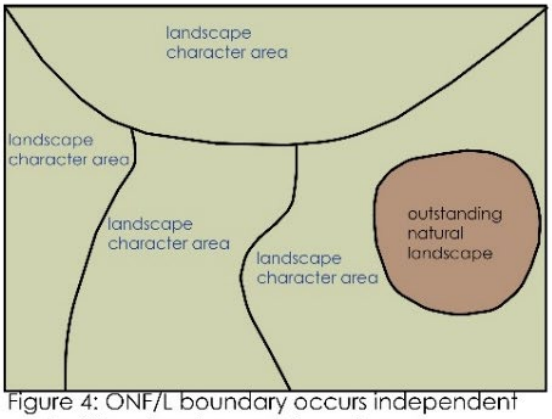


Figure 4: ONF/L boundary occurs independent and within a landscape character area boundary

Consistent with the above diagram, the identification of an appropriate boundary reflect an understanding of important biophysical, sensory and associative values. This can be conceived of as mapping the separate value attributes identified within each landscape character area (see **Figure 5**).

At this stage of the assessment, the review of ONF/L outlines was primarily based on geomorphological aspects and patterns. However, variations in land cover / use were taken into account as a secondary factor. This information was sourced from available aerial photographs and other available GIS information such as the LCDB v.4.0 (Land Cover Database) and field work.

The process of community engagement including future consideration of associative values developed through community and iwi engagement has further refined areas of landscape defined.

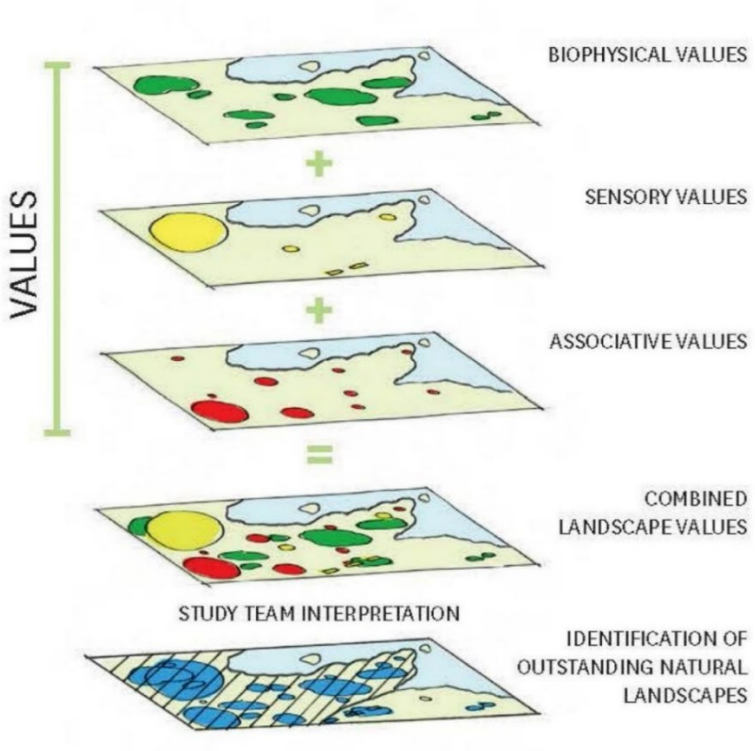


Figure 5: Layering of landscape attributes to order to identify outstanding natural landscapes

Differentiating Outstanding Natural Features and Outstanding Natural Landscapes

There is no automatic policy distinction between 'outstanding natural landscapes' and 'outstanding natural features', both of which essentially have the same level of significance under section 6(b) of the RMA. Consequently, outstanding natural landscapes and outstanding natural features can be collectively referred to as outstanding natural features / landscapes (ONF/Ls).

Notwithstanding this, it is recognised that features can nest within landscapes and vice versa. Such understanding of landscape and feature is scale dependent and also depends on which context it is considered, e.g. Arrow (Fifeshire) Rock could be identified as a feature when seen from viewpoints along Rocks Road, while can also be appreciated as part of the Nelson Haven and Boulder Bank coastal landscape when perceived at a broader district or regional scale.

In recognition of the scale at which values have been defined, outstanding natural landscapes have typically been defined as larger areas that are perceived as a whole and can include a number of features within them. As a larger entity, landscapes can either be experienced from within (e.g. walking tracks or roads) or seen as the whole of the outlook (e.g. the wider backdrop of the Bryant Range).

Conversely, outstanding natural features have been identified as discrete elements within a landscape and are more generally experienced from outside the features' boundaries. Features display integrity as a whole element and can often be clearly distinguished from the surrounding landscape within which they are contained. Generally features are defined by their geomorphology with landforms delineating boundaries, however, in some instances (such as areas of native bush) these can also reflect land cover or land use characteristics.

In accordance with the above distinction, the assessment has also clarified the scale at which either a feature or landscape is recognised in order to further assist with understanding the nature of the important values identified.

Due to the territorial authority of Nelson encompassing both regional and district governance, there was no need for the study team to assess ONF/Ls at two levels, i.e. regional and district-levels. An ONF/L in Nelson will therefore be an ONF/L at both regional and district scale.

Significant Landscapes / Features

The initial brief provided by NCC only required the identification of outstanding natural features and landscapes under RMA section 6(b). As this work was progressed, it became clear that Nelson's landscapes also included important landscape values within a more highly modified urban context which required an additional category of identification. The term 'significant' has been used in this aspect of the study to identify such features and landscapes that do not meet the quality threshold for 'Outstanding' in terms of their values. While the identification of SL/Fs was not part of the initial brief for the study, these areas were identified due to the presence of very high landscape values confirmed through consultation, which in the view of the study team lies just below or around the threshold for ONF/L identification.

While some landscapes / features have very important amenity values, ONF/Ls were only identified in areas that contained high values across all landscape attributes, including naturalness, as well as very high sensory / aesthetic values. Landscapes and features containing particularly high associative values, but a noticeably lower rating of other landscape attributes, have been identified as Significant Landscapes / Features (SL/Fs).

The values of these SL/Fs are similar to areas of Visual Amenity Landscapes (VAL) identified within Nelson City's existing visual backdrop.

The threshold between SL/F and ONF/L was defined based on a rating for each of the three landscape attributes outlined above. Whilst ONF/Ls were defined as those landscapes and features that score 'very high' in terms of their sensory / aesthetic values and high in relation to both biophysical and associative values, SL/Fs were identified where landscape attributes only scored very high in terms of associative values as well as high in one other biophysical or sensory / aesthetic landscape attribute. This allows for landscapes and features to be considered as SL/Fs that may for example now be relatively modified biophysically but nonetheless very important in terms of their cultural associations.

While, the term 'significant landscape' is not directly linked to a specific section of the RMA, they are often alike to other second tier landscapes similar to Nelson's areas of 'Visual Amenity Landscape' which were separately identified as important to the largely undeveloped visual backdrop of Nelson. Such landscapes or features may be important under section 7 of the RMA for a large variety of reasons. Such landscapes are important both in respect of the maintenance of amenity values and more generally of the quality of the local environment. The identification of SL/Fs typically recognises that such landscapes may also be very important in terms of their associative values but do not exhibit the predominance of natural attributes that an ONL is required to display due to extensive modifications (which can include historic and current land uses). Features and landscapes that do not meet the criteria for being ranked as 'outstanding' can nonetheless be required to be ''maintained and enhanced'' either as ''amenity values'' or part of the wider ''environment'' under S.7(c) or S.7(f).

The most rigorous approach to landscape evaluation is likely to involve a layering of values with an evaluation of the quality of each values layer accompanied by an explicit (to the extent possible) justification as to why the values meet the threshold for ONF/L or SL/F status. In this way, the justification for status is relatively robust and explicit. Finally, the explanation provides a basis for directing specific management mechanisms designed to protect the actual outstanding or significant values present.

Analysis and Boundary Definition

The use of spatial data through GIS has been an integral tool for analysing and mapping landscapes within the district. Several geospatial data layers pertaining to landscape elements, imagery, and cadastral designations were overlaid to understand spatial relationships between factors used to analyse and map the boundaries of ONF/Ls.

The spatial data used to generate the maps within this report include the following professional, district, regional, and national sources:

- Territorial Authority Boundaries (NCC, 2014)
- Mean High Water Springs (NCC, 2014)
- Land Cover Data Base v 4.0 (MFE / Landcare Research, 2014)
- QEII Covenants (QEII National Trust, 2016)
- Topography (LINZ)
- Aerial imagery (NCC, 2009; LINZ, 2014)
- Regional Parks, Forests, and Water conservation areas (NCC, DoC)
- District Zoning (NCC)
- Cultural, heritage, and archaeology sites (provided by NCC from district plan registers)

- Landscape Character areas in the Nelson Landscape Study (prepared by Boffa Miskell 2014)

Because landscapes are inherently heterogenic and dynamic, defining the extent of ONF/Ls is exceptionally challenging. While several factors were considered, catchment and landform boundaries were deemed an effective method for achieving the intent of the RMA and therefore were followed where possible.

There were several instances for which land cover was used to extend or reduce the boundary from catchment and landform. Boundaries were extended to include large contiguous areas of mature indigenous and/or rare vegetation contributing to landscape value and were reduced to exclude areas of managed exotic forest. Regional park and forest boundaries were generally contained within ONF/Ls, forming the boundary in instances where indigenous vegetation transitioned to exotic land cover. In some instances where no clear boundary was present, it was necessary to use an arbitrary boundary. For mapping clarity, the coastline adopts the MHWS provided by NCC to specify the boundary along the coastal edge.

It should be noted that there is a degree of generalisation used to map boundaries at a landscape scale (~1:10,000). At this scale, boundaries shall be considered zones of transition rather than a definite line in the landscape. These boundaries should be ground-truthed in order to achieve a level of accuracy for legal purposes.

Landscape Sensitivities

The sensitivity of a landscape is the measure of its ability to accommodate change or intervention without suffering unacceptable effects to its character and values.

Evaluating landscape sensitivities is ultimately concerned with providing a basis for decision making in order to achieve environmental sustainability. While ready formulae to achieve this are not available, it is possible to develop an understanding and describe how vulnerable or resilient attributes within an area of landscape are. This may be either because of effects on landscape character as a whole or effects on individual elements or attributes of the landscape.

Judging landscape sensitivity considers the degree to which the landscape in question is robust, in that it is able to accommodate change without adverse impacts on its existing character. This means making decisions about whether or not significant characteristic elements of the landscape will be liable to loss through disturbance, whether they can easily be restored and whether important aesthetic or associative aspects of character will be liable to change. It also recognises that the existing landscape management techniques may be responsible for the landscape values which are recognised. Different landscapes will be sensitive to different types of development.

The focus of this assessment relates to identifying the nature of landscape sensitivities within an identified landscape character area rather than scoring or ranking the inherent sensitivity across different landscape character areas. This recognises that any comparative judgement of sensitivity is ultimately also dependant on the type of change in question. The following indicators of sensitivity have been developed to assist an understanding of landscape sensitivity in relation to each character area:

- **Landform –** Including the representativeness of underlying geology and the level of landform variation or gradient including whether the landscape is steeply undulating, rolling or flat.
- **Land cover –** The presence of indigenous or exotic vegetation and its relative ecological importance and / or contribution to visual amenity.
- **Settlement and human influences –** Including the presence or lack of buildings and human modification and having regard to their age, nature, form and level of settlement.
- **Landscape pattern and complexity –** The presence or absence of cultural patterns and human introduced elements including access tracks, tree planting and the interplay of colour and texture affecting the expression of natural processes.
- **Scale –** Whether or not the landscape includes human scale elements, presence or absence of enclosing or discordant features.
- **Skylines -** Whether open or framed, settled etc. and their role in relation to surrounding areas
- **Perceptual aspects -** Such as sense of remoteness, wildness and tranquillity
- **Aesthetic attributes -** Such as texture, pattern, colour, movement, light, reflection
- **Cultural and Historic Aspects –** the presence of important cultural or historic artefacts

The evaluation of sensitivity is supported by bullet points which refer to the key landscape attributes with increased sensitivities (i.e. the nature of biophysical, sensory or associative

values which could potentially be under threat). It must also be acknowledged that, within a landscape character area, sensitivity may be so variable, or impossible to record without extensive survey work. An example of this is sensitivities relating to the presence of cultural associations or artefacts. Preliminary findings cannot replace the involvement of contributing iwi, community groups and experts in the validation and decision making process as to the nature of landscape sensitivities which may occur.

Landscape Threats

Whilst it is possible to think in general terms about the sensitivity of the landscape as a whole, landscape sensitivity is also commonly associated with considering the effects of a particular type of change. This might be new development such as housing or industrial activity as well as other forms of change such as the creation of new plantation forestry.

In association with identifying that an area or attribute associated with a landscape character area has an elevated level of sensitivity, an understanding of the nature of threats to landscape value can also be defined. Such threats can occur uniformly throughout a character area or relate more specifically to a particular landscape sensitivity (e.g. the introduction of new residential buildings along skylines).

In Nelson, the key potential types of landscape threats which have currently been identified include the following in the list below. The list is, however, not necessarily comprehensive and the future may hold a different range of uses that cannot be anticipated.

- **Subdivision into smaller land holdings**
- **Rural residential and lifestyle development**
- **Buildings and structures**
- **Earthworks and mineral extraction**
- **Clearance of indigenous vegetation and conversion into pastoral farming or forestry**
- **Tree planting and expansion of exotic forestry**
- **Weed spread including wilding pine**
- **Grazing by feral animals**
- **Recreation access facilities and development**
- **Aquaculture and fishing activities**
- **Coastal erosion and its mitigation**

Many of these activities are also opportunities in so far as they provide for the reasonable use of the land for people's livelihood, lifestyle and/ or recreational activity. The major threats to landscape values are not so much the activities themselves. It is the location, nature, scale, design and management of the activities that cause potential threats to landscape values. The formulation of a comprehensive and integrated strategy with appropriate direction and guidance will assist with the protection, enhancement and the sustainable management of identified landscape values. Further understanding of how key changes may pose threats to Nelson's landscapes and seascapes is set out below.

Buildings and Structures

Buildings and structures have the potential to modify the landscape depending on their location in relation to the topography, size/ scale/ height, form, colour, materials/ finish as well as surrounding existing and proposed vegetation. For residential dwellings landscape change can also relate to other consequential modifications that lead to domestication, such as gardens, driveways, sheds, fences and other structures associated with residential development.

Land based structures can include telecommunication towers, electricity pylons, wind turbines, solar panels and farm buildings, such as barns and implement sheds. Ridgelines are particularly sensitive to the locations of structures, since their appearance on the skyline is often visually prominent from various viewpoints. The expressiveness of particularly legible landforms may be modified by structures, if they visually dominate their surroundings. Water based structures such as jetties and marine farms can also impact on the seascape and undermine the natural character values of the coastal environment.

Threats to landscapes can also arise from cumulative effects from various activities or from incremental development over time, such as subdivision sprawl or 'creep' of development where an existing modification in the landscape leads to further co-location of modification. As part of an assessment of landscape effects, opportunities for benefits could include opportunities to remedy or mitigate an existing adverse effect and opportunities to protect open space from further development (eg. through the use of restrictive covenants). The extent to which a proposal avoids fragmentation of the landscape and allows for the physical and visual connections between natural features and elements can also be considered.

Earthworks

Earthworks can leave exposed and cut surfaces which often contrast with surrounding vegetation and natural contours. Earthworks can occur across a spectrum of smaller scale change including tracks or building platforms to larger scale quarrying or mining operations. In particular, if earthworks are carried out on slopes, the scarring can be visually prominent with an adverse effect on the surrounding landscape. The location, shape, volume and size of earthworks generally determine their visual impacts, 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.

Clearance of indigenous vegetation

The presence of indigenous vegetation often forms an important contributing factor that adds to the natural science values of the areas. The quality and quantity of native vegetation cover often varies considerably between landscape character areas. The extent and species composition of vegetation cover/ remnants needs to be considered when effects of vegetation removal are to be assessed.

There is a strong overlap with parts of the district plan that are aimed at protecting the biodiversity of the district under RMA section 6 (c). From a landscape perspective, loss of indigenous vegetation can adversely affect:

- The overall natural character of an area, including its natural elements, patterns and processes;
- Indigenous ecosystem integrity and function including biophysical effects on water quality;
- Associative cultural and recreational values; and
- Natural character associated with the coast, a water body or wetland.

Tree planting

Tree 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 and features. Tree planting for commercial purposes is often linear in form with distinctive, unnatural edges and generally consists of exotic, single species monocultures. 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 larger scale, commercial plantation forests can also include the creation of access tracks and visual scarring of the landform during harvesting. When considering the effects of tree planting the scale, location and layout in relation to the underlying landform, species composition and edge treatment can all generate landscape effects which can be taken into account. Adverse effects can also include visual domination and in particular effects on openness of the landscape or the potential for the planting to block views from roads and other public places.

While small-scale woodlots, shelterbelts and erosion control planting may be widely accepted in sensitive landscapes, large scale commercial forestry could lead to significant physical and visual effects that causes degradation of landscape values. This can also affect the relationship to other areas of forestry and the potential for cumulative effects on landscape values including increased risk of wilding spread.

Section B: Outstanding Natural Features / Landscapes

Based on the landscape evaluation exercise, the following outstanding natural landscapes and features (ONF/Ls) have been identified across the region, with associated maps of these areas included at the end of this report.

- The Bryant Range and Mineral Belt **(Figure 1)**
- Haulashore Island and Arrow (Fifeshire) Rock **(Figure 2)**
- Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea and Mackay Bluff **(Figure 3)**
- Delaware Inlet **(Figure 4)**
- Cape Soucis and Whangamoa Inlet **(Figure 5)**

The extent and values identified in relation to each outstanding natural landscape and outstanding natural feature is set out in the following pages.

The Bryant Range and Mineral Belt

The Bryant Range and Mineral Belt forms part of an impressive mountain range landscape along the eastern edge of Nelson. This occupies parts of the Northern Bryant Range, Mineral Belt and Roding Character Areas and encompasses contiguous areas of Mount Richmond Forest Park managed for conservation purposes (see **Figure 1**).

Biophysical **Very High**

- Extensive uplifted mountain range accommodating the Mineral Belt, an internationally important geological feature associated with ultramafic geology (Johnston, 1987)
- Nationally important ecological area encompassing notable plant communities and habitats of the mineral belt and adjacent limestone substrates (Nelson City Council, 2009)
- High levels of cobalt, nickel and chromium result in restricted range of highly distinctive indigenous herbs and shrubs (Molloy, 1988)
- High proportion of threatened and locally endemic plant species within the Mineral Belt (Mike Harding, pers. comm.)

Sensory **Very High**

- Striking 'dun' coloured soils and stunted vegetation communities are highly legible and expressive of underlying formative processes
- Highly natural and remote backdrop with an absence of roads, structures and introduced vegetation species
- A vivid contrast between the productive land use on the lower lying hills and extensive areas of native forest and stunted vegetation within the Mineral Belt
- The Mineral Belt and 'The Doubles' form distinctive and iconic features visible from respective parts of Nelson's coastline and Nelson City which remain clearly memorable
- Shifting light conditions and shadows along the Mineral Belt together with the presence of wildlife in this wilderness area form important transient values

Associative **Very High**

- Highly valued wilderness recreation opportunities accessible from Nelson (Nelson City Council, 2009)
- Maungatapu (Parikarearea) and the mineral belt are very sacred to local iwi (Te Tau Statutory Acknowledgements, 2014)
- Significant cultural and archaeological features, such as argillite quarries which were a source of material for Maori for making tools and historic trails (Johnston, 1987)
- Historic European mine workings and historic railway line (Johnston, 1987)
- Archaeological and historic sites are of regional and possibly national importance (Nelson City Council, 2009)
- Strong association with historic geological and discovery of 'dunite' and 'rodingite' rock types named after this area (Johnston, 1987).

EVALUATION
The larger Bryant Range which includes the Mineral Belt, Roding Valley and the Northern Bryant Range containing Mount Richmond Forest Park is considered to form an outstanding natural landscape [**ONL**].

Haulashore Island and Arrow (Fifeshire) Rock

Haulashore Island and Arrow Rock / Te Urenui together with tilted sandstone rocks adjoining Rocks Road form a collection of iconic landscape features at the southern end of the Nelson Haven and Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea Character Area (see **Figure 2**). These collectively define part of the natural and memorable entrance experience forming the southern approach into Nelson City. While tall pine trees are present and highly visible on Haulashore Island its overall naturalness prevails forming an important node marking the former and present harbour entrances.

Biophysical — High

- Haulashore Island and Arrow Rock (Fifeshire Rock /Te Urenui) form an important landform remnant severed by 'the Cut' and stack at the southern end of the Boulder Bank (Warren, 2009)
- Impressive beds of tilted fossil laden sandstone along Rocks Road with wave cut platforms and coastal cliffs at Magazine Point form unique geological features easily accessible along Nelson's coastal edge (Johnston, 1979)

Sensory — Very High

- Iconic and highly memorable landmark features occupying a prominent role along the main coastal southern route traveling north into the City and natural entrance into Nelson Haven
- Areas of exposed coastal rock remain highly expressive of formative uplift and coastal processes
- Haulashore Island (despite the presence of pine trees) and together with Arrow Rock retain high degrees of naturalness, being largely unbuilt island environments
- The presence of islands at the entrance to Nelson Harbour form highly visible, iconic features within the Coastal Environment.
- Rich association with transient coastal experiences due to shifting tidal and wave patterns, light conditions and presence of marine mammals

Associative — Very High

- Strong associations with historic maritime events including shipwrecks and port access marking the former and present harbour entrances permanently severed from the Boulder Bank in 1905, by 'the Cut' which provides shipping access to Port Nelson
- Fifeshire Rock / Te Urenui is of significance to local iwi (Te Tau Statutory Acknowledgements, 2014)
- Important association with Maori use associated with transportation and food along the coast with a kainga site identified on southern tip of Haulashore Island (New Zealand Archaeological Association)
- Site of First recorded fossil find in New Zealand (Hayward, 1999)

EVALUATION
Collectively the features of Haulashore Island, Arrow Rock and tilted sandstone along Rocks Road are considered to form a cluster of outstanding natural features [**ONF**].

Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea and Mackay Bluff

Nelson's Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea and Mackay Bluff form a striking land system and resultant natural feature which extends for approximately 17 km along Nelson's coastal edge and encompassing Horoirangi Marine Reserve. This is identified within the Southern Tasman Bay / Te Tai-o-Aorere, Nelson Haven and Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea, Wakapuaka Flats and Drumduan / Horoirangi landscape / seascape character areas (see **Figure 3**).

Biophysical **Very High**

- The boulder bank is of international importance forming the largest known boulder bank of its type in the world (Warren, 2009, Davidson and Preece, 1994)
- Presence of distinctive and vulnerable coastal plant communities and pockets of remnant coastal forest (Davidson and Preece, 1994)
- Complex sub-tidal reef system and important relationship with aquatic habitats protected in Horoirangi Marine Reserve (Department of Conservation, 2006)

Sensory **Very High**

- Part of a larger legible land system derived from material eroded from Mackay Bluff to form a slender natural spit of cobbles and boulders (Warren, 2009)
- Limited built development retains a predominately open and expansive natural coastal edge with limited and long established isolated buildings
- Views towards the Boulder Bank form Nelson form an iconic feature along the coastal edge
- Very high scenic and wildness associations (auditory, visual and aromas) and transient values along the coastal edge

Associative **Very High**

- The Boulder Bank is strongly associated with Nelson's identity forming the first European settlement Port with natural protection in the South Island (Warren, 2009).
- Horoirangi is a thriving marine reserve supporting passive recreation opportunities (Forest and Bird, 2016).
- Strong spiritual and cultural associations to Maori associated with its long-time occupation and association with Drumduan / Horoirangi (Department of Conservation, 2006)
- Remains of a substantial archaic Maori settlement site at the Glen (Warren, 2009)
- Mackay's Bluff was an important fishing station to local iwi (Te Tau Statutory Acknowledgements, 2014)
- An important source of hammer stones for the pakohe industry which were used in quarries throughout the area (Te Tau Statutory Acknowledgements, 2014)
- Historic Lighthouse with Category 1 historic Places listing and Nelson Boulder Bank as a whole is listed with Heritage NZ due to the high number of inter-related historic places (New Zealand Historic Places Trust, 2013)

EVALUATION
The Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea and larger land system associated with Mackay Bluff and Horoirangi Marine Reserve are considered to form an outstanding natural feature [**ONF**].

Pepin Island / Mahipuku and Delaware Inlet / Wakapuaka

Pepin Island / Mahipuku and Delaware Inlet / Wakapuaka form a collective of features which form a remarkable coastal landscape along Nelson's northern coastline contained within the Delaware and Outer Eastern Tasman Bay / Te Tai-o-Aorere landscape / seascape character areas. Part of this area encompassing Pepin Island / Mahipuku is farmed, whilst retaining an impressive sequence of coastal landforms which enclose Delaware Inlet and retain a high levels of perceived naturalness with limited apparent modification (see **Figure 4**).

Biophysical **Very High**

- Impressive sequence of coastal landforms, including an estuary, sand spits, small peninsulas and unique coastal hill form attached to the mainland by a tombolo (Davidson and Preece, 1994)
- Extensive unmodified mud and sand flats dominate intertidal area together with nationally important dune habitats (Davidson and Preece, 1994)
- Significant conservation values ranging from salt marsh through to coastal forest retained on Bishop Peninsula (Davidson and Preece, 1994)
- Nesting, roosting and/or feeding site for nationally threatened bird species (Cawthron Institute, 2016)

Sensory **Very High**

- Pepin Island / Mahipuku and adjoining landforms reflect formative geological and coastal processes (Lauder, 1962)
- Although farming occurs, the Inlet retains a very high degree of naturalness largely free of human modification together with an open rural backdrop with limited rural based settlement and landform modification
- Clustered node of domestic and farm building on the western toe of Pepin Island / Mahipuku beyond which buildings are limited to isolated built elements which are extremely dispersed and remain wholly subservient to the open landscape context
- A highly coherent and striking sequence of coastal features with no significant discordant features
- Rich association with transient coastal experiences due to shifting tidal and wave patterns, light conditions and presence of marine mammals

Associative **Very High**

- A host of land and sea based recreational activities are popular (i.e. fishing, surfing, kayaking, boating and walking)
- Very important Maori cultural and spiritual associations and archaeological sites forming a major centre of occupation (Davidson and Preece, 1994)
- Important European heritage sites including the first New Zealand international telegraph cable connection at Cable Bay / Rotokura in 1876 (Davidson and Preece, 1994)

EVALUATION
The collective features of Pepin Island / Mahipuku and Tombolo, Cable Bay / Rotokura, Bishop Peninsula and Delaware Spit and Delaware Bay is considered to form an outstanding natural landscape **[ONL].**

Cape Soucis / Raetihi and Whangamoa Inlet

Cape Soucis / Raetihi and Whangamoa Inlet forms the northern extent of Nelson's remote coastline and mountain range landscape. The extent of potential outstanding natural landscape in this area is identified within the Outer Easter Tasman Bay / Te Tai-o-Aorere, Whangamoa Hills, Cape Soucis and Rai Saddle landscape / seascape character areas. This encompasses steep coastal cliffs, headlands and rock outcrops as well as Hori Bay, Whangamoa Inlet, Kokorua Bay, Omokau Bay, and Oananga Bay which extend between the Whangamoa Heads and Cape Soucis. The inland boundary encompasses contiguous areas of Mount Richmond Forest Park which extend a cover of indigenous vegetation along Nelson's elevated inland mountain spine separated by land accommodating exotic plantation (see **Figure 5**).

Biophysical **Very High**

- Northern end of large substantial uplifted mountain range comprising compressed sedimentary material and a belt of ultramafic rocks (Lynn, 2014)
- Steep unmodified coastal cliffs and headland acts as the region's northerly point
- Localised bands of nationally rare exposed serpentinitic breccia and limestone
- High numbers of threatened and at-risk plant species along the narrow band of coastal habitat including small areas of indigenous coastal dunes (Davidson and Preece, 1994)
- Mature and regenerating alluvial forest surrounding Whangamoa Inlet (Davidson and Preece, 1994)
- Large extent of intact indigenous forest including extensive areas of mixed beech and podocarp - broadleaved forest (Davidson and Preece, 1994)

Sensory **Very High**

- Coastal edge remains highly expressive of the geological and natural processes which have shaped this area of landscape
- Steep rugged and dramatic coastal cliffs which create a wild and rugged coastal edge and mountain backdrop
- Minimal human modification and interplay of coastal landforms and native vegetation retains a very high level of naturalness
- Dramatic steep coastal scarps and rock outcrop landforms and backdrop of indigenous vegetation form an iconic and memorable outer edge of Tasman Bay / Te Tai-o-Aorere
- The interplay of coastal landforms and native vegetation retains a very high level of coherence where the sequence of vegetation communities extend between the coastal edge and the summit of Castor Peak.
- High experiential and transient values due to coastal exposure and association with marine mammals and terrestrial wildlife.

Associative **High**

- Whangamoa Inlet has strong cultural and spiritual association with Maori
- Several sites associated with long-standing Maori settlement (Davidson and Preece, 1994).

EVALUATION
Cape Soucis, Whangamoa Inlet and the adjoining coastal landforms and cliffs with indigenous forest backdrop within Mount Richmond Forest Park are considered to form an outstanding natural landscape [**ONL**].

Section C: Significant Landscapes / Features

Based on the landscape evaluation exercise, the following significant landscapes / features / (SL/F) have been identified across the region:

- Maitai Valley
- Nelson Haven
- Tahunanui Beach

The values identified in relation to each significant feature / landscape is set out below:

Maitai / Mahitahi River

The Maitai / Maitahi River flows west from the Bryant Range into Nelson Haven. It includes tributaries which flow from the Roding and Mineral Belt landscape character areas and extends through the Upper Maitai and Maitai Valley character areas before flowing through Nelson's urban area in its lower reaches.

Biophysical	**Moderate**

- Accessible inland valley system extending east of Nelson City
- Remnant beech and podocarp amongst stands of plantation forest on slopes in the vicinity of the Maitai Dam

Sensory	**High**

- Iconic and memorable inland valley landscape setting in close proximity to Nelson
- Upper reaches retain a high level of naturalness with exception of built elements associated with Maitai Dam, Nelson's water supply and transmission lines.
- Strong picturesque scenic qualities and lower reaches
- Coherent configuration of open space continues recreation access along the Maitai River
- Transient values associated with recreational use of the river and accompanying open space areas

Associative	**Very High**

- Highly valued recreational area associated with the Maitai River, open space and associated reserves including the golf course and motor camp
- The river and its environs are a site of great significance for local iwi (Te Tau Statutory Acknowledgements, 2014)
- The Maitai River was historically a source of argillite, a highly valuable and useful rock used for toki (adzes) and working tools and was rich in mahinga kai, rongoā, weaving and building materials (Te Tau Statutory Acknowledgements, 2014)
- The Maitai River and its tributaries provided tūpuna with a natural pathway or ara through the rohe (Te Tau Statutory Acknowledgements, 2014)

EVALUATION
The Maitai River within the Maitai Valley and Upper Maitai landscape character areas is considered to form a Significant Landscape [**SL/F**].

Nelson Haven

Nelson Haven extends to the north-east of Nelson City and forms a contained estuary between the Boulder Bank and QEII Drive. It forms a recognised natural feature contained within the larger Nelson Haven and the Boulder Bank character area.

Biophysical	**High**

- The active estuary with shifting channels is highly dynamic and the influence of the tide is particularly important for the ecosystem
- The largest colony of eel grass beds in Tasman Bay
- Nelson Haven is considered of national importance as a major feeding area and roost for migratory waders and nationally threated bird species

Sensory	**High**

- Below MHWS, the estuary retains a strong open natural context with exposed mudflats and shifting channels of water
- Sandflats retain formative coastal processes which more significant modification along the coastal edges associated with Wakapuaka Flats, QEII Drive and Nelson Port
- Limited modification is apparent in the form of posts, poles and moored boats seen in the context of a strong coastal shipping character in Nelson Port
- The constant change and movement on the coast - with tides, weather and lighting conditions - contributes a great deal of visual variety to the city's landscape context
- Various seabirds and marine mammals seen in this area contribute to high transient values

Associative	**Very High**

- Of very high local importance to the local community
- Important for a variety of recreational activities, such as windsurfing, kite surfing, paddle boarding, rowing and sailing
- Important food source and transport connections for Maori
- Strong historic associations with Port Nelson and artefacts associated with coastal shipping including Nelson's light house

EVALUATION
Nelson Haven is considered to form a Significant Feature [**SL/F**].

Tahunanui Beach

Tahunanui is recognisable as Nelson's beach and an important contribution to Nelson's seaside town. It forms the northern extent of the larger Tahunanui landscape character area and part of the eastern entrance into Waimea Inlet.

Biophysical	**Moderate**

- Modified coastal vegetation patterns with areas of dune system and salt marsh retained along the Tahunanui Back Beach
- The Tahunanui Back Beach provides an important habitat for the carabid ground beetle

Sensory	**High**

- Tahunanui Beach is memorable as an iconic recreation area associated with Nelson's coastal setting
- Shifting coastal patterns remain apparent along the coastal edge with human modification immediately apparent beyond the sandy coastal edge
- The Back Beach retains natural estuary patterns and dynamic sand processes, disrupted by established pines
- Seasonal changes provide strong recreation associations, particularly during summer

Associative	**Very High**

- Very important recreation area, commonly referred to as 'Nelson's beach'
- Important for a variety of recreational activities, such as surfing, windsurfing, kite surfing, paddle boarding and sailing
- Important heritage associations indicating early Maori settlement and associated cultural and spiritual values

EVALUATION
Tahunanui Beach is considered to form a Significant Feature [**SL/F**].

Section D: Landscape Evaluation

In association with the classification of potential ONF/Ls, the nature of landscape values, sensitivities and threats currently identified across the 32 landscape and seascape character areas identified within the Nelson landscape character assessment is set out below. This provides a description of biophysical, sensory and associative values together with an overall landscape value derived from averaging judgements relating to the potential importance of recognised values. A map of the landscape / seascape character areas and types assessed is included as **Figure 6** together with values summarised in **Appendix 2**.

Ranges

- Mineral Belt
- Northern Bryant Range
- Rai Saddle
- Fringed Hill
- Brook Sanctuary
- Barnicoat Range
- Upper Maitai
- Roding

Hills

- Cape Soucis
- Drumduan / Horoirangi
- Atawhai Hills
- Grampians / Sharland Hill
- Hira Forest
- Hira Hills
- Whangamoa Hills
- Whangamoa
- Kokorua

Valleys

- Maitai Valley
- Hira Basin
- Lud Valley

Plains and Foothills

- Stoke Foothills
- Malvern Hills
- Wakapuaka Foothills
- Porthills Ridge
- Saxton Fields
- Tahunanui
- Wakapuaka Flats
- Cable Bay / Rotokura / Delaware Inlet

Estuary / Inlet

- Waimea Estuary
- Nelson Haven and the Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea

Open Water

- Southern Tasman Bay / Te Tai-o-Aorere
- Outer Eastern Tasman Bay / Te Tai-o-Aorere

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Mineral Belt	**Biophysical** • Internationally important geological values of ophiolite mineral belt • Unique plant communities with high proportion of threatened and locally endemic plant species **Sensory** • Distinctive dun coloured soils and stunted vegetation cover expressive of underlying geology • Memorable contrast in landform and vegetation types along larger rugged inland mountain backdrop • Very high level of perceived naturalness with remote mountain character largely unmodified by human intervention • Highly coherent feature within larger mountain range **Associative** • Historic association with Maori of argilite (pakohe) including the argillite quarry at Rush Pools • Maungatapu reigns above the eastern side of Tasman Bay as a sacred mountain. • Early European mining of chromite and copper including alignment of Dun Mountain Railway • Important wilderness recreation area accessible from Nelson	**Very High**	• Impacts on biophysical values associated with geomorphology and associated land cover • Impacts on the coherent open and natural character of Nelson's mountain range backdrop and legibility of the Mineral Belt • Impacts on important heritage artefacts and their settings • Reduction in wilderness recreation opportunities within a rugged natural mountain backdrop	• Scarring from earthworks associated with tracks, mining and quarrying • Introduction of prominent utility structures • Expansion of plantation forestry • Encroachment of weeds (e.g. wilding pines) • Damage from pests and grazing by animals	• All of this area is public ownership which lessens the threat of inappropriate development • Management plan for Nelson's Water supply
Northern Bryant Range	**Biophysical** • Part of larger uplifted mountain range sequence along Nelson's Inland mountain spine • Fragmented geological values associated with ophiolite mineral belt • Extensive upland hill country mixed beech forest with scattered podocarps **Sensory** • Legible mountain range sequence forming elevated eastern spine visible from much of Nelson's coastline • Very high natural values associated with undeveloped rugged mountainous backdrop • Distinctive form of 'The Doubles' forms part of Nelson's iconic mountain range backdrop • Land managed primarily for conservation interest (Mount Richmond Forest Park) retaining a coherent cover of indigenous forest • Wild and scenic values associated with Mount Richmond Forest Park provide opportunities to experience nature **Associative** • The Doubles forms a recognised element along the Bryant Range visible from Nelson City • Limited established recreation or access opportunities	**Very High**	• Impacts on biophysical conservation values managed as part of Mount Richmond Forest Park • Impacts on the open and natural character of Nelson's mountain range backdrop • Impact on amenity values accommodating inland wilderness recreation opportunities	• Expansion of forestry • Encroachment of weeds (e.g. Wilding pines) • Damage from pests and grazing by animals	• The majority of this area is in public ownership which lessens the threat of inappropriate development • Public land managed as part of the Conservation Estate within Mount Richmond Forest Park

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Rai Saddle	**Biophysical** • Part of larger uplifted mountain range sequence along Nelson's Inland mountain spine and saddle at the head waters of Collins River • The majority of the character area is established in exotic forestry with areas of indigenous forest in elevated areas contained in Mount Richmond Forest Park **Sensory** • Isolated pass with limited development forming part of a larger rugged natural mountain range backdrop • Strong association with working landscape and plantation forestry set against backdrop of indigenous forest in Mount Richmond Forest Park • Mosaic of established and harvested forestry reduces overall coherence **Associative** • Historic Maori mining site for argillite (pakohe)	Moderate	• Impacts on biophysical conservation values managed as part of Mount Richmond Forest Park • Impacts on the open and natural character of Nelson's mountain range backdrop • Impacts on important heritage artefacts and their settings	• Scarring from earthworks for tracks and skidder sites • Introduction of prominent utility structures • Expansion of forestry adjoining conservation areas • Encroachment of weeds (e.g. Wilding pines) into indigenous forest • Damage from pests and grazing by animals	• The elevated northern and southern elements of this character area covered with native forest are in public ownership and managed as part of the Conservation Estate within Mount Richmond Forest Park which lessens the threat of inappropriate development
Fringed Hill	**Biophysical** • Part of larger uplifted mountain range forming backdrop to Nelson • The majority of this character area is established in exotic forestry with adjoining indigenous forest and regenerating kanuka to the south **Sensory** • Legible transition from Nelson's immediate hill forms into the more elevated backdrop ranges • Important part of the larger vivid mountain backdrop seen from parts of Nelson including the CBD • Reduced sense of naturalness and coherence resulting from mosaic of changing vegetation types and strong association with plantation forestry **Associative** • Important historic and recreation values associated with Dun Mountain Walkway	Moderate	• Impacts on the landform contributing to Nelson's steep mountain backdrop • Impacts on the open and natural character of Nelson's mountain range backdrop	• Scarring from earthworks for tracks and skidder sites • Expansion of urban development onto lower slopes • Introduction of structures and buildings, including those for utilities, in prominent locations in the middle and upper slopes • Expansion of forestry • Encroachment of weeds (eg Wilding pines)	• A large part of this character area is in public ownership with some managed as part of the Brook Conservation Reserve which lessens the threat of inappropriate development

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Brook Sanctuary	**Biophysical** • Enclosed landform accommodating the upper catchment of the Brook, contained from adjacent urban areas • Extensive areas of lowland beech forest with pockets of podocarp and kanuka forest **Sensory** • High levels of perceived naturalness associated with presence of indigenous flora and fauna • Strong scenic associations associated with coherent vegetation cover • High transient values associated with opportunities to experience wildlife **Associative** • Shared community values associated with managing the Brook Waimarama Sanctuary • Important historic associations including the setting for historic dams and Dun Mountain Railway	**High**	• Impacts on biophysical values associated with native vegetation • Impacts on wilderness recreation opportunities within sanctuary • Impacts on important heritage artefacts and their settings	• Encroachment of weeds (e.g. wilding pines) • Damage from pests and grazing by animals • Intensification of recreation opportunities and associated auxiliary development • Introduction of utility structures in prominent locations	• The majority of this area is retained in public ownership and managed as part of the Brook Conservation Reserve which lessens the threat of inappropriate development
Barnicoat Range	**Biophysical** • Primary mountainous backdrop to Stoke foothills and South Nelson area and rising above Waimea-Flaxmere Fault System • Primarily plantation forestry with areas of scrub and pockets of remnant native vegetation **Sensory** • Steep and rugged relatively unbuilt landscape with established patterns of forestry and tracking • Visually prominent skyline ridge forming unbuilt backdrop to views from Stoke and Waimea Inlet • Mixed vegetation types contributing to larger 'green backdrop' character **Associative** • Recognised primary backdrop and skyline adjoining Stoke • Existing recreation uses	**High**	• Impacts on biophysical values associated with remnant native vegetation and steep mountain backdrop • Impacts on the open and natural green backdrop character and undeveloped upper slope and skyline beyond the Stoke Foothills	• Expansion of forestry • Encroachment of weeds (e.g. wilding pines) • Scarring from earthworks for tracks, quarrying and skidder sites • Introduction of utility structures in prominent locations • Introduction of buildings in prominent locations on the middle and upper slopes • Damage from pests and grazing by animals	• Land at the head of the Marsden Valley is retained in public ownership which lessens the threat of inappropriate development in this area

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Upper Maitai (Mahitahi)	**Biophysical** • Contained valley system within wider mountainous backdrop • Remnant beech and podocarp amongst stands of plantation forest on slopes in the vicinity of the Maitai Dam **Sensory** • Largely unmodified and isolated character with exception of built elements associated with Maitai Dam, Nelson's water supply and transmission lines but still retaining a high level of naturalness **Associative** • Important recreation area accessible from Nelson • Historic association with argillite resources used by Maori highly valuable and useful rock used for toki (adzes) and working tools • Original travel route between Nelson and Pelorus/Marlborough • The first-described examples of lawsonite-bearing metagreywacke and marble in New Zealand.	**High**	• Impacts on biophysical values associated with remnant native vegetation and steep mountain backdrop • Impacts on amenity values accommodating inland wilderness recreation opportunities • Impacts on important heritage artefacts and their settings	• Expansion of forestry • Encroachment of weeds (e.g. wilding pines) • Damage from pests and grazing by animals • Scarring and erosion from earthworks for tracks, quarrying and skidder sites • Expansion of existing utility structures • Introduction of prominent buildings visible from recreation corridors	• Most of this land is retained in public ownership which lessens the threat of inappropriate development
Roding	**Biophysical** • Part of larger uplifted mountain range backdrop to Nelson • Predominant cover of native forest including lowland beech forest and areas of remnant alluvial forest **Sensory** • Exposed section of basal Maitai Group and Upukerora formation and limestone outcrops and caves expressive of respective formative tectonic and weathering processes • Very High natural values associated with isolated and remote inland mountain range • A marked change in vegetation cover with indigenous forest forming a vivid and coherent edge adjoining the Mineral Belt • Very high wilderness associations with opportunities to hunt wild animals and experience indigenous fauna and flora. **Associative** • Provision for Nelson's water supply in the upper catchments • Historic association with early copper mines including the now abandoned Champion Smelter	**Very High**	• Impacts on biophysical values associated with remnant native vegetation and steep mountain backdrop • Impacts on amenity values of inland wilderness recreation opportunities in a rugged unbuilt mountainous backdrop • Impacts on important heritage artefacts and their settings	• Expansion of forestry • Encroachment of weeds (e.g. Wilding pines) • Damage from pests and grazing by animals • Scarring and erosion from earthworks for tracks, quarrying and skidder sites • Introduction of utility structures on prominent sites	• Most of this land is retained in public ownership which lessens the threat of inappropriate development

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Cape Soucis	**Biophysical** • Rugged coastal landforms which extend between the coastal edge and the northern tip of the Bryant Range • High numbers of threatened and at-risk plant species, especially along the narrow band of coastal habitat **Sensory** • Dramatic coastal scarps and rock outcrops express formative geological striations and coastal erosion • Very low levels of modification with exception of isolated coastal dwellings and some forestry • Areas of highly coherent original vegetation cover which extend from the mountain ranges to the sea • Very high wilderness associations associated with remote and exposed coastline **Associative** • Limited access with low levels of recreation use • Adjoining coastal area provides recognised cultural values	**Very High**	• Impacts on biophysical values associated with coastal landforms • Impacts on conservation values associated with native vegetation and vulnerable plant communities • Impacts on sensory values associated with dramatic rugged and isolated coastal character and a coherent cover of native vegetation	• Scarring from earthworks for tracks and skidder sites • Vegetation clearance or damage from pests or grazing • Expansion of forestry • Encroachment of weeds (e.g. wilding pines) • Introduction of utility structures and buildings which increase sense of domestication	• Part of this area is in public ownership and managed as part of the Conservation Estate within Mount Richmond Forest Park which lessens the threat of inappropriate development
Drumduan / Horoirangi	**Biophysical** • Prominent landform to the north of Nelson with broad open ridges and bluffs • Part of a larger land system associated with coastal erosion and the formation of the Boulder Bank • Pockets of remnant native forest with significant conservation value **Sensory** • Legible domed shaped form expressive of volcanic processes • Coastal erosion associated with Mackay Bluff expressive of formation of larger land system associated with the Boulder Bank • Unbuilt rural character with farming activity on middle and upper slopes maintaining a relatively natural backdrop above settlement contained along its base • Striking isolated landform which forms north-east backdrop to Nelson and important gateway between coastal and inland areas of the region • Dramatic coastal cliffs define part of the edge of Tasman Bay / Te Tai-o-Aorere **Associative** • Important cultural and spiritual associations with the Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea • Views of Drumduan / Horoirangi important for Maori sea navigation • Kainga identified at Glenduan along Drumduan's north-west edge	**High**	• Impacts on biophysical values associated with steep upper slopes and coastal cliffs, • Impacts on remnant native vegetation and vulnerable plant communities • Impacts on perceived naturalness of upper slopes and skyline and coastline / land interfaces • Impacts on important cultural / spiritual values, heritage artefacts and their settings	• Scarring from earthworks for tracks or conversion to forestry • Vegetation clearance or damage from pests or grazing • Encroachment of weeds (e.g. wilding pines) • Urban expansion from settlements at Glenduan and rural lifestyle development adjoining Delaware Inlet • Introduction of utility structures on prominent sites • Subdivision and introduction of buildings in prominent locations on middle and upper slopes • Coastal erosion impacts and potential protection mechanisms	• Much of this area is in private ownership and there are several areas of remnant vegetation protected by QEII open space covenants which lessens the threat of inappropriate development

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Atawhai Hills	**Biophysical** • Steep primary backdrop and skyline to the north of Nelson • Mosaic of vegetation types with important remnant forest at Sharlands Creek **Sensory** • Weathered conical forms expressive of weathered formative volcanic processes • Undeveloped upper slopes and skyline forms a coherent natural backdrop to the north of Nelson • Some scattered rural lifestyle dwellings and light coloured dwellings, which often have high reflectivity, has reduced the naturalness and coherence of this area at its northern end **Associative** • Recreation access extends into southern area of the Atawhai Hills from the adjoining Malvern Hills	Moderate	• Impacts on biophysical values associated with steep upper slopes • Impacts on conservation associated with remnant native vegetation • Impacts on open and natural backdrop and undeveloped skyline observed from Nelson City, Atawhai and the coast	• Scarring from earthworks for tracks • Vegetation clearance or damage from pests or grazing • Expansion of forestry • Encroachment of weeds (e.g. wilding pines and gorse) • Introduction of prominent utility structures and buildings • Subdivision and introduction of buildings in prominent locations on the middle and upper slopes	• Most of this land is in private ownership and potentially under increased pressure for development given its proximity to Nelson
Grampians / Sharland Hill	**Biophysical** • Elevated hill forms forming primary backdrop to Nelson • Mosaic of pine plantation, scrub and pockets of remnant vegetation **Sensory** • Prominent conical forms expressive of weathered formative volcanic processes • Predominantly unbuilt 'green' character contrasting with highly built up urban areas at their base • Striking 'green backdrop' and skyline to urban development within Nelson **Associative** • Recognised view-shafts within the city centre such as Grampians seen along the axis of Trafalgar Street	**High**	• Impacts on biophysical conservation values associated with remnant native vegetation • Impacts on open green backdrop and undeveloped skyline observed from Nelson City, also on the ability to view this backdrop from the city.	• Vegetation clearance or damage from pests or grazing • Encroachment of weeds (e.g. wilding pines) • Scarring from earthworks for tracks and skidder sites • Subdivision and introduction of buildings in prominent locations along the upper slopes and skylines • Introduction of structures and utilities in prominent locations along the skyline	• Part of this area is public ownership which lessens the threat of inappropriate development • Privately owned areas are under increased pressure from development given its proximity to Nelson.

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Hira Forest	**Biophysical** • Crumpled sequence of uplifted hills contributing to Nelson's rural hinterland contained between Nelson's primary hill backdrop and Nelson's mountain ranges • Predominantly covered in plantation forest with important remnant beech forest at Whangamoa Saddle and other remnant areas within the forestry estate. **Sensory** • Legibility and coherence of natural landform largely reduced by exotic plantation forestry • Forestry and associated tracking and earthworks reduce sense of naturalness • Limited viewing opportunities contributing to the character of Nelson's landscapes **Associative** • Some recreation use associated with forestry tracks • Some potential cultural and spiritual values associated with tributaries to the Maitai River	Low	• Impacts on biophysical values associated with steep hill slopes and areas of remnant native vegetation • Impacts on amenity values associated with open space recreation opportunities	• Scarring from earthworks for tracks and skidder sites • Encroachment of weeds	• Mostly under ownership and management of forestry companies providing a consistency of land uses and ownership
Hira Hils	**Biophysical** • Part of a larger north sequence of steep uplifted hills extending between Nelson's rural hinterland and the coastal environment • Mosaic of vegetation types including remnant indigenous forest, scrub and exotic plantation forestry **Sensory** • Limited residential development and extensive vegetative cover retains a high degree of naturalness • Localised backdrop to rural lifestyle development established within Hira Basin • A mosaic of exotic plantation and indigenous forest has reduced the overall vividness and coherence of the landscape whilst retaining an elevated green backdrop **Associative** • Limited cultural and spiritual values have been identified during this stage of the assessment	Moderate	• Impacts on biophysical values associated with steeper middle and upper slopes and areas of remnant native vegetation • Impacts on sensory values associated with the unbuilt green backdrop character proving a natural backdrop and skyline to Hira Basin	• Scarring from earthworks for tracks, quarrying and skidder sites • Expansion of exotic forestry • Encroachment of weeds (e.g. Wilding pines and gorse) • Expansion of utility structures • Rural lifestyle subdivision and introduction of buildings in prominent locations	• Varied and mostly private ownership leads to a variety of possible land use and development outcomes.

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Whangamoa Hills	**Biophysical** • Part of a larger sequence of uplifted hills and transition between faulting and volcanics beyond the coastal edge • Dominant cover of high value indigenous forest with some exotic forestry and wilding pine extended onto northern coastal cliffs **Sensory** • Rugged coastal beaches and cliff faces retain a highly legible association with coastal erosion • A high level of naturalness with no obvious buildings or residential development • Steep coastal cliffs framed by indigenous vegetation forms a vivid and striking coastal edge particularly when viewed by boat • Dynamic coastal processes and marine birds and mammals characteristic along the coastal edge **Associative** • Recreation access to Hori Bay • Adjoining coastal area provides recognised cultural values	**High**	• Impacts on biophysical values associated with steep and rugged coastal landforms • Impacts on conservation values associated with remnant and regenerating native vegetation • Impact on sensory values associated with a largely unmodified and remote coastal character	• Scarring from earthworks for tracks and skidder sites • Expansion of exotic forestry • Vegetation clearance or damage from pests or grazing • Encroachment of weeds (e.g. Wilding pines) • Expansion of utility structures • Subdivision and introduction of buildings in prominent locations	• Part of this area is public ownership and managed as part of the Conservation Estate within Mount Richmond Forest Park which lessens the threat of inappropriate development • General lack of access and steep topography limits ability to subdivide and develop.
Whangamoa	**Biophysical** • Forms part of a larger up thrust hill sequence and valley system • An easily accessible late Quaternary fault scarp • Mixed indigenous forest and plantation forestry cover established throughout the character area **Sensory** • A legible valley system accommodating productive forestry throughout • The relatively unmodified character of the landform, limited valley floor rural development and the settlement and presence of waterways retains a high degree of naturalness • A mosaic of exotic plantation and indigenous forest has reduced the overall vividness and coherence of the landscape whilst retaining a green character experienced along the highway corridor **Associative** • Important food gathering areas and historic boundary between Iwi associated with the Whangamoa River	Moderate	• Impacts on biophysical values associated with steep rugged landforms and remnant and regenerating native vegetation • Impacts on sensory values associated with a coherent 'green' rural character and limited rural based development • Impacts on cultural and spiritual values associated with the Whangamoa River and food source	• Scarring from earthworks for tracks, quarrying and skidder sites • Introduction of utility structures or buildings in prominent locations • Vegetation clearance or damage from pests or grazing, particularly along the SH6 road corridor • Encroachment of weeds (e.g. Wilding pines) • Expansion of exotic forestry	• Part of this area is public ownership and managed as part of the Conservation Estate within Mount Richmond Forest Park which lessens the threat of inappropriate development

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Kokorua	**Biophysical** • Forms part of a larger up thrust hill sequence and valley system partially within the coastal environment • The Kokorua sand spit and Inlet contains remnant populations of a variety of regionally threatened plant species including the only known Tasman Bay / Te Tai-o-Aorere population of sand dune plant spinifex • Small but very important valley-floor forest and wetland remnants **Sensory** • Coastal processes associated with the estuary and river system remain highly legible • The estuary coastal edge retains a very high level of naturalness and remoteness that remains relatively undeveloped • The Whangamoa River accommodates a high level of naturalness with a sparsely settled rural character along the valley floor and backdrop of pine plantation and remnant vegetation **Associative** • A long association with Maori occupation is also recognised in this area with history of occupation dating back 1200 years • Important food gathering areas and historic boundary between Iwi associated with the Whangamoa River • Several archaeological sites surrounding the Whangamoa Inlet, especially on the sandspit	**High**	• Impacts on biophysical values associated with steeper hill slopes and remnant alluvial and coastal vegetation • Impacts on sensory values associated with isolated wilderness areas and unbuilt rural character • Impacts on associative values associated with cultural sites and artefacts and spiritual associations	• Scarring from earthworks for tracks, quarrying and skidder sites • Subdivision and/or building development • Vegetation clearance or damage from pests or grazing • Encroachment of weeds (e.g. Wilding pines)	• Most of this area is in private ownership which potentially increases the threat of inappropriate development
Maitai Valley	**Biophysical** • An accessible inland valley system following the Maitai River • Predominantly managed as open space and pasture with exotic amenity plantings **Sensory** • Open space maintain a strong association with the Maitai River • Coherent picturesque scenic qualities contributing an iconic and memorable inland valley landscape setting in close proximity to Nelson • Coherent configuration of open space continues recreation access along the Maitai River • Transient values associated with recreational use of the river and accompanying open space areas **Associative** • Highly valued recreational area associated with the Maitai River, open space and associated reserves including the golf course and motor camp • The Maitai River was historically a source of argillite, a highly valuable and useful rock used for toki (adzes) and working tools.	**High**	• Impacts on biophysical values associated with access to water • Impacts on sensory values associated with access and emersion within an inland picturesque valley • Impacts on opportunities to undertake recreational use of open space areas and the Maitai River • Impacts on cultural values associated with the historic Maori use of argillite and availability of a food source	• Scarring from earthworks for tracks extending into elevated areas • Vegetation clearance or damage from pests or grazing • Subdivision and development of buildings on the enclosing valley slopes and reducing areas of available open space	• Parts of the valley floor are retained in public ownership which has potential to lessen the threat of development

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Hira Basin	**Biophysical** • Contained basin landform following terraces along the margins of the Wakapuaka River • Scattered podocarps on the valley floor **Sensory** • Distinctive conical forms expressive of formative volcanics along the north-western edge of the basin • Rural based activity has reduced the legibility of natural processes throughout much of the character area • Roads, residential buildings, fences, access ways and auxiliary buildings reduce the overall level of naturalness whilst retaining a coherent rural character **Associative** • Recognised amenity values associated with a settled rural community	Moderate	• Impacts on biophysical values associated with expressive natural landforms • Impacts on remnant indigenous vegetation • Impacts on amenity values associated with a coherent settled rural character	• Scarring from earthworks for tracks extending into elevated areas • Vegetation clearance or damage from pests or grazing • Subdivision and development of buildings on the enclosing valley slopes • Introduction of prominent buildings unsympathetic to their rural surroundings • Fragmented development patterns and unconstrained urban sprawl across the basin floor	• Most of this land is in private ownership and potentially under increased pressure for development given its proximity to Nelson
Lud Valley	**Biophysical** • Contained inland valley system following the margins of the Lud and Teal Rivers • Predominately exotic amenity plantings with some scattered mature beech and kowhai **Sensory** • Strong settled rural character with occasional access ways, rural dwellings and amenity plantings reduces legibility and naturalness • Retains a coherent settled rural character **Associative** • Recognised amenity values associated with a settled rural community	Moderate	• Impacts on biophysical values associated with remnant indigenous vegetation • Impacts on amenity values associated with a coherent settled rural character	• Scarring from earthworks for tracks extending into elevated areas • Vegetation clearance or damage from pests or grazing • Subdivision and development of buildings on the enclosing valley slopes • Introduction of prominent buildings unsympathetic to their rural surroundings • Fragmented development patterns and unconstrained urban sprawl across the valley floors	• Most of this land is in private ownership and potentially under increased pressure for development given its proximity to Nelson

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Stoke Foothills	**Biophysical** • Sequence of enclosed settled valley floors and open rolling shoulder slopes • Limited pockets of remnant indigenous vegetation **Sensory** • Elevated open spurs retain part of a legible sequence of foothills extending below the Barnicoat Range • Low density rural character providing transition between urban area of Stoke and rural backdrop • Open character of elevated spurs retain a relatively natural backdrop and contrast to the developed areas of Stoke • Areas of rural character retained in areas of valley floor **Associative** • Recognised open backdrop to valley floor and plains settlement • Historic parkland vegetation retained at Ngawhatu Psychiatric Hospital • One of the first coal mines in New Zealand • Location of Nelson's landfill	Moderate	• Impacts on landform and remnant indigenous vegetation • Impacts on areas of rural character and mature exotic parkland species retained along valley floor • Impacts on an open rural character and areas of undeveloped skyline • Impacts on backdrop to existing developed areas	• Scarring from earthworks for tracks and building platforms • Vegetation clearance or damage from pests or grazing • Introduction of buildings and utility structures in prominent locations along upper slopes and the skyline • Introduction of prominent buildings unsympathetic to their rural surroundings	• Most of this land is in private ownership and is generally zoned for residential development reflecting is proximity to Nelson
Malvern Hills	**Biophysical** • Primary hill backdrop to the north of Nelson City • Mosaic of vegetation including areas of regenerating native vegetation and forest **Sensory** • Legible rolling summits and spur crests characteristic of weathered volcanic processes • The open rounded form of Botanical Hill forms an iconic feature visible and accessible from Nelson • Low density rural character primarily contained along lower slopes providing a coherent transition between urban areas and a more elevated open backdrop along the Atawhai Hills **Associative** • Botanical Hill 'Centre of New Zealand ' forms an important backdrop to Nelson City and a recreation area accessible from Nelson • Historic association with the first datum used for cartography New Zealand	**High**	• Impacts on landform and remnant indigenous vegetation • Fragmentation of elevated open space backdrop to Nelson • Urban sprawl along upper slopes and prominent ridgelines • Fragmentation of rural character forming transition from lower areas of urban character	• Scarring from earthworks for tracks and building platforms • Introduction of buildings in prominent locations along upper slopes and the skyline • Planting patterns reflecting an unnatural layout.	• Botanical Hill is in public ownership which lessens the threat of inappropriate development • Majority of the remainder is in private ownership including the prominent ridge visible from the City.

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Wakapuaka Foothills	**Biophysical** • Primary Hill backdrop to the east of Wakapuaka Flats • Mosaic of vegetation with some limited areas of regenerating native vegetation and forest **Sensory** • Residential development within the valleys and extending into elevated areas has reduced the associated level of naturalness and coherence • Low density rural character providing transition between urban areas and open and rural backdrop along the Atawhai Hills **Associative** • Part of the recognized hill backdrop along the northern approach into Nelson	Moderate	• Impacts on landform and remnant indigenous vegetation • Impacts on sensory values associated with undeveloped upper slopes and prominent ridgelines • Fragmentation of rural character by subdivision and residential development	• Scarring from earthworks for tracks extending into elevated areas • Vegetation clearance or damage from pests or grazing • Rural lifestyle sprawl onto upper slopes and ridgelines • Introduction of buildings and utility structures in prominent locations along upper slopes and skyline • Prominent buildings (in relation to form, scale or colour)	• Most of the land is in private ownership and potentially under increased pressure for development given its proximity to Nelson
Porthills Ridge	**Biophysical** • Enclosing landform that runs parallel with Nelson's coastal edge **Sensory** • Prominent western skyline from Nelson City, eastern skyline to Tahunanui and northern skyline to Stoke • Most of the northern extent of the Port Hills Ridge has been developed and reduces its legibility and associated natural values along the immediate hill backdrop • Areas of open space, retained to the south of the Port Hills contributes a local open backdrop separating Nelson from Stoke **Associative** • Recognised elevated ridge backdrop associated with settlement in Nelson • Important viewing points along the ridge top allow views of Nelson and Stoke in the context of the surrounding landscape	Low	• Impacts on a cohesive urban framework established along the ridgeline • Impacts on sensory values associated with an open space backdrop along the upper slopes and ridgeline in areas where residential development has yet to occur	• Introduction of prominent buildings and utilities which appear unsympathetic along the ridgeline context • Scarring from earthworks for tracks or building platforms • Unconstrained urban sprawl along the upper slopes and ridgeline • Prominent buildings (in relation to form, scale or colour)	• Most of this land is in private ownership and is under increased pressure for development given its proximity to Nelson

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Saxton Fields	**Biophysical** • Part of a larger alluvial fan along the toe of the Stoke Foothills • Open areas are primarily modified pasture with exotic tree belts and amenity planting **Sensory** • Legibility of underlying natural processes predominantly concealed by open space development and rural based activities • Existing rural land use and playing fields retain a coherent sense of open scape surrounded by urban development **Associative** • Open scape and playing fields retain an important recreation areas for the community	Low	• Impacts on sensory values providing a sense of open space separation between Stoke and Richmond • Reverse sensitivities of increasing urban development reducing the ongoing viability of adjoining farming operations	• Residential development extending into open space areas separating Richmond and Stoke	• Part of this area is in public ownership which lessens the threat of inappropriate development in these areas whilst the remainder is in private ownership.
Tahunanui	**Biophysical** • Modified coastal vegetation patterns with areas of Dune System and salt marsh retained along the Tahunanui Back Beach • The Tahunanui Back Beach provides an important habitat for the carabid ground beetle **Sensory** • Coastal processes remain legible along the coastal edge with shifting patterns of sand and coastal erosion along Tahunanui Back Beach • Large areas of coast line have been reinforced with rock rip-rap which reduces the overall level of naturalness • Tahunanui Beach forms an iconic area of Nelson's coastline • Areas of open space bordered by peripheral commercial and recreation buildings retain coherent coastal edge character • The constant change and movement on the coast - with tides, weather and lighting conditions - contributes a great deal of visual variety to the city's landscape context **Associative** • Very important recreation area commonly referred to as 'Nelson's beach' • Important heritage associations indicating early Maori settlement and associated cultural and spiritual values	**High**	• Impacts on biophysical values associated with sensitive dune systems and coastal habitats • Impacts on a coherent open space character and associated recreation value connected with Nelson's seaside identity	• Intensification of commercial and recreation use Coastal erosion impacts and potential protection mechanisms	• With the exception of the airport and golf course most of this area is in public ownership which lessens the threat of inappropriate development

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Wakapuaka Flats	**Biophysical** • Low lying reclaimed landform including drained paddocks in the coastal environment • Salt marsh vegetation protected by a DoC Reserve **Sensory** • Linear paddock boundaries reflect a modified drainage pattern that reduces the legibility of natural processes and associated natural values • The flat landscape retains a coherent open rural character along the northern gateway into Nelson **Associative** • Recognised recreation values along the Boulder Bank and on sand flats • Historic Maori settlement at the northern end of the Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea	Moderate	• Impacts on biophysical values associated with geomorphology of the Boulder Bank and retained areas of salt marsh • Impacts on an open rural character and coherent northern gateway into Nelson • Impacts on associative values associated with cultural sites and artefacts and spiritual associations	• Gravel / boulder extraction • Vegetation clearance or damage from pests or grazing • Urban intensification encroaching into the flat open landform • Introduction of prominent non-rural buildings • Changed land form interrupting open rural character (eg new hardfill areas as occurred previously).	• The most sensitive areas are retained in public ownership which lessens the threat of inappropriate development in these areas
Delaware (Wakapuaka)	**Biophysical** • A good example of a tombolo attaching an island to the mainland and an enclosed estuarine bay with sandspit at opposite end • Coastal cliffs include identified Geopreservation sites including a good exposure of the Median Tectonic Line boundary between two terrains and well exposed coastal sections through several intrusions along the coastal edge • Regionally rare plant communities along Delaware Spit and remnant vegetation on Bishop Peninsula **Sensory** • Interplay of tombolo, sandspits, inlet and coastal cliffs clearly reflect formative coastal processes • Delaware Inlet and its coastal margins together with farming activity remain relatively unmodified and retain a high level of naturalness • High experiential values contribute a vivid and dramatic character • Shifting tidal process together with various seabirds and marine mammals seen in this area form recognised transient values **Associative** • Cable Bay / Rotokura is a high use recreation area in close proximity to Nelson used for walking, surf casting, picnicking and bird watching • Very important Maori cultural and spiritual associations and archaeological sites forming a major centre of occupation • Whakapuake taiapure has been identified at Delaware Bay between Ataata Point and Whangamoa HeadImportant European heritage sites including NZ's first international telegraph cable connection	**Very High**	• Impacts on biophysical values associated with important geological features, indigenous vegetation and aquatic ecosystems • Impacts on sensory values associated with vivid and dramatic natural elements • Impacts on associative values associated with cultural sites and artefacts and spiritual associations	• Scarring from earthworks for tracking and introduction of building platforms • Vegetation clearance or damage from pests or grazing • Residential subdivisions and fragmented development patterns extending into sensitive open space areas • Introduction of prominent buildings within and adjoining existing rural lifestyle development • Coastal erosion impacts and potential protection mechanisms	• Much of this character area is in private ownership which may increase the threat of inappropriate development, particularly given its proximity to Nelson City

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Waimea Estuary	**Biophysical** • The eastern edge of the largest enclosed estuary in the South Island • Predominately degraded plant communities on account of the high levels of adjoining urban development • Threatened coastal plant species found on Saxton Island **Sensory** • Legible coastal processes within the estuary framed by a predominately urban hard edge • Adjoining development enclosing the estuary has reduced the overall sense of naturalness whilst retaining relatively higher levels of perceived naturalness on islands • Limited moorings and jetties disrupt an open an expansive seaside character • The constant change and movement on the coast - with tides, weather, lighting conditions - contributes a great deal of visual variety to the city's landscape context **Associative** • Important recreational area for boating with footpaths and jetties along the coastal edge • Waimea Estuary was rich in mahinga kai, rongoā and weaving and building materials	**High**	• Impacts on biophysical values associated with legible coastal features • Sensory impacts on a coherent seaside character and important transient values	• Measures to control effects of sea level rise and scarring from erosion • Intensification of boat moorings and jetties • Introduction of prominent utility structures • Greater intensity of recreational pursuits	• With the exception of Saxton Island, most of this character area is in public ownership which lessens their threat of inappropriate development

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Nelson Haven and the Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea	**Biophysical** • Best known Boulder Bank spit in New Zealand representing a landform of international importance • The active estuary with shifting channels is highly dynamic and the influence of the tide is particularly important for the ecosystem • Nelson Haven is considered of national importance as a major feeding area and roost for migratory waders and nationally threated bird species • Regionally rare moss and lichen communities are found on the Boulder Bank **Sensory** • Boulder Bank is highly expressive of its formative coastal processes • Built development limited to isolated light house and scattering of six historic baches retains a high level of naturalness • Iconic view of natural landform elements providing gateway features entering Port Nelson and protective horizontal feature along Nelson's seaward edge • The constant change and movement on the coast - with tides, weather and lighting conditions - contributes a great deal of visual variety to the city's landscape context • Various seabirds and marine mammals seen in this area contribute to transient values **Associative** • Of local importance for a variety of recreational activities, such as windsurfing, rowing and sailing • Important food source and transport connections for Maori • Source of hammer boulders transported throughout the area for quarrying pakohe. • Strong historic associations with Port Nelson and artefacts associated with coastal shipping including Nelson's light house • Rocks Road is one of the first areas where fossils were collected for scientific purposes in New Zealand	**Very High**	• Impacts on biophysical values associated with legible coastal processes • Impacts on sensory values associated with an open uncluttered horizon and coastal setting visible from adjoining residential areas • Impacts on important heritage artefacts and their settings and spiritual associations	• Measures to control effects of sea level rise and scarring from erosion • Gravel / boulder extraction • Intensification of boat moorings and jetties • Increased Port activities • Greater intensity of recreational pursuits • Additional structures, including utility structures, on the Boulder Bank and Haulashore Island	• The Boulder Bank and Haulashore Island are in public ownership which lessens the threat of inappropriate development

Landscape / Seascape Character Areas	Landscape values	Overall Landscape Value	Potential Sensitivities	Potential Threats	Development Considerations
Southern Tasman Bay / Te Tai-o-Aorere	**Biophysical** • Comparatively sheltered and enclosed waters of inner Tasman Bay / Te Tai-o-Aorere • Protected Horoirangi Marine Reserve **Sensory** • Highly legible coastal processes partially sheltered in the inner waters of Tasman Bay / Te Tai-o-Aorere • High levels of perceived naturalness • Area of modifications limited to Port Nelson beyond the Boulder Bank • High experiential values due to transient coastal processes and nature of marine mammals **Associative** • Many sea based recreational activities present (i.e. fishing, surfing, paddle boarding and boating) • Recognised cultural associations for Maori	**High**	• Impacts on biophysical values associated with coastal landforms and sensitive aquatic habitats • Impacts on sensory values associated with an open sheltered seascape encompassing distant views across Tasman Bay / Te Tai-o-Aorere and views from the coast towards Nelson's inland mountain spine	• Dredging and trawling • Aquaculture • Discharges to the coastal marine area	
Outer Eastern Tasman Bay / Te Tai-o-Aorere	**Biophysical** • Steep coastal cliffs, interspersed by spectacular rocky outcrops and small gravel or sandy beaches • Low diversity of microalgae dominated by flapjack seaweed • Sub-tidal reefs support a relative high diversity of fish and encrusting animals **Sensory** • Steep exposed coastal cliffs retain a highly legible coastal processes • Very high levels of perceived naturalness due to lack of modifications along the coastal edge • This stretch of coast has more of a 'wild' feel to it than any other part of the Nelson region • Very high transient values due to exposure and nature of marine mammals **Associative** • The coastline has provided an important source of food and transportation links to Maori • Historic maritime association with various shipwrecks including the Delaware in Delaware Bay	**Very High**	• Impacts on biophysical values associated with coastal landforms and sensitive aquatic habitats • Impacts on sensory values associated with a dramatic and wild open seascape	• Dredging and trawling • Aquaculture	

Section E: Landscape Management Options

Landscape management options reflect the set of tools which may be employed by Nelson City Council to manage landscape values.

From a landscape perspective, where development can be accommodated without compromising the key characteristics of the landscape and maintain and/or enhance important landscape values, this would generally be considered to be 'appropriate' development. Conversely, inappropriate development may generate significant adverse effects and detract from the landscape. The significance of any adverse landscape effects would generally be balanced against other positive social, economic or cultural benefits which may occur.

In order to inform potential land management options, a range of potential management tools covering the spectrum from regulatory to non-regulatory mechanisms can be developed.

Regulatory approaches

Regional Policy Statements, Regional Plans, Regional Coastal Plans and District Plans form the suite of regulatory instruments with the ability to manage potential landscape effects. The use of effective regulatory landscape approaches should be directly responsive to the particular landscape values, sensitivities and threats which apply to a particular area or feature.

As identified in Part A of this report, specific landscape policy is required to address section 6(b) of the RMA and Policy 15 of the NZCPS. This requires the identification and protection of outstanding natural features and landscapes from inappropriate subdivision, use and development. Within the coastal environment, a recent Supreme Court ruling has directed that the NZCPS must be given effect to by avoiding any adverse effects on Outstanding Landscapes in the Coastal Environment. In other natural features and landscapes, including outstanding natural landscapes and features outside the coastal environment, adverse effects must be avoided, remedied or mitigated.

In addition to areas of recognised landscape values, landscapes must also be managed in accordance with section 7(c) of the RMA which requires amenity values to be maintained and enhanced. The specific regulatory approaches which may be developed include formal Landscape Classification which defines Outstanding Natural Features and Landscapes in the District Plan. Other regulatory approaches include:

- Formal recognition of all landscape and seascape character areas;
- Identification of special landscape areas or zones; and
- Structure Plans.

The latter two approaches are acknowledged as currently being adopted in the NRMP.

Non-Regulatory approaches

Non-regulatory approaches are often the best means of protecting and/or maintaining and enhancing landscapes and support landowners in managing recognised landscape values. Approaches to landscape management, however must also take account of the potential sensitivities and threats to landscape values which may require more stringent regulator measures to ensure important landscape values are appropriately managed.

The range of non-regulatory approaches which may be employed include planning and budgeting for education programmes, land acquisition, incentive schemes, guidance material and community projects. Strategic documents linked to annual planning documents are also an effective way for councils to work towards landscape management objectives.

An understanding of regulatory and non-regulatory approaches to landscape management is set out together with an analysis of potential advantages and disadvantages in **Appendix 1**.

Glossary

Landscape – The cumulative expression of natural and cultural features, patterns and processes in a geographical area, including human perceptions and associations.

Seascape – An area of sea, coastline and land, whose character results from the actions and interactions of land with sea, by natural and / or human influences. This principally applies to coastal and marine areas seaward of Mean High Water Springs.

Landscape character – Refers to the distinctive combination of landscape attributes that distinguish any particular area of land and give an area its identity. It is determined by the inter-relationship of:

Landform – Combinations of slope and elevation that produce the shape and form of the land.

Land cover – Combinations of land use and vegetation that cover the land surface.

Land Use – Reflect cultural and social processes such as residential use, farming and transport and can also include spiritual and historical associations that give added meaning to places.

Landscape characterisation – The process of sorting the landscape into different types or areas using selected criteria but without attaching relative values to the different landscape types or areas.

Landscape / Seascape Character Types – These are distinct types of landscapes or seascapes that are relatively homogenous in character. They are generic in nature in that they may occur in different parts of the country, but where ever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and settlement pattern with associated perceptual and aesthetic attributes.

Landscape / Seascape Character Areas – These are single unique areas which form discrete geographical areas of a particular landscape or seascape type. Each has its own individual character and identity, even though it shares the same generic characteristics with other types.

Landscape evaluation – The process of attaching value (non-monetary) to a particular landscape, usually by the application of previously agreed criteria and including consultation.

Landscape classification – The process of defining and mapping 'significant' landscapes which require special protection and management because of their elevated values recognised under the Resource Management Act (e.g. Outstanding Natural Landscape, Outstanding Natural Feature and Visual Amenity Landscape).

Naturalness – A measure of the degree of human modification of a landscape/ seascape or ecosystem expressed in terms of:

Indigenous Naturalness – An understanding of naturalness based on the level of intactness of indigenous ecosystems

Landscape Naturalness – An understanding of naturalness based on the degree of visible human modification which is present in the landscape (i.e. the perception and appearance of naturalness rather than the more specific interpretation of indigenous).

Vividness – How striking or memorable an area of landscape is, including its role in the mental maps of a district or region.

Coherence – Where land cover and land use appear in harmony with the underlying landform and there are no significant discordant elements.

Transient Values – Encompass wild associations and describe the contribution which wildlife, climate and hydrological processes make to landscape.

Key Characteristics – Those combinations of elements which help give an area its distinct sense of place.

Landscape Value – derives the importance that people and communities including tangata whenua, attach to particular landscapes and landscape attributes.

Landscape Attributes – Comprise of biophysical, sensory and associated aspects of landscape through which landscape values can be defined:

Biophysical Aspects –natural science elements, including its geological, ecological and dynamic components which can be directly attributed to place.

Sensory / Aesthetic Aspects – aspects of landscape experienced through sensory qualities and involve judgmental and subjective interpretations of nature and beauty, as well as transient matters contributing to human perception.

Associative Aspects – aspects of landscape related to shared and recognised community values, or related cultural and historical associations.

Natural Character – is the term used to describe the natural elements of all coastal environments within the NZCPS. The degree or level of natural character within an environment depends on:

1. *the extent to which the natural elements, patterns and processes occur and;*

2. *the nature and extent of modification to the ecosystems and landscape/seascape.*

The degree of natural character is highest where there is least modification. The effect of different types of modification upon natural character varies with context and may be perceived differently by different parts of the community

Rural Character – Rural landscapes are, by their nature, strongly influenced by the type of rural activity and the intensity of associated settlement. Natural elements generally remain strongly evident but are overlaid by patterns and processes of human activity. Natural systems operate but, in places, are manipulated to enhance productivity. Human induced patterns and processes are related predominately to productive land uses such as agriculture, horticulture and forestry, typically including paddocks, shelter belts, woodlots and forest blocks, cropping regimes and settlement. The patterns of human activity are generally large scale (by comparison with urban areas), reflected in generally low-density settlement, few structures and often a sense of spaciousness.

Coastal Environment – An environment in which the coast is a significant element taking account of an assessment of Policy 1 NZCPS 2010 and includes:

a) The coastal marine area;

b) Islands within the coastal marine area;

c) Areas where coastal processes, influences or qualities are significant, including coastal lakes, lagoons, tidal estuaries, salt marshes, coastal wetlands, and the margins of these; (Study Team emphasis)

d) Areas at risk from coastal hazards;

e) Coastal vegetation and the habitat of indigenous coastal species including migratory birds;

f) Elements and features that contribute to the natural character, landscape, visual qualities or amenity values;

g) Items of cultural and historic heritage in the coastal marine area or on the coast;

h) Inter-related coastal marine and terrestrial systems, including the intertidal zone; and

i) Physical resources and built facilities, including infrastructure, that have modified the coastal environment

Outstanding Natural Landscape – an area of landscape which is 'conspicuous, eminent, especially because of excellence' and 'remarkable in' the context of Nelson's landscapes.

Bibliography

Boffa Miskell Ltd. (2005). Nelson landscape study: Identification of outstanding natural features & landscapes and other sensitive areas for Nelson City Council (Report No. W04151). Prepared by Boffa Miskell for Nelson City Council.

Boffa Miskell (2014) Nelson Landscape Study: Landscape Character Assessment. Prepared by Boffa Miskell for Nelson City Council.

Boffa Miskell (2016) Nelson Landscape Study: Visual Amenity Landscape Evaluation. Prepared by Boffa Miskell for Nelson City Council.

Boffa Miskell (2015) Nelson Coastal Study: Natural Character of the Nelson Coastal Environment. Prepared by Boffa Miskell for Nelson City Council.

Cawthron Institute (2016) Advice for NCC Whakamahere Whakatu Nelson Plan: Coastal Indigenous Biodiversity. Report No. 2493.

Chittenden, E. T., Hodgson, L., & Dodson, K. J. (1966). Soils and agriculture of Waimea County, New Zealand (Soil Bureau Bulletin No. 30). Wellington: Department of Scientific and Industrial Research.

Courtney, S. P., Bradshaw, D. H., Moore, S. H., & Atkinson, M. A. (2003). Living heritage: Growing native plants in Nelson. Department of Conservation Nelson/Marlborough Conservancy and Nelson City Council.

Davidson, R. J., & Preece, J. R. (1994). Internationally and nationally important coastal areas from Waimea Inlet to Cape Soucis, Nelson, New Zealand: Recommendations for protection. Nelson: Department of Conservation Nelson/Marlborough Conservancy.

Department of Conservation. (2006). Horoirangi Marine Reserve. Nelson / Marlborough Conservancy.

Hayward, B. W., Kenny, J. A., & Johnston, M. R. (1999). Inventory and Maps of important geological sites and landforms in the Nelson and Marlborough Regions, including Kaikoura District.

Johnston, M.R. (1979) Geology of the Nelson Urban Area. New Zealand Geological Survey.

Johnston, M.R. (1987). High hopes: The history of the Nelson mineral belt and New Zealand's first railway. Nelson: Nikau Press.

Kaplan , S. (1979) Perception and Landscape: Conception and Misconception Proceedings of Our National Landscape Conference, US For. Serv. Gen. Tech. Rep. PSW-35 (1979), pp. 241–248.

Lauder, W.R. (1964) The geology of Pepin Island and part of the adjacent mainland, New Zealand Journal of Geology and Geophysics, 7:1, 205-241

Lynn, I. H. (2013). Land types of Nelson City. Lincoln: Landcare Research.

Molloy, L. (1988) Soils in the New Zealand Landscape: The Living Mantle. Mallinson Rendell Publishers Ltd.

Molloy, L., & Smith, R. (2002). Landforms: The Shaping of New Zealand. Nelson, New Zealand: Craig Potton Publishing.

Natural England. (2011). Landscape Character Assessment Guidance for England, Scotland and Wales.

Natural England. (2012). An approach to seascape character assessment.

Nelson City Council. (2009). Conservation and Landscape Reserves Management Plan. Nelson City Council.

Nelson City Council, Tasman District Council, Marlborough District Council (2014) Te Tau Ihu: Statutory Acknowledgements.

NZILA. (2010). Best Practice Note: Landscape Assessment and Sustainable Management 10.1.

New Zealand Historic Places Trust (2013), Registration Report for a Historic Place: Nelson Boulder Bank Historic Area, Nelson (Register no. 7821).

Warren, K. J. (2009). Rolling stones: Nelson's Boulder Bank: Its place in our history and hearts. Nelson: Nikau Press.

Appendices

Appendix 1: Advantages and Disadvantages of Landscape Management Approaches

Generic Instrument	Associated Method / Option	Description	Advantages	Disadvantages
Regulatory	Landscape Classification and formal recognition of Outstanding Natural Landscapes and Features / Visual Amenity Landscapes	Under this approach areas of important landscape are classified and grouped according to identified landscape values (e.g. outstanding natural landscapes, visual amenity landscapes). The classification and mapping of these landscapes is then supported by a suite of objectives, policies, rules and assessment criteria which align with the values and sensitivities of landscape categories defined.	• Once adopted, areas of recognized landscape values are clearly defined and increase certainty for land owners and Plan users • Efficiency in ensuring relevant policy is focused on areas with recognised higher landscape values	• The process of determining and agreeing high landscape values and associated sensitivities and threats is potentially time consuming where conflicting values occur • This approach alone does not address areas of landscape with lower landscape values which often have increased vulnerability to change
	Formal recognition of Landscape / Seascape Character Areas in statutory plans	Under this approach all landscape character areas which make up the region are mapped within the District Plan or referred to as a matter to be considered in relevant landscape policy. Such landscape character areas are supported by a suite of objectives, policies, rules and assessment criteria which align with the key characteristics of identified landscapes.	• Once adopted, landscape character area boundaries would form a clear organizing structure within District Plans through which potential landscape effects can be identified and managed • The mapping of landscape character areas and definition of key characteristics validated by communities would form an objective framework	• Landscape character assessment may be seen by some landowners as limiting or controlling development and the process of agreeing often conflicting landscape values, sensitivities and threats across all landscape character areas is potentially time consuming where there are conflicting values

Generic Instrument	Associated Method / Option	Description	Advantages	Disadvantages
			through which landscape effects can be assessed	• Landscape character area boundaries may no longer be recognized as 'transitions' when mapped with more formal planning lines defined in a district plan. • It may not be efficient to use regulatory measures to manage potential effects across all landscape character areas
	Identification of special areas or zones	This approach is essentially a zoning technique whereby specific areas are identified based on their sensitivities to and ability to absorb change and potentially under threat from particular forms of development (e.g. landscape overlays, ridgeline or Viewshaft Protection and green belt). This could take account of the findings of the landscape character area and develop planning zones according to specific landscape sensitivity.	• Landscape management tools are focused on areas with greater sensitivity and threats to change. • Can form a clear organizing structure within the Plan • Can operate as a subset, or inform, the landscape classification by value option above.	• Accurate mapping and appropriate statutory planning provisions to manage the effects of activities can potentially be time consuming where there are conflicting landscape values • Effectiveness may be compromised if associated planning provisions are overly generous • Does not manage, or identify, areas of outstanding value where these are not under threat, or have a high ability to absorb change.

Generic Instrument	Associated Method / Option	Description	Advantages	Disadvantages
	Structure Plans	Structure plans are high level plans that illustrate the spatial arrangement of land use types in a defined area. The structure plan process can be used to identify associated infrastructure including roads and schools and existing landscape features to be retained.	• Ability to co-ordinate land management techniques in areas with greater sensitivity	• The process of determining and agreeing appropriate development areas is potentially time consuming, particularly where conflicting values occur • As a standalone method does not address areas without high development pressures.
Non-Regulatory	Recognition of Landscape Character Assessment through education	Under this approach, landscape character assessment can be used as an education tool used to understand the key characteristics of landscape character areas and guide appropriate landscape management and change	• Increased landowner awareness through engagement with landscape values, sensitivities and threats • The mapping and defining of landscape character areas can be validated by communities to form an objective framework through which landscape effects can be assessed • The process of landscape character assessment can be updated and undertaken at a more detailed scale independent of the formal District Plan process • Can offer support to protection policies given to areas with higher landscape value identified	• Voluntary with no statutory obligation • Cost associated with preparing, publishing and distributing material • Potential to have limited effectiveness if solely relied upon without supporting statutory rules.

Generic Instrument	Associated Method / Option	Description	Advantages	Disadvantages
			through a regulatory approach • The process of determining and agreeing often conflicting landscape values, sensitivities and threats across all landscape character areas is potentially less time consuming where this is not adopted as formal policy	
	Land acquisition	Purchasing particular significant landscapes and natural features with recognised high landscape values as they become available.	• Greater certainty with appropriate landscape outcomes • Can provide a useful supplement to targeted regulation and/or other incentives	• Cost implications – including initial cost of purchase and ongoing responsibility for management costs
	Incentives	Incentives may take the form of financial encouragement or a grant to a landowner to protect and / or manage a block of land in a certain way. Alternatively, incentives can take the form of public recognition, or an award, for a landowner who agrees to voluntarily comply with a desired land management activity to help a strategy be realised.	• Landscapes with increased values or sensitivities can be maintained or improved and potentially form an interim measure until permanent protection can be arranged • Can provide a useful supplement to targeted regulation	• Costs may vary according to circumstances • Land with high landscape values is not legally protected and may be subject to increased pressure to change where sold • Could be viewed as offering preferential treatment to a particular category of land owner
	Landscape management strategy for key landscape sensitivities	This approach can be used to focus on areas with higher landscape sensitivity and	• Ability to co-ordinate land management techniques in	• Voluntary with no statutory obligation

Generic Instrument	Associated Method / Option	Description	Advantages	Disadvantages
		develop coherent guidance to manage change in these areas.	areas with greater sensitivity • Encourages better informed decisions regarding land management options • Efficient means of raising community awareness of issues • Can provide a useful supplement to targeted regulation	• Limited effectiveness if solely relied on
	Landscape and building appearance guidelines	Guidelines are written forms of guidance to inform how to meet or achieve certain standards or outcomes. They can supplement regulatory controls, or be standalone instruments to educate and inform people without coercion.	• Less coercive than regulation • Encourages better informed decisions regarding land management options	• Voluntary with no statutory obligation • Cost associated with preparing, publishing and distributing material • Reliant on Information being well promoted and regularly updated • Limited effectiveness if solely relied on
	Community Planning	Under this approach communities are engaged to identify their values and become involved in developing a plan which helps shape their environments.	• Empowers communities to identify their landscape values and direction for change • Provides a powerful tool which can be used to direct and facilitate appropriate landscape outcomes • Local people can bring additional resources	• Voluntary with no statutory obligation • Likely to require a range of specialist skills to be effective

Appendix 2: Summary of Potential Landscape Values identified across each Landscape Character Area

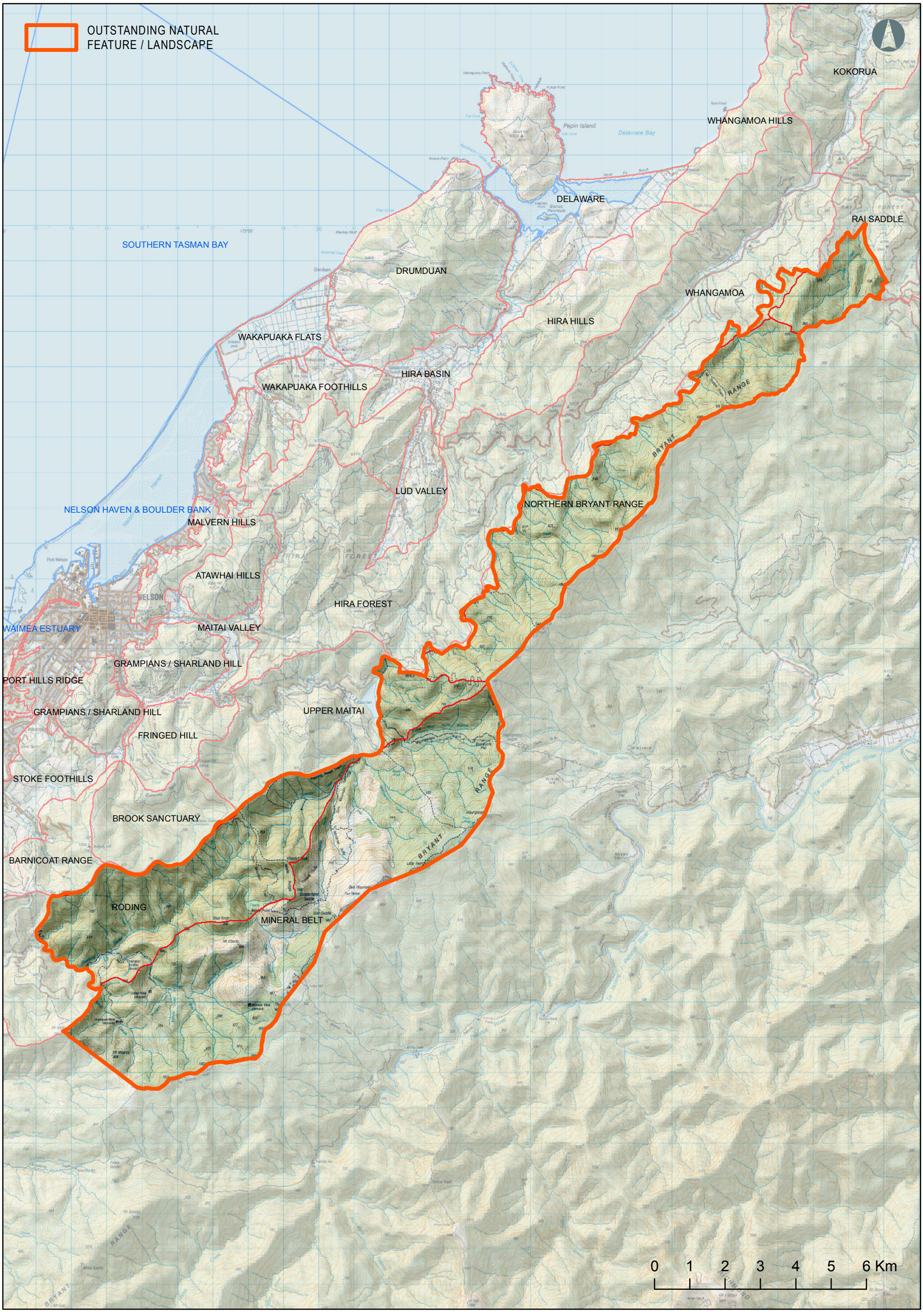
LANDSCAPE / SEASCAPE CHARACTER AREA	Landscape Values										Overall Landscape Value[2]
	Biophysical Aspects		Sensory and Aesthetic Aspects					Associative Aspects			
	Landform component Includes topography and / or geology which displays particular representativeness or rarity within the region.	**Land cover component** Native vegetation communities, wildlife or ecosystems which display particular representativeness or rarity in the region.	**Legibility or expressiveness** How obviously the feature or landscape demonstrates its formative processes	**Naturalness** The perception of the predominance of nature in the landscape.	**Vividness** How striking the landscape is, including the potential to be symbolic of an area due to recognisable scenic associations and memorable qualities	**Coherence** The patterns of land cover and land use are largely in harmony with the underlying landform of the area and there with no significant discordant elements	**Transient values** Including presence of wildlife or other values at certain times of the day or year	**Recognised Values** Whether the values are shared and recognized by the local and wider community for its contribution to local identity	**Tangata Whenua Values** Cultural and spiritual values for tangata whenua	**Historic and heritage associations** Knowledge of historic events that occurred in and around the landscape influences and adds to the value held by the community	
Mineral Belt	**VH**	**VH**	**VH**	**VH**	**VH**	**VH**	**H**	**VH**	**VH**	**VH**	**VH**
Northern Bryant Range	**H**	**VH**	**H**	**VH**	**VH**	**VH**	**VH**	**H**	L	L	**VH**
Rai Saddle	M	M	M	**H**	M	M	M	M	M	L	M
Fringed Hill	M	L	**H**	M	**H**	M	L	M	L	**H**	M
Brook Sanctuary	M	**H**	M	**H**	**H**	**H**	**VH**	**H**	M	**H**	**H**
Barnicoat Range	**H**	M	M	M	**H**	M	M	M	L	L	**H**
Upper Maitai	**H**	M	M	**H**	**H**	**H**	M	**H**	**VH**	M	**H**
Roding	**H**	**VH**	**H**	**VH**	**H**	**VH**	**VH**	**H**	M	**VH**	**VH**
Cape Soucis	**VH**	**VH**	**VH**	**VH**	**VH**	**H**	**VH**	M	M	M	**VH**
Drumduan / Horoirangi	**VH**	M	**H**	**H**	**H**	M	M	**VH**	**H**	**H**	**H**
Atawhai Hills	**H**	M	M	M	**H**	M	M	M	L	L	M
Grampians / Sharland Hill	**H**	M	**H**	**H**	**H**	M	M	**H**	M	M	**H**
Hira Forest	M	L	M	L	L	M	L	M	L	L	L
Hira Hills	M	M	M	**H**	M	M	M	M	L	L	M
Whangamoa Hills	M	**VH**	**H**	**VH**	**H**	**H**	**H**	M	M	L	**H**
Whangamoa	M	M	M	**H**	M	M	M	M	**VH**	L	M
Kokorua	M	**H**	**H**	**H**	**H**	**H**	**H**	**H**	**VH**	**VH**	**H**
Maitai Valley	M	L	M	**H**	**H**	**H**	**H**	**VH**	**VH**	**H**	**H**
Hira Basin	M	M	M	M	L	M	L	M	L	M	M
Lud Valley	M	M	M	M	L	M	L	L	L	L	M
Stoke Foothills	L	M	M	M	M	**H**	L	M	L	L	M
Malvern Hills	**H**	M	**H**	M	**H**	**H**	M	**H**	M	**H**	**H**
Wakapuaka Foothills	M	L	M	M	L	M	L	L	L	L	M
Porthills Ridge	M	VL	L	VL	M	M	L	M	L	M	L
Saxton Fields	L	VL	L	L	L	M	L	M	L	L	L
Tahunanui	M	M	**H**	M	**H**	M	**H**	**VH**	**VH**	M	**H**
Wakapuaka Flats	M	M	M	M	L	M	L	M	**H**	M	M
Delaware	**VH**	**H**	**VH**	**VH**	**VH**	**VH**	**VH**	**VH**	**VH**	**VH**	**VH**
Waimea Inlet	**H**	M	M	M	M	H	**H**	**H**	**H**	**H**	**H**
Nelson Haven and the Boulder Bank / Te Taero a Kereopa – Te Tāhuna a Tama-i-ea	**H**	**H**	**VH**	**H**	**VH**	**H**	**VH**	**VH**	**VH**	**VH**	**VH**
Southern Tasman Bay / Te Tai-o-Aorere	**H**	**H**	**H**	**H**	**H**	**H**	**VH**	**VH**	**H**	**H**	**H**
Outer Eastern Tasman Bay / Te Tai-o-Aorere	**H**	**H**	**VH**	**VH**	**VH**	**VH**	**VH**	**H**	**H**	M	**VH**

Very Low (VL), Low (L) Medium (M) **High (H), Very High (VH)**

[2] The 'Overall Landscape Value' represents a technical professional judgement and broadly reflects an averaging of the judgements of values across identified landscape character areas.

Figures

File Ref: W13005_ONLs_A3mb.mxd



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NELSON LANDSCAPE STUDY - FIGURE 1

THE BRYANT RANGE & MINERAL BELT

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Project Manager: Rhys Girvan

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NELSON LANDSCAPE STUDY - FIGURE 2

HAULASHORE ISLAND & ARROW ROCK

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OUTSTANDING NATURAL FEATURE / LANDSCAPE

EASTERN OUTER TASMAN BAY

SOUTHERN TASMAN BAY

NELSON HAVEN & BOULDER BANK

WAIMEA ESTUARY

Tai-o-Aorere

DELAWARE

DRUMDUAN

WAKAPUAKA FLATS

WAKAPUAKA FOOTHILLS

HIRA HILLS

HIRA BASIN

WHANGAMOA

LUD VALLEY

MALVERN HILLS

ATAWHAI HILLS

NORTHERN BRYANT RANGE

HIRA FOREST

MAITAI VALLEY

GRAMPIANS / SHARLAND HILL

PORT HILLS RIDGE

TAHUNANUI

GRAMPIANS / SHARLAND HILL

UPPER MAITAI

FRINGED HILL

MINERAL BELT

STOKE FOOTHILLS

BARNICOAT RANGE

BROOK SANCTUARY

RODING

SAXTON FIELDS

0 1 2 3 4 Km

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NELSON LANDSCAPE STUDY - FIGURE 3

BOULDER BANK & MACKAY BLUFF

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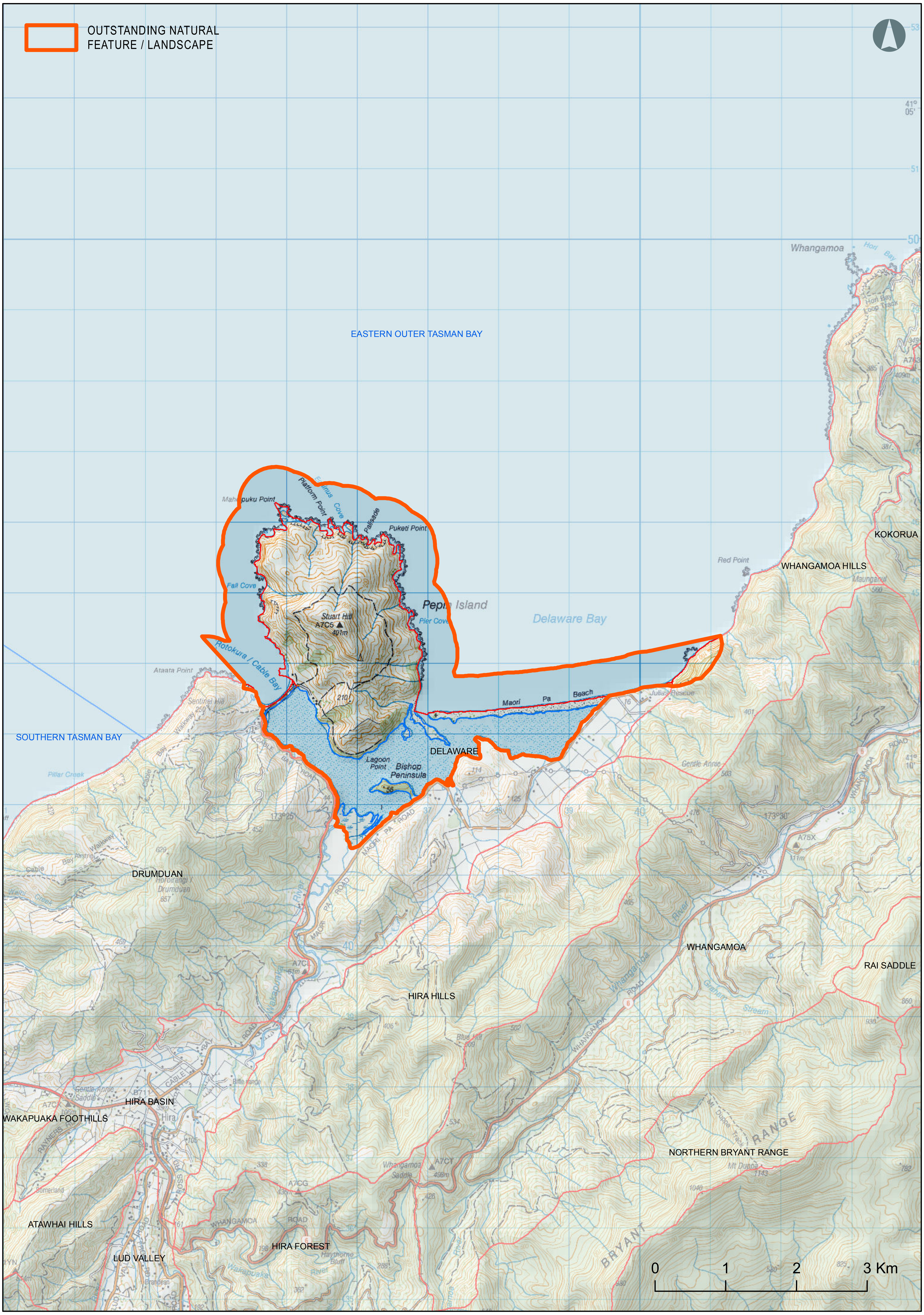
OUTSTANDING NATURAL
FEATURE / LANDSCAPE
EASTERN OUTER TASMAN BAY
SOUTHERN TASMAN BAY
Pepin Island
Delaware Bay
Whangamoa
Hori Bay
Mahoepuku Point
Platform Point
Palisade
Puketi Point
Fall Cove
Stuart Hill
A7C5
401m
Pier Cove
Rotokura / Cable Bay
Ataata Point
Sentinel Hill
Maori Pa Beach
Julias Rescue
Red Point
DELAWARE
Lagoon Point
Bishop Peninsula
KOKORUA
WHANGAMOA HILLS
Maungatapu
DRUMDUAN
HIRA HILLS
WHANGAMOA
RAI SADDLE
HIRA BASIN
WAKAPUAKA FOOTHILLS
NORTHERN BRYANT RANGE
ATAWHAI HILLS
LUD VALLEY
HIRA FOREST
Gentle Annie
Mt Duppa
BRYANT RANGE
0
1
2
3 Km

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NELSON LANDSCAPE STUDY - FIGURE 4

PEPIN ISLAND & DELAWARE INLET

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OUTSTANDING NATURAL FEATURE / LANDSCAPE

EASTERN OUTER TASMAN BAY

CAPE SOUCIS

KOKORUA

WHANGAMOA HILLS

RAI SADDLE

DELAWARE

WHANGAMOA

HIRA HILLS

0 1 2 3 Km

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NELSON LANDSCAPE STUDY - FIGURE 5

CAPE SOUCIS & WHANGAMOA INLET

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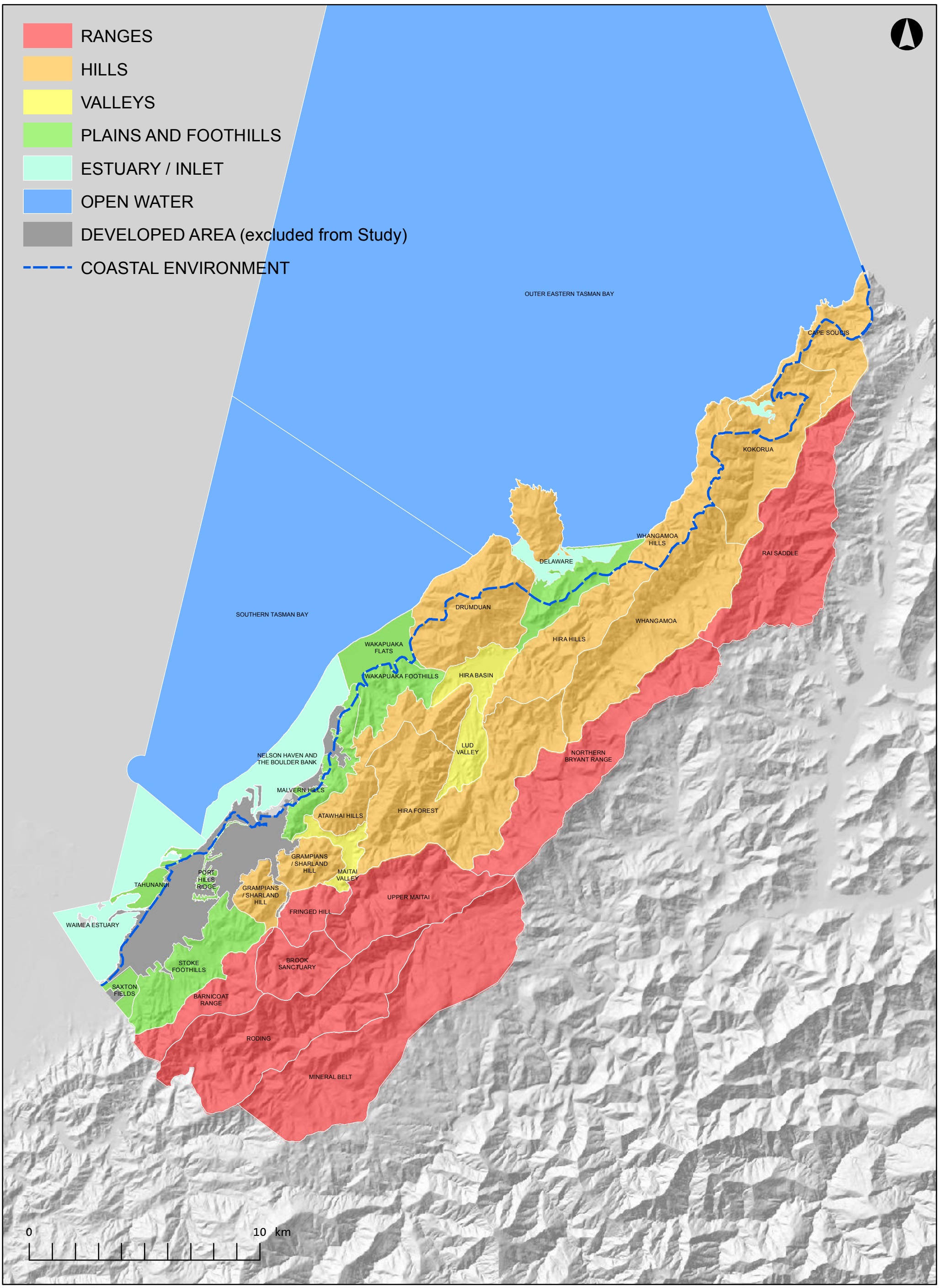

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NELSON LANDSCAPE STUDY - FIGURE 6

LANDSCAPE CHARACTER AREAS & TYPES

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