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## WEST COAST LANDSCAPE & NATURAL CHARACTER STUDY 2012 & 2013

### EXPLANATION OF ASSESSMENT METHODOLOGIES

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# 1. Landscape & Natural Character Assessment

## Introduction

This report sets out to explain the rationale behind the assessment employed to identify Outstanding Natural Landscapes, together with areas of High and Outstanding Natural Character throughout the West Coast Region (Buller, Grey and Westland Districts) in 2012 and 2013 by Brown NZ Ltd. That study adopted an approach that was considered to be consistent with relevant case law at that time from the Environment Court, guidance from the New Zealand Institute of Landscape Architects and past studies undertaken in different parts of New Zealand.

To place the study in an historical context, it followed a 2011 study of the Buller District alone that had been requested by the Environment Court in response to Meridian Energy Limited's proposed development of a hydro-electric power scheme on the Mokihinui River, west of Kahurangi National Park. The Environment Court requested that Meridian undertake an evaluation of the landscape values of the Mokihinui River in the context of the wider Buller District so as to determine whether or not the proposed scheme would adversely affect an Outstanding Natural Landscape (ONL) or Landscapes. That study was undertaken in early 2011 and identified a series of Outstanding Natural Landscapes across the Buller District, including an ONL that captured most of the Mokihinui River corridor.

Subsequently, the Environment Court cast a critical lens over the Buller Study again in late 2012 in the course of addressing appeals over the Escarpment Mine Proposal on the Denniston Plateau. The Court reviewed the ONLs identified around the Plateau in the course of its deliberations and agreed with the Brown NZ study of 2011 that the Denniston Plateau was not an ONL – despite displaying a range of other values. Consequently, the Court tacitly endorsed the findings of the Buller Study as they pertained to the area around the Denniston Plateau.

In the meantime, Brown NZ Ltd was engaged by the Joint Councils to undertake a study aimed at identifying ONLs across the West Coast Region, together with areas of High and Outstanding Natural Character – also initially across the entire Region. Subsequently, Brown NZ was instructed to limit the scope of the Natural Character assessment to just the Region's coastlines, and to remove that part of the initial assessment also addressing freshwater environments and their margins (Lakes, rivers, wetlands, etc). A number of consents for marine farming and other 'coastal' activities were also identified within some of the areas of Outstanding Natural Character identified in 2012 and 2013, and these were subsequently 'downgraded' to areas of High Natural Character on the basis of the environmental changes associated with the consents already granted.

As a result, this report is divided into three sections, addressing:

- The assessment method used to identify the Region's Outstanding Natural Landscapes (ONLs);
- The assessment method used to identify the Region's areas of High and Outstanding Natural Character; and
- The reasons for changes and effective downgrading of some areas originally identified as having Outstanding Natural Character.

## 2. Landscape Assessment Background



In addition to the past involvement of both Stephen Brown and Brown NZ Ltd with a wide range of landscape studies across New Zealand (**Annexure A**), three key considerations ‘drove’ the Landscape Assessment undertaken in 2012 and 2013:

- Section 6(b) of the Resource Management Act making, *“the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development,”* a Matter of National Importance;
- Accepted definitions of ‘Landscape’, including those found in the NZ Institute of Landscape Architects’ Charter;
- Recent case law, and related interpretation of landscape values and effects, from the NZ Environment Court; and
- The NZILA’s then recently *Best Practice Note: Landscape Assessment And Sustainable Management 10.1*.

In particular, these had a bearing on the overall approach adopted for the West Coast Study, together with the criteria employed to evaluate different landscapes and the thresholds employed to identify *“Outstanding Natural”* Landscapes.

### 2.2 What is ‘Landscape’?

The NZ Institute of Landscape Architects’ NZILA’s Charter (2010), at p.4, describes ‘Landscape’ as being, *“the cumulative expression of natural and cultural elements, patterns and processes in a geographical area.”* Moreover, the Charter’s Preamble offers the following, slightly more detailed, description of landscapes – as follows:

*“Landscapes are the result of unique combinations of biophysical, cultural and social processes, evolving over time and interwoven with memory, perception and tradition. They include land, water systems and marine areas, and play a vital role in human nurture, fulfilment and in shaping individual and collective identity. Landscapes range from the outstanding and the memorable, to the familiar and commonplace ....”*

In both analysing, and differentiating between, the multitude of landscapes found throughout the West Coast Region, it is therefore important to adopt an approach that addresses both the biophysical qualities of different environments and human perception of them. Both dimensions need to be considered when distinguishing particular landscapes from other landscapes and evaluating their specific qualities.

## **2.2 Environment Court Case Law**

This approach was consistent with the relevant decisions of the Environment Court up to, and including, 2012. In particular, a series of cases and decisions involving the Wakatipu Environmental Society and Pigeon Bay Aquaculture Limited were crucial to refining the criteria employed in the West Coast Landscape Study, and their subsequent application:

### **2.2.1 ‘Landscape’ & The Criteria Used to Assess Landscape Values**

In 2012 it was generally accepted that the Modified Pigeon Bay / WESI criteria established a sound basis for the identification of outstanding natural landscapes. More specifically, key findings of the WESI Decision<sup>1</sup>, as summarised by the Environmental Defence Society in 2005, included the following:

- (i) *A précis definition of ‘landscape’ cannot be given. However a working definition includes the following elements:*
  - *Landscape is a subset of the environment. Landscape involves both natural and physical resources and various factors relating to the viewers and their perception of the resources. Landscape is a link between individual resources and the environment (as defined in the RMA) as a whole. It considers a group of natural and physical resources together. It also emphasises that attitudes to those resources are affected by social, economic, aesthetic and cultural conditions.*
  
- (ii) *Any criteria for assessing landscape should include consideration of the following factors:*
  - *The natural science factors: - the geological, topographical, ecological and dynamic components of landscape*

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<sup>1</sup> *Wakatipu Environmental Society Incorporated and others v Queenstown- Lakes District Council C180/1999, commonly referred to as the ‘WESI Decision’*

- *Its aesthetic values including memorability and naturalness*
- *Its expressiveness (legibility) how obviously the landscape demonstrates the formative processes leading to it*
- *Transient values: occasional presence of wildlife, or its values at certain times of the day or of the year*
- *Whether values are shared or recognised*
- *Its value to tangata whenua and*
- *Its historical association.*

Also of direct relevance to the identification of ONFLs, Policy 15 (1) of the **NZ Coastal Policy Statement** (2010) also required Territorial local / regional authorities to “*To protect the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development*” by:

- (c) *identifying and assessing the natural features and natural landscapes of the coastal environment of the region or district, at minimum by land typing, soil characterisation and landscape characterisation and having regard to:*
  - (i) *natural science factors, including geological, topographical, ecological and dynamic components;*
  - (ii) *the presence of water including in 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 recognised;*
  - (viii) *cultural and spiritual values for tangata whenua, identified by working, as far as practicable, in accordance with tikanga Māori; including their expression as cultural landscapes and features;*
  - (ix) *historical and heritage associations; and*
  - (x) *wild or scenic values;*

This policy clearly builds on the platform established by the *Modified Pigeon Bay* criteria. However, in sub-section (viii) it appears to contradict the Environment Court’s separation of natural ‘cultural’ landscapes that are to be addressed under section 6(b) of the Act and those

modified 'cultural' landscapes that might be more appropriately addressed under sections 6(e) and (f), as already discussed.

### 2.2.2 When Is a Landscape 'Sufficiently Natural' To Qualify As an ONL?

In addressing the issue of 'sufficient naturalness' for any landscape to qualify as a potential ONL, the Court again made the following points in the *Pigeon Bay Aquaculture Ltd v Canterbury Regional Council* decision (C32/99):

(iv) *The criteria for "naturalness" under Section 6(b), RMA includes:*

- *the physical landform and relief;*
- *the landscape being uncluttered by structures, and/or obvious human influence;*
- *the presence of water (lakes, rivers, sea)*
- *the vegetation (especially native vegetation) and other ecological patterns;*

*The absence or compromised presence of one of these criteria does not mean that the landscape is not natural just that it is less natural. There is a spectrum of naturalness. The meaning of "natural" has further been ruled on in decisions Harrison v Tasman District Council, W042/93; Weatherwell-Johnson v Tasman District Council, W181/96; Browning v Marlborough District Council, W020/97.*

The following discussion, taken from the transcript of the Port Gore Marine farm hearing in Blenheim (*Sanford Ltd v Marchant, Friends of Nelson Haven and Tasman Bay Inc and Marlborough DC*) reinforces the idea that naturalness is central to the identification of ONLs under section 6(b) of the Act. In line with later comments by Judge Jackson in that same case, they suggest that landscape assessments needs to first determine if a landscape is sufficiently 'natural' to qualify as an ONL (though, not necessarily pristine), before determining if it is outstanding:

*MR BROWN: I have done that, but I have ..... also included an area with dash lines which relates to semi-natural landscapes. That is quite a broad category or categorisation. I have shown a solid line where that approximate division lies, but I have also shown quite a broad area of semi-natural.*

*HIS HONOUR: That has implications for categorisation of outstanding natural landscapes because I assume you would say that you cannot have an understanding, well you may be able to have an outstanding semi-natural landscape, but it is not an outstanding landscape for the purposes of section 6B.*

Based on these findings and discussion, it could be inferred that a landscape has to either wholly or largely / predominantly natural to qualify as an ONL, taking into account both the biophysical qualities of that landscape and human perception of it.

### 2.2.3 When Is a Landscape ‘Outstanding’?

Again, the *Pigeon Bay Aquaculture Ltd v Canterbury Regional Council* decision (C32/99) comments on this matter as well:

- (iii) *The word ‘outstanding’ in section 6(b), RMA means “conspicuous, eminent, especially because of excellence” and “remarkable”. If considered by a regional council then ‘outstanding’ is considered on a regional basis. If being considered by a district council, then outstanding is to be considered in terms of the district. In relation to a district plan, what is outstanding can only be assessed on a district-wide basis because the sum of the district’s landscapes is the only immediate comparison that the district council has.*

Furthermore, at Paragraph 135 of the Environment Court’s decision in *Waiareka Valley Preservation Society Inc versus Holcim NZ Ltd & Ors* (C058/2009) includes the following statement:

*“In considering whether or not landscapes or features are outstanding, it has been customary over the past decade for landscape architects and the Court to consider various elements of the landscape under a series of heads identified in *Wakatipu Environmental Society Incorporated versus Queenstown Lakes District Council*, and sometimes referred to as the modified Pigeon Bay criteria or factors. We indicate that we consider the term factors much more appropriate. They are a series of elements which help to ensure a full understanding of the landscape the Court is dealing with, not a series of criteria according to which some rating in one or more results in a landscape becoming outstanding. It is still necessary to stand back and ask the question “does this landscape or feature stand out among the other landscapes and features of the district?”. We refer to the salutary comments of the Court in *Unison versus Hastings District Council*, warning against a mathematical or mechanical approach to applying the modified Pigeon Bay factors. ....”*

Consequently, any assessment of landscape values necessarily involves an appreciation of the greater whole – of the landscape as both the product of its various elements and as ‘the sum of its parts’ – before determining if it is sufficiently conspicuous, eminent, and outstanding to be identified as an ONL.

### 2.2.4 Related Considerations

Three of the *Modified Pigeon Bay* ‘factors’ described above, presented potential problems in relation to the West Coast Study: *Shared and Recognised Values*, *Heritage Values* and *Tangata Whenua Values*.

In discussions with the Regional Council at the outset of the West Coast Study it was accepted that **Heritage Values** are an important component of the Region. Coal mining, gold mining, farming, early settlements and other activities / sites contribute very significantly to the



character and identity of the West Coast. However, most of these contribute to the cultural history of the Region and its Districts, not its natural heritage or natural landscape values. As such, the *Heritage Values* of the West Coast remained a matter of concern and uncertainty throughout the 2012 / 2013 study.

There were also significant information gaps in relation to public perception and appreciation of the West Coast and its landscapes, as well as in respect of Tangata Whenua perspectives on the Region and its array of landscapes.

Even so, research in relation to ***Shared and Recognised Values*** turned up the following study undertaken by Professor Simon Swaffield and Dr John Fairweather in Westland in 2001: *Visitors' And Locals' Experiences Of Westland, New Zealand* (Report No.23, Lincoln University; John Fairweather, Bronwyn Newton, Simon R Swaffield, David G Simmons; 2001). This was part of a series of landscape studies undertaken by the same authors throughout New Zealand from 1998 to 2004<sup>2</sup>. These studies, consistent with that undertaken in Westland) led to the identification of a number of key landscape 'traits' that consistently correlate with high landscape preferences and values, including those associated with highly values, and outstanding, landscapes:

- *Naturalness - correlated with apparent levels of development or lack of development*
- *Endemic Values / 'NZness' (related to sense of place)*
- *Strong Landscape Structure - related to landform & the interaction of land with sea / water*
- *Strong Landscape Patterns - typically related to vegetation and land uses*
- *Visual Drama (memorability)*
- *Visual Diversity*

These additional 'factors' were explored as a way of incorporating a Public Perception component in the West Coast Study, ie. helping to underpin evaluation of different landscapes in terms of human / public perception.

Conversely, very little information was available in 2012 about ***Tangata Whenua Values*** and perceptions of the West Coast's landscapes, and such evaluation can be problematic without active iwi participation because every iwi and hapu respect specific features and elements within their rohe that are either taonga in their own right, that contain taonga and / or which

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*Public Perceptions of Outstanding natural Landscapes In The Auckland Region, Research Report No. 273, John R Fairweather, Simon R Swaffield, David G Simmons. 2004*

*Understanding Visitors' Experiences In Kaikoura Using Photographs Of Landscapes & Q Sort. Report No. 5. John R Fairweather, Simon R Swaffield, David G Simmons. 1998*

*Understanding Visitors' And Locals' Experiences Of Rotorua Using Photographs Of Landscapes & Q Sort. Report No. 13. John R Fairweather, Simon R Swaffield, David G Simmons. 2000*

*Public Perceptions Of Natural And Modified Landscapes Of The Coromandel Peninsula, New Zealand. Research Report No. 241. John R Fairweather, Simon R Swaffield. October 1999*

are the subject of historic tales – both real and mythic / legendary. Yet there is often little commonality in respect of the value attached to such connections between and hapu and iwi, or across regions and districts. Furthermore, there is often a very real and understandable reluctance to reveal such connections and values. As a result, it is virtually impossible to develop a region or district-wide map, or other reference tools, that can readily be employed to modify or influence the sort of more generic landscape values discussed thus far in this review. (Indeed, in the case of the *Kawhia Aotea Landscape Assessment* in 2007 it was decided that *Tangata Whenua Values* should be addressed quite separately from the broader landscape assessment to avoid dilution of management strategies focused on the protection of taonga and other values / sites of value to local iwi).

Again, in the Court's *Waireka Valley Preservation Society Inc V Holcim NZ Ltd* (C058/2009) decision, the following point is made at paragraphs 175:

*“But in terms of section 6(b) the question is not whether these items exist, or are important, but whether they are such that in combination they give a particular character to the landscape such that together with tangata whenua cultural associations they make the wider landscape outstanding as a natural feature.”*

This point is elaborated on at paragraph 170, where the decision also states:

*“In terms of section 6(b) we also indicate that there may be a problem that many of the items cited as contributing to the historical ambience of the area are items of human construction. That is, they do not contribute to naturalness, and may well be more appropriate to a consideration of whether section 6(f) applies”.*

In other words, while there will inevitably occasions where the value of a landscape or feature is amplified or reinforced by tangata whenua / cultural associations and historical values, such values are only relevant to the identification of outstanding natural landscapes and features in terms of section 6(b) of the Act where such connections relate to the natural state and values of the feature / landscape. This ‘confluence’ of compatible values applies, for example in relation, to Maori perceptions and appreciation of Aorangi / Mt Cook; but would not apply to the likes of Maori paa, battlefields or other sites that are valued because of their modification and association with human activities – not a natural feature. Modified sites / locations might well be identified as heritage / cultural ‘landscapes’, but they would be identified and managed as such on the basis of sections 6(e) and (f) of the RMA. Hardly surprising, this interpretation of Sections 6(b) and (e) of the Act is not universally accepted.

Taking all of these matters into account, it was ultimately decided that the 2012 landscape assessment would address *Tangata Whenua Values* if and when such matters arose in relation to specific landscapes, but did not have sufficient time or resources to undertake a detailed assessment of Tangata Whenua perspectives of the West Coast and its broad array of landscapes.

## 2.3 The NZILA Best Practice Note - Landscape Assessment & Sustainable Management 10.1

The NZILA Best Practice Note on *Landscape Assessment and Sustainable Management 10.1* is a very generic guideline that will soon be superseded by an Assessment Guide that is much more directive, bicultural in nature and focused on the identification of characteristics and values in relation to important landscapes. To date, however, the Practice Note has remained quite 'loose', although it has mirrored the Environment Court decisions in stating that strategic landscape assessments (of territorial areas) should address three 'layers' of attributes:

- *Biophysical elements, patterns, and processes*
- *Sensory qualities*
- *Spiritual, cultural and social associations, including both activities and meanings.*

For the reasons set above (Section 2.2) the West Coast Study focused primarily on the "Biophysical elements, patterns and processes" and "*Sensory qualities*" of each landscape identified, much less so on "*Spiritual, cultural and social associations*".

The NZILA Practice Note then goes on to state that the assessment process should involve:

*Characterisation: Expert interpretation of landscape character based on classification of different types of landscape, through:-*

- *Identification of patterns of natural and cultural features, processes and influences.*
- *Analysis of their characteristics and spatial location, and the extent to which they are distinctive, representative or typical at the different scales.*

*Evaluation: An explicit account and weighing up of the landscape values of the existing landscape including those expressed within the statutory context of the assessment. This stage will include engagement as appropriate with tangata whenua, communities, stakeholders and interest groups.*

As indicated above, the only aspects of this part of the Practice Note that were problematic in relation to the West Coast Study were engagement with Tangata Whenua, the incorporation of *Heritage Values* in it, and, to a lesser extent, the incorporation of *Shared and Recognised Values*.

## 2.4 Agreed Landscape Assessment Methodology

Taking on board all of the matters traversed above, a draft assessment method and criteria were forwarded to Mike Meehan (then Senior Planner at the West Coast Regional Council) in early June 2012. After a subsequent meeting with Mr Meehan and the district planners in Greymouth, it was agreed that the draft assessment process and criteria would provide the

basis for the Landscape Study field work and identification of ONLs across the Region. That process is as set out below:

Stage:	Process:
1.	<p><b>Field Work – Mapping of ‘Sufficiently Natural’ Areas:</b></p> <p>Use of field work and aerial imagery to map all areas that might be considered ‘sufficiently natural’ to qualify as ONL candidates</p>
2.	<p><b>Draft Mapping of ‘Natural Landscapes’:</b></p> <p>Use of field work and aerial imagery to map the candidate landscapes based on their:</p> <ul style="list-style-type: none"> <li>• Landforms</li> <li>• Vegetation Cover</li> <li>• Land Uses &amp; Activities</li> <li>• Interaction with the sea / lakes / rivers / wetlands</li> </ul>
3.	<p><b>Evaluation of Each – Round 1:</b></p> <p>Detailed evaluation of each candidate landscape ‘on the ground’ employing the criteria set out overleaf</p>
4.	<p><b>Evaluation of Each – Round 2:</b></p> <p>Comparative evaluation of each candidate landscape as a whole, addressing them in terms of the ‘sum of their parts’ – the overall character, identity &amp; spectacle associated with each landscape</p>
5.	<p><b>Overall Evaluation of Each Landscape:</b></p> <p>Assessment of each candidate landscape ‘in the round’ – both in terms of the assessment criteria set out overleaf and ‘as a whole’ – to determine if each was sufficiently conspicuous, eminent and ‘outstanding’ to qualify as a draft ONLs</p>
6.	<p><b>Review &amp; Refinement</b></p> <p>Review of the draft ONLs in response to feedback from the Regional and District Councils leading to the refinement &amp; deletion of some draft ONLs</p>

The criteria employed to assess each candidate ONL were as set out below, using evaluation of the *Malcolm, McKenzie & Hope River Ranges ONL* as an example (Unit 1A):

**Malcolm, McKenzie, & Hope Blue River Ranges**  
Unit No: 1A (forms the coastal area of ONL 1)

<b>Bio Physical Landscape Characteristics</b>	
<b>Evaluation Factors:</b>	<b>Key Values:</b> <small>(Indication of key Bio-Physical values)</small>
Landforms (Geomorphology / Geology / Terrain)	<input type="checkbox"/>
Vegetation Type (s)	<input type="checkbox"/>
Sea / Water Bodies	<input type="checkbox"/>
Natural Processes	<input type="checkbox"/>
Land Uses / Activities / Structure	<input type="checkbox"/>
<b>Rating of Biophysical Values:</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>

Low ..... High

<b>Perceptual / Aesthetic Values</b>	
<b>Evaluation Factors:</b>	<b>Key Values:</b> <small>(Indication of key Perceptual values)</small>
2D Patterns (Composition) & 3D Spatial Structure	<input type="checkbox"/>
Vividness / Expressiveness / Legibility	<input type="checkbox"/>
Dynamic / Transient Values	<input type="checkbox"/>
Landmarks / Key Views	<input type="checkbox"/>
Coherence / Unity	<input type="checkbox"/>
<b>Rating of Perceptual / Aesthetics Values:</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>

Low ..... High

<b>Associative Values</b>	
<b>Evaluation Factors:</b>	<b>Key Values:</b> <small>(Indication of key Perceptual values)</small>
Naturalness / Endemic Value (distinctive NZ / West Coast Sense of Place)	<input type="checkbox"/>
Tangata Whenua Values / Associations	<input type="checkbox"/>
Historical / Heritage Associations	<input type="checkbox"/>
<b>Rating of Perceptual / Aesthetics Values:</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>

Low ..... High

ONFL THRESHOLDS: (Overall Evaluation of Landscape Values in the context of the West Coast Region)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
<b>OUTSTANDING</b>	

The assessment criteria set out above were aligned with pre-2012 Environment Court decisions, the NZILA Practice Note 10.1 and Lincoln University’s research into public

perception of Westland and other NZ landscapes. In addition, each Evaluation Sheet concluded with a brief summary of the Key Attributes and Characteristics that contributed to the ONL status of individual landscapes. The following example is again drawn from the *Malcolm, McKenzie & Hope River Ranges ONL* example:

*“Series of remote low elevation coastal foothills and valleys that are heavily dissected with high relief. Sequence of steep coastal slopes, cliffs and headlands (Awarua Point, Bonar Knob) with a series of rocky shoals, outcrops, and broad sandy beaches. Forms the coastal edge to the Malcolm and McKenzie Range.*

- *Unmodified and continuous mature coastal and lowland forest together with the dramatic terrain imparts a strong sense of naturalness.*
- *Dramatic interaction of the landscape with the Tasman Sea with its continuous vegetation cover providing a consistent patterning to this exposed landscape.*
- *Extremely limited modification / human activities.*
- *The highly distinctive and glacial shorn profile of Awarua Point is a key landmark within this landscape.”*

Summaries of this kind are now becoming increasingly relevant, as the draft *NZILA Assessment Guideline* (which I have contributed to, as part of the Review Panel) will emphasise the identification of ‘characteristics and values’ as key outcomes of future strategic landscape assessments. Moreover, this approach has already been adopted by the Environment Court in relation to the Proposed Queenstown Lakes District Plan and the ONLs and ONFs identified within it.

## **2.5 Subsequent Steps**

In addition to the refinement of ONLs described above, Brown NZ was also asked to modify its study findings in 2013 by removing all non-coastal ONLs from the draft study and just providing maps and assessment worksheets that addressed ONLs within the coastline of the West Coast. The Coastal Environment was delineated in draft form as part of the Natural Character component of the West Coast Study, and the ONLs were re-mapped in accordance with that delineation in November 2013.

### 3. Natural Character - Background



As with the Landscape Assessment process described above, the analysis and evaluation of Natural Character Values in 2012 was based on statutory requirements, especially those derived from:

- Section 6(a) of the Section 6(b) of the Resource Management Act which makes, *“the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development,”* a Matter of National Importance;
- The *NZ Coastal Policy Statement 2010* and, in particular Policy 13(2), which describes some of the attributes of Natural Character’;
- Environment Court case law – although there was relatively little of this pertaining to the 2010 NZCPS in 2012; and
- Past assessment best practice, which until 2010 had focused on evaluating:
  - Natural Processes
  - Natural Elements
  - Natural Patterns

Initially, the resulting assessment covered both the West Coast Region’s coastline and the margins of its lakes, rivers and wetlands – as per the original study brief. However, in 2013, the study was reduced in its scope so as to just focus on the ‘Coastal Environment’. At that time, the Coastal Environment had not been delineated / mapped for the Region, so that also became a key part of the revised project.

### 3.2 What is ‘Natural Character’?

In December 2010 the new NZCPS became operative, including Policy 13(2, which described Natural Character in the following fashion:

- (2) *Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:*
  - (a) *natural elements, processes and patterns;*
  - (b) *biophysical, ecological, geological and geomorphological aspects;*
  - (c) *natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;*
  - (d) *the natural movement of water and sediment;*
  - (e) *the natural darkness of the night sky;*
  - (f) *places or areas that are wild or scenic;*
  - (g) *a range of natural character from pristine to modified; and*
  - (h) *experiential attributes, including the sounds and smell of the sea; and their context or setting.*

To further complicate matters, however, Objective 4 also refers to, “*recognising and protecting characteristics of the coastal environment that are of special value to tangata whenua;*” while Objective 6 requires territorial authorities to, “*to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that:*

- *historic heritage in the coastal environment is extensive but not fully known, and vulnerable to loss or damage from inappropriate subdivision, use, and development.”*

Consequently, much as Landscape and Natural Character are described as being different at Policy 13(2), there remains a significant overlap between the way in which both areas of assessment are interpreted and also viewed by the general public. The following diagram attempts to summarise the areas of overlap and difference between them (overleaf):



# LANDSCAPE NATURAL CHARACTER

<b>BIOPHYSICAL VALUES:</b>	<b>GENERIC BIOPHYSICAL VALUES:</b> <ul style="list-style-type: none"> <li>▪ LANDFORMS</li> <li>▪ VEGETATION TYPE &amp; COVER</li> <li>▪ LAND USES / ACTIVITIES / STRUCTURES</li> <li>▪ SEA / FRESHWATER BODIES</li> </ul>		<b>'SCIENTIFIC' BIOPHYSICAL SYSTEMS &amp; PROCESSES:</b> <ul style="list-style-type: none"> <li>▪ ECOLOGY / HABITAT VALUES</li> <li>▪ GEOMORPHOLOGY</li> <li>▪ HYDROLOGY</li> </ul>
<b>PERCEPTUAL VALUES:</b>	<b>SCENIC &amp; AESTHETIC VALUES:</b> <ul style="list-style-type: none"> <li>▪ LEGIBILITY</li> <li>▪ COMPOSITION</li> <li>▪ COHERENCE</li> </ul>	<b>PERCEIVED:</b> <ul style="list-style-type: none"> <li>▪ BIOPHYSICAL / NATURALNESS</li> <li>▪ EXPRESSION OF FORMATIVE PROCESSES</li> <li>▪ INTACTNESS</li> <li>▪ SMELL &amp; SOUNDS OF THE SEA</li> </ul>	<b>PERCEPTIONS OF:</b> <ul style="list-style-type: none"> <li>▪ REMOTENESS</li> <li>▪ WILDNESS</li> <li>▪ WILDERNESS</li> <li>▪ SURF BREAKS</li> </ul>
<b>PERCEPTUAL VALUES:</b>	<b>SHARED &amp; RECOGNISED VALUES:</b> <ul style="list-style-type: none"> <li>▪ IDENTITY</li> <li>▪ SENSE OF PLACE</li> <li>▪ VALUE TO COMMUNITY</li> </ul>		<b>TANGATA WHENUA VALUES</b> <b>HERITAGE VALUES</b>

## 3.2 Case Law & Best Practice

In 2012 and early 2013 there was very little case law applicable to assessing natural character values. Consequently, the criteria employed in the West Coast Study were derived directly from Policy 13 of the NZCPS (2010) and from a subsequent workshop in Wellington in August 2011, then a second workshop in September 2012, both of which addressed this very issue. 'Best practice' in 2012 was almost entirely drawn from assessments undertaken prior to the emergence of the (then) new National Policy Statement – under the NZCPS 2004.

Consequently, the assessment criteria prepared in mid 2012 (Section 3.5) were drawn from the 2010 NZCPS and the reported outcomes of both Natural Character workshops – the first of which I participated in and that also culminated in the production of a report titled: *"Natural Character and the NZCPS 2010 - National Workshop"*:

<http://www.doc.govt.nz/Documents/conservation/marine-and-coastal/coastal-management/natural-character-and-the-new-zealand-coastal-policy-statement-2010-national-workshop.pdf>

At the subsequent DoC workshop on 30 September 2012, hosted by Marlborough District Council, the following response to the issue of High and Outstanding natural character thresholds was proposed:

<http://www.doc.govt.nz/Documents/conservation/marine-and-coastal/coastal-management/natural-character-and-the-new-zealand-coastal-policy-statement-2010-marlborough-workshop.pdf>:

- “Look at the term ‘outstanding’ in relation to the existing RMA and NZCPS 2010 provisions for natural features and natural landscapes, and ask the question how does this approach work in relation to natural character? With help from peers and ecologists within Boffa Miskell Ltd, the study worked with the following descriptors:

**Outstanding** is a comparative evaluative term meaning to stand out, exceptional, pre-eminent, clearly superior to others in the same group or category.

**Outstanding Natural Character:** the coastal environment may be outstanding where it has very high levels of natural character. ....

- Areas with outstanding natural character are the areas with the highest area of ‘indigenouness’ - the full expression for ‘outstanding natural character’ in the Marlborough study is containing a combination of indigenous elements, patterns and processes that are exceptional in their intactness, integrity and lack of built structures and other modifications compared to other areas in the Marlborough Sounds.
- The above definition is such that experiential aspects are not explicit.
- The way the methodology works is that the outstanding areas are drawn from areas assessed as having ‘very high’ natural character (‘outstanding’ is a subset of ‘very high’). Not all that is ‘very high’ is ‘outstanding’.

Translating this approach to the West Coast study, it was therefore determined that:

- Areas of **Outstanding Natural Character** should equate with being ‘close to wholly natural’ – although it is not realistic to expect that any part of the coastal environment will be pristine;
- Areas of **High Natural Character** should display a predominance of natural features, elements and patterns [in terms of their biophysical structure and character, perceived naturalness and related associative values – as per Policy 13(2)] – although they are also likely to contain areas that are clearly subject to human modification, e.g. farming, roading or other activities and structures.
- Areas of **‘Other’ Levels of Natural Character** are likely to be much more variable – from those containing sizeable remnant features or elements (eg. headlands, stands of coastal vegetation) to those – like port areas – in which the only natural element is the sea.

### 3.6 NATURAL CHARACTER ASSESSMENT METHODOLOGY

On the basis of the legislation and related material outlined above, a draft assessment method and criteria were also forwarded to the West Coast Regional Council, and it was agreed that the following process would be adopted for identification of areas of High and Outstanding Natural Character:

Stage:	Process:
1.	<p><b>Field Work – Mapping of ‘Sufficiently Natural’ Areas:</b></p> <p>Use of field work and aerial imagery to map an indicative coastal environment &amp; river / lake / wetland margins</p>
2.	<p><b>Draft Mapping of Natural Character Areas:</b></p> <p>Use of field work &amp; aerial imagery to subdivide the coastline &amp; freshwater catchments in Natural Character Areas based on their:</p> <ul style="list-style-type: none"> <li>• Water types (sea; lakes / rivers / wetlands)</li> <li>• Landforms</li> <li>• Vegetation Cover</li> <li>• Land Uses &amp; Activities</li> </ul>
3.	<p><b>Evaluation of Each Natural Character Area:</b></p> <p>Detailed evaluation of each candidate landscape ‘on the ground’ employing the criteria set out overleaf</p>
4.	<p><b>Evaluation of Each Natural Character Area:</b></p> <p>Comparative evaluation of each Natural Character Area to evaluate the thresholds for High &amp; Outstanding Natural Character Areas</p>
5.	<p><b>Overall Evaluation of Each Natural Character Area:</b></p> <p>Re-assessment of each NC Area to identify Areas of High &amp; Outstanding Natural Character</p>
6.	<p><b>Review &amp; Refinement</b></p> <p>Review of the draft ONC &amp; HNC Areas in response to feedback from the Regional and District Councils – leading to the ‘down grading’ of some draft ONC Areas</p>

The criteria employed to assess each Natural Character Area were as set out below, using evaluation of the *Arawhata River Mouth* (Unit C7) as an example:

## Arawhata River Mouth

Unit No: C7

Ecological Characteristics	
Evaluation Factors:	Key Values: <small>(Indication of key Bio-Physical values)</small>
Landforms (Geomorphology / Geology)	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
Vegetation Type, Cover & Patterns	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
Sea / Estuarine Water Bodies	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
Land Uses / Activities / Structure	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
Habitat Value	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
Natural Processes	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
<b>Rating of Bio Physical Values:</b>	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 100%; height: 20px; background: linear-gradient(to right, white 90%, gray 90%);"></div> <div style="margin-left: 10px;">Low ..... High</div> </div>

Perceptual Values	
Evaluation Factors:	Key Values: <small>(Indication of key Perceptual values)</small>
Wildness / Wilderness / Remoteness	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
Experiential Attributes	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
Context / Setting	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
Transient / Dynamic Attributes	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
Night-time Values	<div style="width: 100%; height: 15px; background: linear-gradient(to right, white 90%, gray 90%);"></div>
<b>Rating of Perceptual Values:</b>	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 100%; height: 20px; background: linear-gradient(to right, white 90%, gray 90%);"></div> <div style="margin-left: 10px;">Low ..... High</div> </div>

Overall Natural Character Evaluation  
(Biophysical and Perceptual Values)

OUTSTANDING

Again, each Evaluation Sheet concluded with a brief summary of the Key Attributes and Characteristics that contributed to the ONC or HNC status of each coastal or river / lake / wetland area. Eg – for the *Arawhata River Mouth*:

*Remote and isolated sequence of exposed beaches, low lying mature coastal forest, eroded dune lands and wetlands, and the braided river mouth of the Arawhata River.*

- *Continuous pristine mature coastal and lowland forest cover.*
- *This landscape is highly expressive of the interplay between the Arawhata River mouth and the Tasman Sea. The tidal rhythm of the sea also provides a counterpoint for the rivers natural variations of flow, clarity and flood cycles.*

- *Inland dune waterbodies are expressive of the coastal environment's formative processes.*
- *Backed by forest covered foothills of Mt Mclean and the Haast Range beyond.*
- *Limited presence of any development.*
- *Unmodified vegetation sequences from dunefields to mature coastal forest create a strong sense of naturalness.*

### **3.7 MAPPING OF THE COASTAL ENVIRONMENT**

In early 2013, Brown NZ Ltd was asked to review its draft mapping and evaluation of Natural Character values, and to restrict its final report to just the coastal parts of the West Coast Region. This required more detailed delineation of the Region's Coastal Environment, responding to the NZCPS and Policy 1's more prescriptive description of the components found within that environment:

***Policy 1 Extent and Characteristics of the Coastal Environment***

- (2) Recognise that the coastal environment 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, saltmarshes, coastal wetlands, and the margins of these;*
  - (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.*

Translating Policy 1 of the NZCPS into criteria that were meaningful 'on the ground', the following parameters were employed to identify the limits of the Coastal Environment in 2013:

***A. Areas That Are Physically Linked to the CMA:***

- 1. that are directly subject to wave action and tidal inundation / movement and which contain / define the inter-tidal margins of the CMA;*

2. *coastal drainage systems, including catchments and headwaters that feed directly into the CMA; and*
3. *landforms and vegetation cover that are directly affected / modified by exposure and proximity to the CMA – through wind action, wave action and salt exposure.*

**B. Areas Whose Character is Substantially Defined by their Proximity to the CMA:**

4. *areas within which the CMA is a dominant to significant visual entity;*
5. *locations whose landscape character and amenity is clearly influenced by proximity to, and a sense of connection with, the CMA; and*
6. *locations within which items of cultural and historic heritage are found that are linked to, or within the CMA.*

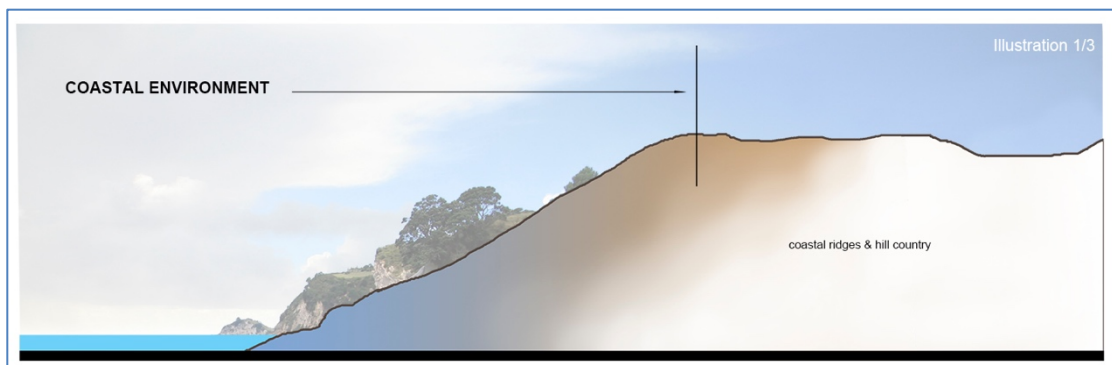
Many parts of the coast enjoy direct visual interaction with the CMA, and some – such as beachfronts, spits, dune corridors and wetland margins – are clearly shaped by their exposure to the sea. In some locations, this area of coastal influence can extend for kilometres inland, particularly around major coastal dune systems and wetlands, such as those found around the Okarito Lagoon, Waitaha and Okuru. In such cases, the Coastal Environment was extended inland sufficiently far to capture such areas – as shown on **Figure 1** (below).

**Figure 1.**



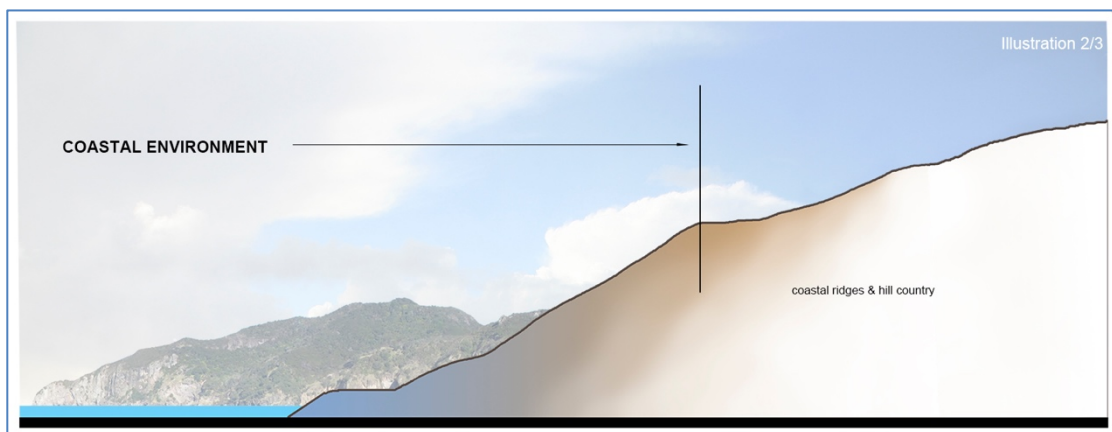
Conversely, the West Coast is also renowned for its major coastal ranges, some of which fall directly into the Tasman Sea. This includes those found around Jackson Bay, Whakapohai-Paringa, Punakaiki, and north of Mokihinui, all have a clear connection with the Coastal Marine Environment (CMA) and their coastal slopes / faces logically fall within the Coastal Environment (see **Figure 2**).

**Figure 2.**



However, in many areas this interaction is less easily defined. The main ranges that provide the backdrop to all of the West Coast often enjoy spectacular views to, and of, the Tasman Sea (eg. from the Denniston Plateau), but frequently do so over a considerable distance. Conceivably, this could have resulted in exceptionally large parts of the Region being captured by the Coastal Environment. However, in such instances, an attempt was made to identify those areas that derive most, or a very large proportion, of their character from visual interaction with the CMA and which convey a marked sense of being shaped (especially in terms of their vegetation cover) by the physical processes derived from close proximity to the sea. These areas were differentiated from others that also offer views to and from the sea, but in which such interaction was considered less fundamental to their visual and physical character. As a result, the Coastal Environment often runs much closer to the coast than the major ranges behind it, 'hopping' over river valleys and from ridge to ridge quite close to the CMA – as illustrated in **Figure 3**.

**Figure 3.**



In accordance with this approach, the Coastal Environment was mapped down the length of the West Coast Region and the Natural Character Assessment maps were re-drafted so that they fully aligned with the identified Coastal Environment. A new report was issued in October 2013 that limited the assessment of Natural Character values to just those identified areas of High and Outstanding Natural Character within the Coastal Environment.

## 4. Changes to Areas of Outstanding Natural Character & Landscape Value

Subsequent to completion of the October 2013 reports, (landscape and Natural Character), our office received enquiries in relation to a number of draft ONLs and ONC areas. The following are brief summaries of those changes – pertaining to ONL 51 (Ngakawau), and Natural Character Areas 33, 35 and 36.

### 4.1 The Ngakawau ONL

In October 2014, the following email was received from Lillie Sadler at the West Coast Regional Council:

*As per our phone conversation, our Councillors are surprised at the inclusion of the Ngakawau River Valley (ONL51) as a coastal ONL in the West Coast Landscape Study report prepared for the Regional Coastal Plan review. Although the hills behind the township are mostly unmodified, the view of the hills cannot help but also take in the view of the township, which makes the area quite modified. The town surrounds the coastal section of the River, and the main road bridge crosses the river near the mouth, there is little naturalness about this area. The Ngakawau Gorge is listed as a key landmark within the landscape, however this is inland of the coastal environment. You mentioned Charming Creek, this is also outside the coastal environment. We consider that there is nothing particularly special or outstanding about the coastal part of the Ngakawau River, and ask you to reconsider your assessment.*

It was agreed that the mapping should be amended to ensure that the catchment immediately around the Ngakawau River and Township was removed from ONL51 – in line with the Regional Council's decision to remove all ONLs outside the Coastal Environment. That amendment occurred in late 2014. This was the only ONL, out of 55 within the Coastal Environment, that appeared to raise concern in the years immediately following completion of the ONFL study.

### 4.2 Natural Character Areas 33, 35 & 36

Around the same period, in early November 2014, Lillie Sadler also contacted Brown NZ in relation to the proposed Natural Character Areas 33, 35 and 36 with the following concerns:



Our CEO has asked us to have another look at the natural character areas. There are three areas which I question have high natural character: C33 Chesterfield terraces between Hokitika and the Kumara Junction, C36 Peter Ridge foothills at the south end of Greymouth, and C35 New River mouth.

*The large majority of the coastal environment between the beach and the Chesterfield terrace consists of farm land and road. The vegetated terrace is a considerably smaller proportion of C33, looking at our aerial photos I estimate the terrace facing the sea covers around 15-20% of the coastal environment from the terrace face to the Mean High Water Spring line. It is therefore a highly modified environment, and we ask that you consider removing the high natural character ranking for this area.*

*The coastal environment at the foot of the C36 Peter Ridge foothills comprises industrial and residential areas, sewage ponds, and farmland. These are clearly visible from the most commonly used viewpoint, the State Highway. The visual impact of any activity in the coastal marine area on the seaward face of the foothills would have to take into account the adjoining developed areas, which make this environment highly modified. There is no photo in the Natural Character report of C36 so I have attached a copy of an aerial photo showing approximately where C36 lies, indicated by the black line. However, from the beach the hill can only be seen up to the western side of the marked area. The C36 eastern boundary goes further inland than what is visible from the beach (it also has a subdivision in it). This means that the larger proportion of the coastal environment around and including C36 is modified. Would you please consider removing the high natural character ranking for this area.*

*Although the section of the New River which flows parallel to, and is visible from, the State Highway is relatively unmodified, an erosion protection wall has been constructed at the confluence of New River and Saltwater Creek to help maintain the mouth opening. An access road goes from the pub to the rock wall, and the vegetation in this part of the lagoon contains gorse and blackberry as well as native bush. I will email you some photos tomorrow, and once you have viewed these can you please review the high natural character ranking of C35.*

The following reply was sent to Ms Sadler, together with amended amps addressing the concerns raised:

*In relation to Map 6, I have modified – but not deleted – parts of Natural Character Areas 33, 35 and 36. The reason I have done this is that I still consider the remaining areas to fit within the description of High Natural Character and to meet the criteria for such areas. To further clarify this, I am sending aerial images which show that these areas do not include farmland, sewage ponds, or areas of significant development.*

*In relation to the Gladstone Unit (35), I'm also mindful that the representatives of*

*Grey District wanted us to consider identifying the wetlands, coastal shrubland and beachfront in Unit 35 as an area of Outstanding Natural Character at the meeting held to review the draft maps. I declined to do because of the influence of the coastal highway and housing across it. There was also support for identifying the forested escarpments in Unit 33 as having High NC to help stop further erosion of their bush cover and naturalness.*

*Anyhow, the areas now depicted as areas of high Natural Character comprise just the following:*

***Unit 33:*** *the forest covered coastal escarpment immediately inland of the state highway – NOT the farmland and beachfront west of the highway. I have removed the area further south which contained a sizeable number of residential properties. I recall .*

***Unit 35:*** *the area of wetland, marsh, estuary, river mouth, beachfront and native shrubland between Paroa and northern Camerons – excluding all farmland, areas of residential occupation and the highway. Although influenced by these activities and structures, this unit retains an intact coastal sequence and ecological system (albeit small scale), that contrasts very markedly with the developed areas either side, and inland, of it.*

***Unit 36:*** *just the forest covered hills above Boddytown, providing part of the backdrop to Greymouth. Although separate from the sea, this hill country remains within the Coastal Environment and – like the hill sequence leading out to Point Elizabeth north of Greymouth – is still an important natural ‘remnant’.*

This reply was accompanied by changes to the mapping on Natural Character Units 33, 35 and 36 that, as far as I can tell, resolved these matters of concern.

Other issues were also raised by Ms Sadler, but these appear to have been the ones of most significance from the Regional Council’s perspective. Given that 61 areas were identified as being of High or Outstanding value within the Coastal Environment, this does not seem to be an excessive number of ‘unit’s that required amendments and related mapping alterations.

## **Stephen Brown**

BTP, Dip LA, Fellow NZILA, Affiliate NZPI

