



Southland Coastal Landscape Study
August 2006

Boffa Miskell

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Prepared for
Environment Southland and Southland District Council
by
Boffa Miskell Limited



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Executive Summary

The character of the Southland coastline is recognised and valued for its great diversity. This ranges from the sweeping sea-cliffs in the west, to the intimate bays and harbours in the east, areas of remnant coastal dunes, attractive rural, working landscapes, important conservation areas, estuaries, historic sites, tourist attractions, townships, and a wide range of recreational opportunities.

Recent and rapid change in the Southland coastal environment is placing pressures on this landscape. There are currently many opportunities to experience the diverse values this lengthy coastline offers, however such opportunities will not last forever if pressing tourism, residential or infrastructure development needs are accommodated without consideration for strategic planning and management. Where there is capacity for change, sensitive development can be welcomed.

Development on private coastal land has impacts on the landscape, natural character and amenity values of the coastal environment, including the public foreshore. The purpose of the Coastal Resource Area (CRA) is currently aimed more at general environmental outcomes rather than the protection and management of these landscape values.

The aim of this document is to collate and evaluate information about the landscape character of the Southland coast within the CRA, and to consider the likely pressures and opportunities for landscape change; assess the sensitivity of these landscapes to change and to develop guidelines as to where and how landscape change can best be accommodated to conserve or enhance current landscape character, natural character and amenity values, in order to help inform future planning decisions.

Findings from this study suggest that the entire Southland coast can be considered a significant landscape. However, investigations have led to the identification of areas within this special landscape that have some capacity for housing development as well areas that would benefit from protection. Development guidelines have been suggested for each landscape unit that include management frameworks in which development or protection/enhancement opportunities could be considered.

The key findings that from this process are:

- *The Coastal Resource Area is identified as significant.*

- *Some areas within the CRA are identified as worthy of consideration for an Outstanding Natural Landscape or Outstanding Natural Feature overlay to aid protection from inappropriate forms of further development.*
- *Maintenance and enhancement of connections at the interface between the shoreline and the coastal setting. These 'edge' landscapes are vulnerable and valuable - what happens to one will generally affect the other.*
- *Maintain the sustainable patterns of agriculture that are reflected in much of the landscape character of these areas. The central role of farming in much of this landscape means that retaining a viable farming community is essential.*
- *Maintain, enhance and safeguard significant open space, ecological linkages, landscapes and landforms/natural features.*
- *Concentrate pressure for coastal subdivision in a few areas capable of absorbing landscape change, rather than submitting to the spread of isolated developments, where these will change existing settlement patterns and the rural or remote character of the coastline.*
- *This report encourages strategic decisions such as establishing limits to settlements or determining the scale and role of commercial, recreational or other facilities, to be examined in settlement structure plans, so that these concepts are subject to further, more specific investigations. In many cases the question of whether the landscape is able to accommodate further development could be less of a matter for concern provided that policies are able to give confidence that permitted development will be appropriate in terms of its nature, scale, form, siting and relationship with the character of its surrounding environment.*

The Southland coastal environment is recognised as a valuable public asset and natural resource. There are areas within the coastal environment with capacity for further development where it respects private landownership, public access and recreation opportunities, natural dynamic coastal processes and significant landscape values.

Section One: Introduction

1.1 Background

Boffa Miskell Ltd prepared a Regional Landscape Assessment for the Southland Regional Council in 1997 that identified the entire Southland Coast (including the coastline within the Invercargill City boundaries) as a special area with characteristics that could be considered outstanding:

'Parts of the Coast are outstanding for their natural character and wild, rugged qualities. The entire coast is of ecological value, and of historic and contemporary significance to the takata whenua. The river mouths in particular are of social and cultural significance with their crib communities and unique social and aesthetic styles.

Within the coast there are a number of extensive areas of urban industrial development as well as holiday and fishing settlements.

Boundary: Much of the length of the coast is still dominated by its natural qualities. Clearly the highly modified urban and industrial locations would be excluded from any outstanding landscape. It is difficult to determine whether all or parts of the remainder meet the criteria of "outstanding". A number of locations were specifically mentioned at public meetings and in assessment sheet returns eg the Catlins Coast, Toetoes Bay, Awarua Bay, Bluff-Omaui, Riverton, Colac Bay, Te Waewae Bay and the Fiordland Coast. These cover the majority of the coast and it is recommended that, with the exception of the coastal settlements, the entire coast is recognised as being outstanding. The distance inland that is included within these outstanding coastal landscapes requires detailed investigation.

Possible Mechanisms: Since the majority of the coast is included as outstanding, the Southland Regional Council should explore mechanisms that avoid unnecessary compulsion. Awareness and education initiatives, voluntary agreements and where necessary, compensation agreements should be explored. These initiatives coupled with existing protection should ensure that landscape values are retained.'

While coastal landscapes have long been valued by some, in recent years there has been a more widespread adoption of the value of the coastal environment, particularly for the residential opportunities offered by a 'beach lifestyle' and 'sea-view'. Homes constructed for residential development tend to be larger and more visually imposing and are often designed to take advantage of coastal views. Residential development often precedes or accompanies pressure for infrastructure development. As a result of these development pressures, the southland coast will experience more focussed tensions between how individuals want to use and develop their land and how communities value the existing landscape qualities of that land.

Southland's Regional and District Councils have a mandatory duty to address these landscape management issues. This project was commissioned by the Southland District council (SDC) and Environment Southland (ES) in response to these pressing coastal development issues. It assesses the landscape character and significance of the Southland coastline using an assessment methodology that follows a series of logical steps from character identification to assessment and proposed planning considerations capable of translation into planning control mechanisms.

1.2 Statutory Context

The Resource Management Act requires Councils, in achieving the purpose of the Act, to recognise and provide for the protection and management of landscapes with particular regard to:

- section 6a: the preservation of the natural character of the coastal environment
- section 6b: the protection of outstanding natural features and landscapes
- section 6f: the protection of historic heritage
- section 7c: the maintenance and enhancement of amenity values; and
- section 7f: the quality of the environment

Recent pressures for development within the coastal environment, particularly in terms of rural residential and lifestyle developments, has led the Southland District and Regional Councils to undertake a more strategic approach in order to best protect and manage their coastal landscapes in light of RMA requirements. In 2005, the Councils invited BML to submit a proposal for a landscape assessment of the Coastal Resource Area.

1.3 Scope

ES and SDC require BML to identify the key landscapes in the study area that are appropriate for more specific recognition and protection. The outcome of the investigation is this report and accompanying GIS maps (as described in the brief) that identify areas in which conventional development is likely to be unsuitable and areas where development is more likely to be appropriate. The approach for identification of those areas is described in **Appendix 1 - Methodology**.

The study area (see Figure 1) defined by the Council's brief includes the coastline of the Southland Region and approximately one kilometre inland, following cadastral boundaries. It extends from Te Wae Wae Bay in the west through to Brothers Point in the east, however it does not include any of the coastline within the Invercargill City Boundary. Therefore, there is a gap in the study area from Ferry Road at Oreti Beach to the edge of Awarua Bay and Waituna Lagoon.

The object of this report is to assist Environment Southland and Southland District Council consider the options for pro-actively managing the extensive growth occurring in Southland District Council's Coastal Resource Area. The intention is to further inform the Councils and the community, to help guide the formulation of strategic landscape management provisions and provide a framework to support future assessments and decision-making regarding the sustainable management of the Southland coastal environment.

These landscape considerations will form part of a wider Southland Coastal Study being undertaken by SDC and ES that will include natural hazards.

The outcomes of this report have led to the identification of the entire coastline as significant, the identification of 'outstanding' landscapes and natural features, and the identification of areas where opportunities exist for development. The nature of those opportunities will be clarified.

Limitations to the report include:

- Six person days were spent on site, on the ground. There is considerable difficulty in getting access to all of the extensive study area. Therefore the approach has made full use of desk-top resources.
- At this stage, there has not been any community or landowner consultation or stakeholder involvement. Community and stakeholder perceptions and values have been integrated only in so far as the reading of background material allows. We recommend that an appropriate consultation strategy is developed once initial study findings are available.
- This study does not address all 'landscape' values in full. In the case of cultural heritage for example, takata whenua values noted are limited to those values that have already been identified in the existing planning documents. This study seeks to identify and assess the more distinctive landscape characteristics, qualities and sensitivities.

1.4 Methodology

This assessment has analysed the Southland coastal environment based on a combination of viewshed and landscape characteristics. Figures 1 and 2 illustrate the extent of the study area and the division of regional coastal character areas. The division between these units are at three different scales: regional, district and local. At the regional scale the coast is divided into the following:

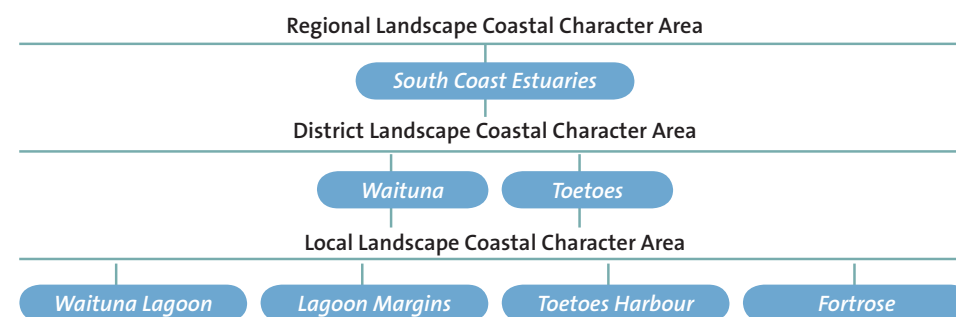
- Te Waewae Bay
- The Riverton bays and headlands
- The South Coast Estuaries
- Southwest Catlins

Within those regionally distinct areas, District Coastal Character Areas are defined on the basis of their particular physical and visual characteristics. The descriptions of these district landscape settings focus on the physical resource - the geomorphology, topography and land cover.

Analysis of these areas is based on judgements about the sensitivity of landscape character and visual aspects of each area.

Further division of the district landscape areas into local character units or 'places', allows the assessment to 'zoom' into a place in the landscape where there may be particular or pronounced values, sensitivities and/or development pressures.

The following diagram illustrates the relationship between Regional, District and Local Coastal Character Areas using the South Coast Estuaries region as an example. The Character Areas are colour-coded throughout the document to enable quick reference with the maps provided.



A series of GIS analysis maps were produced during the assessment process to inform the delineation of landscape character areas. Following the assessment, this series of maps has been expanded to communicate assessment outcomes.

1.4.1 Landscape Characteristics

The landscape characteristics within each character area have been gathered based on geomorphological patterns and variations in landform, ecology, key view and aesthetics and settlement and land-use patterns. This data has been sourced from aerial photos, NZMS topographical maps, the New Zealand Land Cover Database, GIS information supplied by the Council and existing planning documents .

The collection and analysis of this information has allowed landscape character areas at each level to be distinguished from one another and will help determine where and how future development may be most appropriately accommodated at the local level.

Geomorphology and landform:

The landscapes of the area are underwritten by geology and geomorphology, though not fully determined by them. An understanding of rock type, soil type and landform can tell a story about the history of land use in the area and aid the process of establishing physical constraints to and opportunities for further development. Topography can determine land use and define visual catchments.

Ecology:

The ecological investigation of the study area involved analysis of LENZ databases, aerial photographs, and planning documents.

Vegetation patterns also tell a story of land use and landscape value. Vegetation can contribute to a site's visual absorption capability. On the other hand, in some instances, the fragile character of some remnant indigenous vegetation can limit development opportunities.

Key views and aesthetics:

The landscapes of the southern coast are experienced in as many different ways as there are people who view them. Assumptions have been made regarding viewing expectations of residents and visitors, i.e. whether expectations are likely to be in accord with prospects for future growth or whether particular landscape areas are likely to attract people for whom any prospect of residential development would be out of context and dramatically reduce their experience.

For each character area, the following aspects were considered:

- key viewpoints/viewer locations,
- the level of visual enclosure and existing/potential screening elements, and
- the prominence/visibility of landscapes and features

Settlement and land-use:

The cultural and economic patterns of each character area are examined including main settlements, key tourist routes, and description of land use.

This study analyses how these patterns have affected the openness of the landscape, vegetation, extent and nature of modification e.g. roading patterns, residential patterns, prized views and scenic values.

1.4.2 Landscape Sensitivity

Two main factors determine the ability of a landscape to absorb change - the sensitivity of the character of the landscape, and its visual sensitivity. Sensitivity has been analysed under the umbrella of each district coastal character area, but includes reference to the local character units within these areas.

Landscape Character Sensitivity:

The analysis is based on judgments about the sensitivity of particular aspects of the landscape's characteristics, namely natural, cultural and aesthetic factors, and its overall quality/condition. To generalise, landscape character becomes more sensitive where levels of modification are lower, natural patterns and processes are dominant and relatively intact, or there are significant recognised values within the landscape, including scenic or aesthetic values. The values assessment is based on findings from the character analysis and from existing planning documents. Criteria include designations on both a national and local level as well as other factors indicating value, such as tranquillity, remoteness, wilderness and conservation interests.

Visual Sensitivity:

Visual sensitivity covers the visibility and the visual quality of a landscape character area as well as assumptions about the population likely to visually experience the area. The assessment of visibility of each landscape unit is based on findings from the on-site investigations and the photographic records. Landscape character areas identified as having low visual sensitivity are likely to be those with a combination of low visibility as a result of a relatively low viewing population, unlikely to be concerned by further modification.

1.4.3 Suitability for Development

Decisions about the capacity of different parts of the coastal environment will reflect the interaction between the sensitivity of the landscape in the area, the type and extent of change, and the way that the landscape is valued. In some instances opportunities to protect or enhance landscapes and ecological connections have also been identified.

There are some general criteria that facilitate a more objective landscape capacity evaluation process by providing a defined frame of reference. The following criteria (based on the characteristics, qualities and sensitivity identified above) have been used in this assessment:

- existing land use,
- patterns and scale of landscape character units,
- values placed on the landscape – these include ecological, cultural/economic, historic, transient, aesthetic and community/social values,
- visual absorption capability and viewer expectations, and
- scope for mitigation.

1.4.4 Recommended Management Considerations

A group of recommendations has been set out for each district coastal character area based on the development suitability outcomes.

The Southland coastal landscape character areas have been classified as follows:

Regional Coastal Areas	District Coastal Areas	#	#	Local Landscape Units
TE WAEWAE	Bluecliffs	1	A	Hump Burn
			B	Bluecliffs Beach
			C	Bluecliffs Terraces
	Waiau	2	A	Waiau River Mouth
			B	Waiau River Flats
	Orepuki	3	A	Coastal Cliffs
B			Lower Longwoods	
RIVERTON	Pahia	4	A	Monkey Island
			B	Pahia
			C	Ruahine Range
			D	Ruahine Back-slopes
	Colac	5	A	Kawakaputa Bay
			B	Lake George
			C	Oraka Point
			D	Colac Bay
			E	South Howells Point
	Riverton	6	A	Jacobs River Estuary
			B	Riverton township
	Otaitai	7	A	Otaitai Beach
B			Ferry Road	
SOUTH COAST ESTUARIES	Waituna	8	A	Waituna Lagoon
			B	Lagoon margins
	Toetoes	9	A	Toetoes Harbour
			B	Fortrose
SOUTHWEST CATLINS	Otara	10	A	Frasers Beach
			B	Otara
			C	Waipapa Beach
	Haldane	11	A	Haldane Road
			B	Slope Point
			C	Haldane Estuary
			D	Haldane Hills
			E	Haldane Bay
	Porpoise Bay	12	A	Curio Bay
			B	Porpoise Bay
			C	Porpoise Bay Hills
	Waikawa	13	A	Waikawa
			B	Niagara
			C	Yorke Road
			D	Progress Valley
			E	Brothers Point

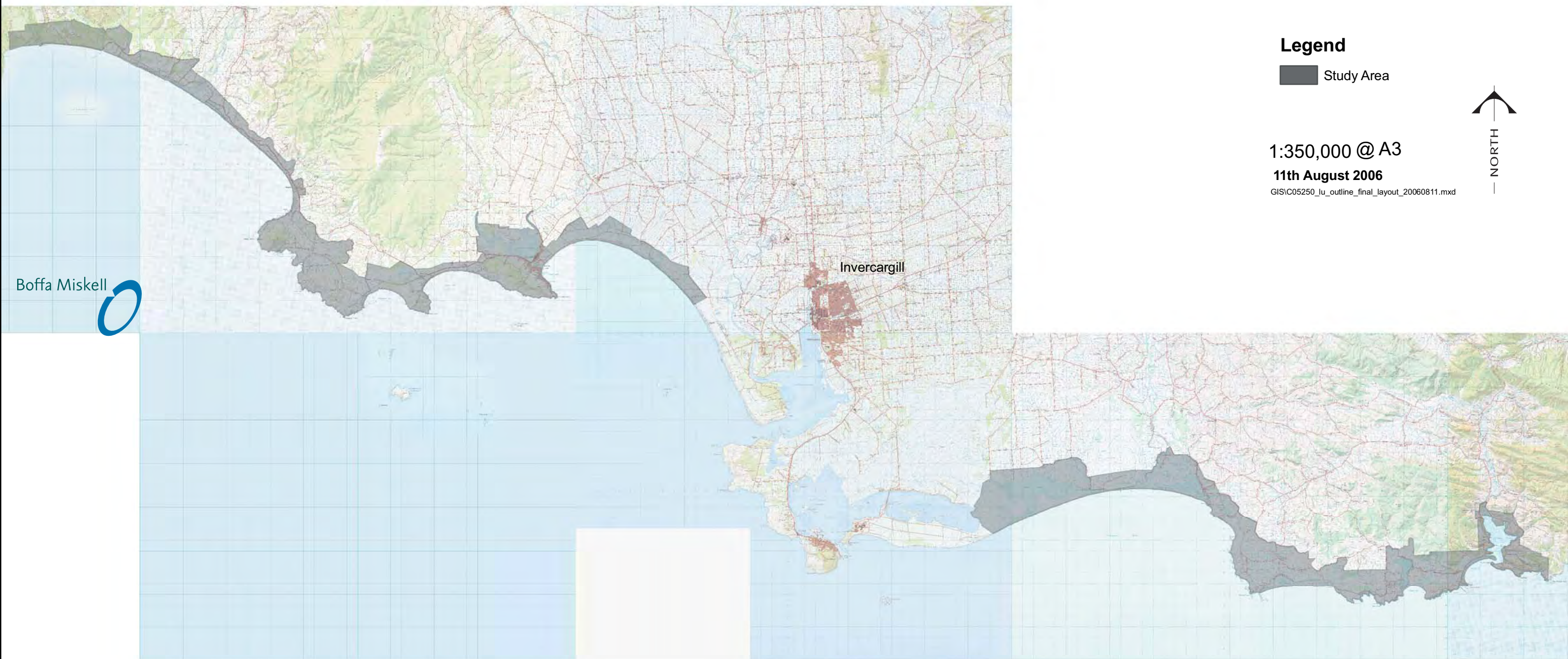


Figure 1: Southland Coast Study Area

0 5 10 20 Kilometres

Legend

Study Area

REGION

- Te Wae Wae
- Riverton
- Estuaries
- Southwest Catlins



1:350,000 @ A3

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Invercargill

Figure 2: Regional Coastal Character Areas