



Southland Coastal Landscape Study
DISCUSSION DOCUMENT

Boffa Miskell

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Prepared for
Environment Southland and Southland District Council
by
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August 2006

CONTENTS

EXECUTIVE SUMMARY	1		
1.0 INTRODUCTION	5	5.0 SOUTHWEST CATLINS REGIONAL COASTAL CHARACTER AREA	65
1.1 Background	5	5.1 Landscape Boundaries	65
1.2 Statutory Context	5	5.2 Otago District Coastal Character Area	65
1.3 Scope	6	5.3 Haldane Bay District Coastal Character Area	68
1.4 Methodology	6	5.4 Porpoise Bay District Coastal Character Area	71
2.0 TE WAEWAE REGIONAL COASTAL CHARACTER AREA	12	5.5 Waikawa Harbour District Coastal Character Area	74
2.1 Landscape Boundaries	12	BIBLIOGRAPHY	89
2.2 Bluecliffs District Coastal Character Area	12	APPENDIX ONE - METHODOLOGY	90
2.3 Waiau District Coastal Character Area	15		
2.4 Orepuki District Coastal Character Area	17		
3.0 RIVERTON REGIONAL COASTAL CHARACTER AREA	30		
3.1 Landscape Boundaries	30		
3.2 Pahia District Coastal Character Area	30		
3.3 Colac Bay District Coastal Character Area	33		
3.4 Riverton District Coastal Character Area	36		
3.5 Otaitai District Coastal Character Area	38		
4.0 SOUTH COAST ESTUARIES REGIONAL COASTAL CHARACTER AREA	54		
4.1 Landscape Boundaries	54		
4.2 Waituna Lagoon District Coastal Character Area	54		
4.3 Toetoes Harbour District Coastal Character Area	56		

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:

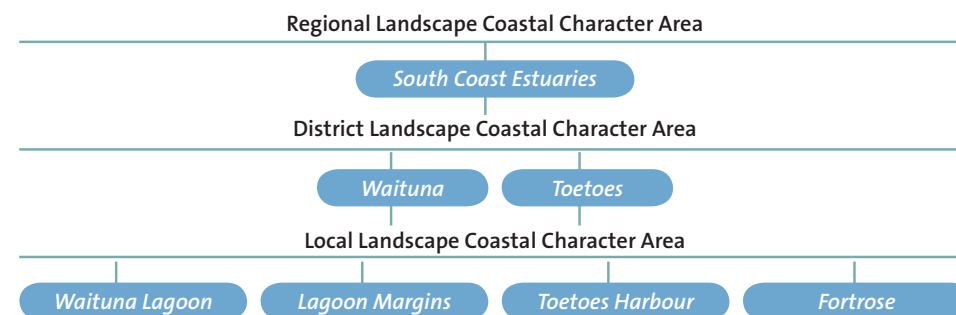
- Te Waewae Bay
- The Riverton bays and headlands
- The South Coast Estuaries
- Southwest Catlins

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:

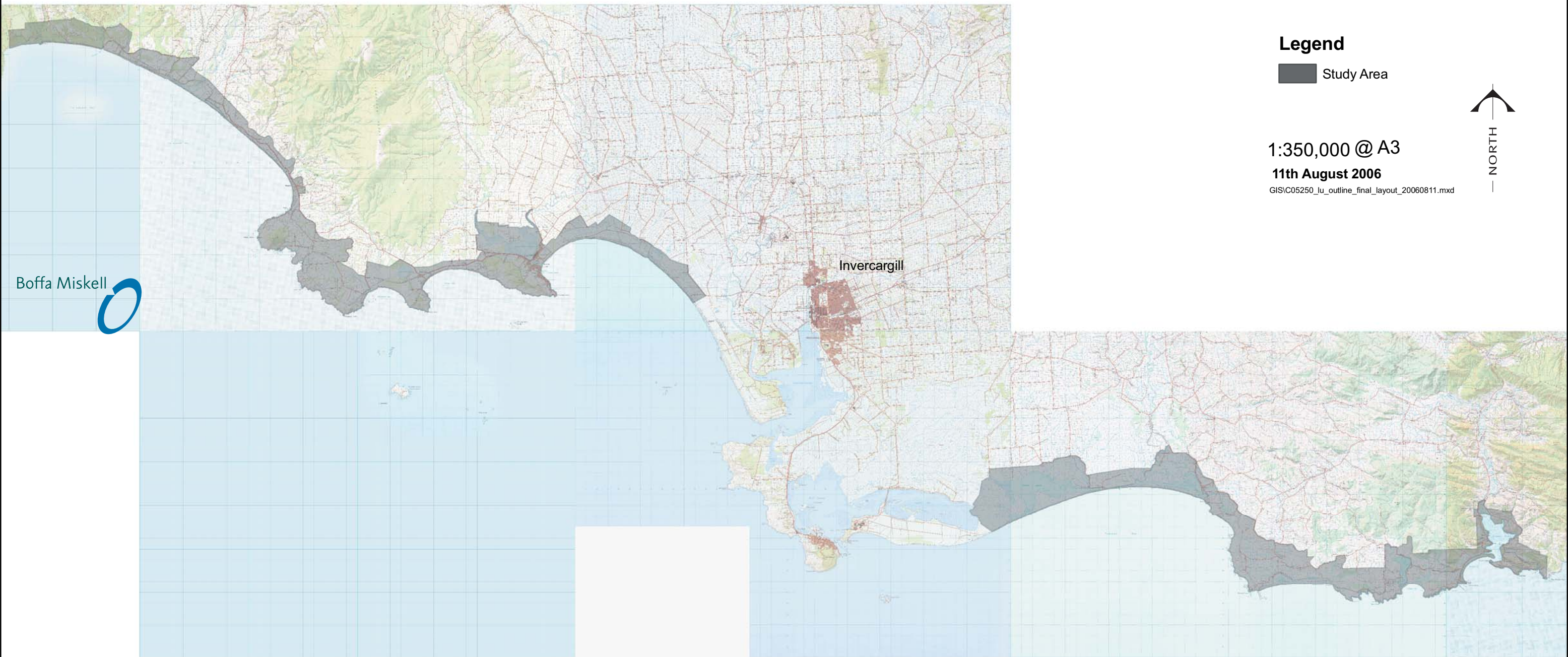
- existing land use,
- patterns and scale of landscape character units,
- values placed on the landscape – these include ecological, cultural/economic, historic, transient, aesthetic and community/social values,
- visual absorption capability and viewer expectations, and
- scope for mitigation.

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



0 5 10 20 Kilometres

Legend

Study Area



1:350,000 @ A3

11th August 2006

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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

11th August 2006

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Invercargill

Figure 2: Regional Coastal Character Areas

Section Two

Te Waewae Regional Coastal Character Area

2.1 Landscape Boundaries

The Te Waewae Character Area extends from Hump Burn in the west to Orepuki township in the east. See Figure 3.

The Shoreline

Te Waewae Bay is a very large, sweeping, bay - the largest embayment on the southland coast. Along the shoreline the beach varies from sand, to gravel, cobbles and boulders. Much of the shoreline is contained by high coastal cliffs which ring the bay and separate it from the land behind. The foreshore is very dynamic, with many of these cliffs subject to erosion.

At the mouth of the Waiau, the river has formed a lagoon and gravel barrier between the mouth and the sea.

The entire coast is important in Maori history.

The Coastal Platform

Papatotara Road and State Highway 99 connect the Bluecliffs area to Orepuki through Tuatapere where the road crosses the Waiau River. It is a dramatic and scenic drive around Te Waewae Bay as the road sweeps along the cliff-tops, providing expansive bay and mountain views in places. This road is part of the Southern Scenic Route, a route promoted for its scenic and tourist attractions.

Farming is the predominant land use activity within this character area. Very few coastal vegetation communities remain intact east of the Waiau River. There are small settlements within the coastal margins at Bluecliffs Beach, Waihoaka and Orepuki, as well as scattered clusters of farmhouses. Shelterbelts, often of macrocarpa or flax, feature regularly across this landscape.

Although the coastal margin, primarily east of the Waiau has been modified through farming practices and settlement, overall, natural character values remain high.

The Coastal Setting

In general, the cultural patterns in this landscape reflect informal, low levels of land use and development. Although the highway provides good access to this area, the landscape is generally more remote and less settled than the other regional coastal areas examined in this report.

The semi-braided Waiau River is a key feature in the Southland landscape. It forms a wide river valley, from Fiordland to the south coast. The Longwood Range also features prominently in the wider coastal setting, providing a forested backdrop for much of Te Waewae Bay and important visual feature bordering the Southland Plains. The Longwoods are a protected conservation area.

This area contains some natural, coastal recreation settings although easy access directly to the shoreline is limited. Popular recreation activities in this area include picnicking, tramping, scenic drives, fishing and seafood gathering.

Some of the key characteristics of the Te Waewae Bay area include its sense of remoteness, an open, rural character and the grand scale of the elements that make up this landscape.

2.2 Bluecliffs District Coastal Character Area

2.2.1 Coastal Environment Context

The Bluecliffs coastal character area lies at the western end of Te Waewae Bay where soft sea-cliffs separate the shoreline from the surrounding hills in a broad, shallow curve. This area extends from the Hump Burn in the west, to the pronounced river escarpment above Papatotara Road.

This is a landscape on the edge between the more wild, natural, and largely DoC managed land of Southwest Fiordland and the more modified farmed landscapes that dominate the river and coastal flats to the east. It is the midground in the grand views enjoyed by west-bound travellers on the southern scenic route.

Tourism and recreation are activities that are heavily dependant on the character and natural values of the Bluecliffs coastal character area – and to the Hump Burn local character area in particular. Visitors are drawn to this area for the recreational opportunities it offers in an unspoilt environment.

2.2.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Bluecliffs unit (see Figure 3) are:

Geomorphology and landform

- soft, eroding, high cliffs that separate the shoreline and the inland landscape

Ecology

- beech forest that covers the slopes across much of the Hump Burn unit.

Key views and aesthetics

- expansive and elevated coastal views from the main road and developed areas
- Fiordland National Park as a backdrop to this character area

Settlement and land-use

- A transition landscape -the edge between a conservation area and rural working character
- The sense of remoteness and low levels of built development to date
- The Bluecliffs beach crib settlement as a cultural feature in a predominantly natural setting
- The significance of the area as a recreation setting – particularly for activities such as hunting, tramping and fishing

2.2.3 Landscape Character Sensitivity

This character area has a high level of natural character, and high landscape and amenity values, particularly west of Rowallan Burn, in the local Hump Burn unit. Although there are pockets of forestry and modified grasslands here, natural patterns and processes found in the dynamic, eroding coastline, the indigenous forest covering much of these hills, and the rivers and streams, dominate this unit. The other units that make up this character area also

share the coastal cliffs and dramatic elevated views that contribute to high landscape and amenity values, although east of Rowallan Burn, the area develops more of a rural working character. However, there is a sense that this farmland has only recently been cut out of the bush margins and if left to do so, could return quickly to wilderness.

The crib settlement above Bluecliffs beach, near the mouth of the Waiau is a unique cultural feature in this landscape.

2.2.4 Visual Sensitivity

The Bluecliffs coastal character area blends into the midground/background views of west-bound travellers on the main highway as it skirts Te Waewae Bay.

The Hump Burn unit is visible from the Bluecliffs terraces and several no-exit roads branch into this character area. There is much potential to screen development in this unit due to the level of intervening vegetation and topography however, any conventional development in this unit is likely to be seen by most people as inappropriate in a relatively unspoilt landscape.

The Bluecliffs Terraces form an open landscape with a comparatively high visibility catchment with the cliff-tops and much of the upper slopes visible from the main road. Most of the Bluecliffs beach unit is visually separated from the adjacent units by the height of the cliffs above the beach.

There are a few residents in scattered farm dwellings and at the crib settlement who view various parts of this landscape character area from their properties.

Most visitors to the Bluecliffs landscape are likely to be visiting the beach, passing through to the Hump Ridge track or to one of many other recreational opportunities that extend beyond the study area. So far, there appear to be few visible signs of impacts from tourism and recreation in this area.

Overall, the visual sensitivity of this character area is considered relatively high.

2.2.5 Landscape Issues - Threats and Opportunities

The main landscape issues that need to be considered in this coastal character area are:

- clearing of the existing coastal shrublands
- erosion of the coastal cliffs
- clearing of the existing indigenous forest
- coastal housing development in otherwise predominantly unmodified area
- implementation of tourist infrastructure such as roading development
- expansion of forestry
- coastal housing development
- implementation of tourist infrastructure such as roading development
- expansion of forestry
- development Suitability Guidelines

2.2.6 Development Suitability Discussion

1A Hump Burn:

To date, tourism and recreation have not had extensive implications for the landscape character of the area. Promotion of or improvements to opportunities for these activities should continue to preserve the high natural values of this area. Housing development could compromise the sense of wilderness valued here at present.

1B Bluecliffs Beach:

This coastal strip has high coastal landscape values. The integrity of coastal escarpments and vegetation should be protected and the low-scale beach character of the existing crib/fishing settlements should be maintained. This unit cannot accommodate any extension to the current footprint of development without threatening the natural character of the area and diluting its unique character.

1C Bluecliffs Terraces:

These upper coastal slopes make up an attractive rural area containing little development. The landscape has a non-intensive, rural working character with semi-wild/semi-modified edges to the surrounding bush. This transitional character adds to the landscape's quality.

There is some capacity in this unit to accommodate new residential development, however the openness, expansive coastal views and transitional land-use patterns that make up this landscape also limit the extent of that capacity. A recent consent application for a proposed subdivision will introduce a new level of built development into this rural-wilderness fringe. In order for any further developments such as this one to be permitted in this area, they should have to take guidance in terms of siting, design and their overall relationship to the environment in which they are located.

2.2.7 Recommendations (see Figure 8)

Consider an 'Outstanding Natural Landscape' overlay in the Hump Burn landscape unit.

The character and legibility of the coastal cliffs along the Bluecliffs Beach landscape unit should be protected from conventional development – considered a significant visual and landscape character area.

Bluecliffs Terrace landscape unit is considered suitable for further small-scale rural housing.

2.2.8 Points for Further Discussion

Geomorphology and landform

Investigate ways in which erosion of coastal cliffs may be minimised.

Ecology

Discourage the clearance of indigenous vegetation in this coastal character area.

Investigate opportunities to protect/restore/extend coastal shrubland, particularly along coastal cliffs and gullies where ecological connections can be made between the shoreline and coastal setting.

Encourage new developments to use native species generally found within this character area.

Key views and aesthetics

Avoid development that intrudes into open views of the ocean and coastline from public viewpoints such as the main road.

Encourage new developments to seek to reinforce the local transitional rural character in terms of scale and integration with the surrounding landscape.

Settlements and land-use

Avoid large-scale commercial forestry developments.

Avoid regular forms of housing development in the Hump Burn unit. Small-scale, sensitive recreational and tourism related development that supports the area as the 'gateway' to the Southwest Coast Conservation Area may be accommodated with care in siting and design.

There is some potential for small-scale development opportunities in the Bluecliffs Terraces area so long as the siting and design of new buildings can be successfully integrated with the landscape character of this area and is not visually dominant from public viewpoints.

Development of road corridors or recreation access in the Hump Burn landscape unit should maintain the wild and scenic values of this area.

2.3 Waiau District Coastal Character Area

2.3.1 Coastal Environment Context

The Waiau River, and the mouth in particular, is the dominant feature that defines the Waiau coastal character area and distinguishes it from the landscape to the west and east. Although modified by hydro development, the Waiau remains a significant river in the southland region, valued for cultural, recreational, ecological and geomorphological qualities.

Overall, this landscape is fairly flat but with river terraces creating some distinctive linear variation in topography. These river flats are farmed to the river margins and landcover is predominantly improved pasture. Paddocks are divided by shelterbelts but the landscape is generally open allowing long views up or over the river to the dark hills and mountains beyond.

At the mouth, the river has formed a long narrow lagoon that spreads east and west inside a gravely beach barrier.

Development in this area can be seen as a typical rural farming settlement pattern with housing scattered fairly evenly across this landscape. Settlement in this area is no doubt related to relationships with the road and the river, and particularly the location of the bridge across the Waiau being further up-valley in Tuatapere, the largest township serving the Te Waewae area. The Department of Conservation manage a small pocket of land through which the lower river flows.

2.3.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Waiau area (see Figure 3) are:

Geomorphology and landform

- The relationship between the mouth of the river and the sea – particularly its dynamic, constantly changing nature
- The significance of the river as a natural feature (in spite of its modifications as a result of the Manapouri Power Scheme) in an otherwise modified agricultural setting

- The legibility of river escarpments

Ecology

- The significance of the lagoon at the mouth in terms of natural character, landscape and amenity values – eg for recreational fishing/whitebaiting, mahika kai and significant habitat for important bird and fish species

Key Views and aesthetics

- Sweeping vistas from the ocean to the mountains and inland up the river valley are possible from parts of the main road through this character area.

Settlement and land-use

- Fertile, fairly intensively farmed river flats
- Scattered farmsteads and small cluster of old fishing cribs

2.3.3 Landscape Character Sensitivity

This landscape contains a highly sensitive lagoon ecosystem and the vulnerable riparian river margins of a significant southland river. The lagoon at the river mouth provides important habitat for threatened wildlife. The riparian margins along the lower river are important for supporting its own ecological habitat but their quality also has a bearing on the quality of the adjacent lagoon habitat below.

Few remnants of ecological significance remain beyond the lagoon and riparian margins. Land cover in the Waiau Flats unit is predominantly characterised by improved pasture and exotic shelterbelts.

Those visiting the area for its recreational values, such as anglers, whitebaiters or bird watchers, are likely to be most sensitive to any reduction in the natural qualities of this landscape.

Overall, the natural character and landscape values of much of this area are high. In spite of existing levels of modification due to farming, gravel extraction and the presence of some cribs on the coastline, this landscape should be considered highly sensitive to further change.

2.3.4 Visual Sensitivity

Views out from the shoreline and river mouth are relatively contained by the surrounding river terrace faces, however overall, this landscape is relatively open and elevated vistas are possible across the area from roads on both sides of the river.

The lagoon is a popular location for a number of activities and expectations of these visitors are likely to be sensitive to visible modification close-by, particularly if it is not rural in character.

2.3.5 Landscape Issues - Threats and Vulnerabilities

The main landscape issues that need to be considered in this coastal character area are:

- Deterioration in water quality and habitat of riparian river margins and lagoon due to erosion, nitrate levels etc because of proximity and dominance of agricultural systems
- Threats to the ecological and recreation values of the lagoon due to landscape change
- Further development of gravel extraction or beach crib sites
- Threats from housing development on the open character of the rural landscape and settlement patterns and loss of expansive views from public viewpoints

2.3.6 Development Suitability Guidelines

2A Waiau River Mouth:

The Waiau River Mouth is a particularly important and distinctive natural feature of the Te Waewae Bay landscape. Development in this local character area would not be appropriate due to the sensitive nature of the area and the need to protect high natural character, landscape and amenity values.

2B Waiau Flats:

The Waiau River is also a significant natural feature in the Te Waewae Bay and broader Southland landscape. Protection of the riparian river edges in this area could enhance the

natural character, landscape and amenity values of both the river and lagoon. Landscape restoration/enhancement initiatives such as fencing off riparian edges from stock should be encouraged where possible.

For the most part, development within and nearby this area appears to be limited to scattered farm houses and small clusters of dwellings at Papatotara on the true right bank and Te Waewae on the left (both beyond the study area). There is capacity to accommodate further development in this unit as long as impacts on the sensitive riparian margins are avoided.

2.3.7 Recommendations (see Figure 8)

Consider the classification of the Waiau River Mouth landscape unit as an Outstanding Natural Feature.

The Waiau Flats landscape unit is considered suitable for further small-scale rural housing.

2.3.8 Points for Further Discussion

Geomorphology and landform

Promote landscape management practices that reinforce the significance of the lagoon and river mouth as legible, dynamic natural features.

Ecology

Investigate habitat restoration on Waiau lagoon to maintain and enhance significant natural character, landscape and amenity values.

Consider planting of riparian river margins to enhance habitat and water quality of the river and lagoon.

Key views and aesthetics

Development in this area should be sited sparsely so as to minimise visibility from the roads, the lagoon and the shoreline and to retain an expansive, open character to views from these points.

Settlement and land-use

Minimise potential visual impacts on current rural settlement patterns by maintaining rural character of existing nearby settlements when siting any new dwellings.

Investigate options for encouraging riparian boundaries to be fenced off to protect them from disturbance and general agricultural impacts.

2.4 Orepuke District Coastal Character Area

2.4.1 Coastal Environment Context

This exposed coastal character area is a sloping band of land between the Longwoods and the Te Waewae coastline. The southern scenic route (State Highway 99) runs through this area following the long sweep of the bay. The landscape above the road is characterised by the undulating gullies and spurs of the lower Longwood Range, which slope south towards the coast. Between the road and coast is a narrow strip of relatively flat or gently undulating clifftops, set high above the shoreline. These coastal cliffs are occasionally incised by a stream or watercourse set into a deep gully. Shelterbelts of flax and macrocarpa pine trees are shorn by strong winds. Land cover is predominantly modified pasture.

This landscape generally has a very open character. Expansive scenic views are possible from stretches of the main road, across Te Waewae Bay to dark hills of native bush and distant Fiordland peaks.

The main streets of Orepuke form a triangle, set into the lower Longwood slopes, immediately adjacent the main highway. This small settlement located in the southeast curve of the immense bay, has a quiet rural village character. Elsewhere, settlement is fairly sparse and follows a typical countryside pattern with both isolated and occasional small clusters of Public access to the beach is limited to a few points.

2.4.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Orepuke coastal character area (see Figure 3) are:

Geomorphology and landform

- The high sea-cliffs that separate the shoreline and the inland landscape
- The streams that flow through this area from the Longwoods to the sea, some

times in deep gullies, eroding near the coast

Ecology

- The relationship of the Longwood Forest as a backdrop to this coastal character area

Key views and aesthetics

- The visual coherence and legibility of the coastal margin
- The expansive, elevated, dramatic and highly scenic nature of coastal views from the State Highway
- These expansive ocean views also allow glimpses of interesting sea-life such as Hector's dolphins, whales and seabirds.
- High winds evident in the shorn shapes of the macrocarpa trees

Settlement and land-use

- The small settlement of Orepuki
- The rural, working character of this area
- The limited number of access points to the beach

2.4.3 Landscape Character Sensitivity

The coastal cliff-tops in this character area are intensively farmed right to the edge of the sea-cliffs. Farmsteads and ancillary farm buildings and structures dot this coastal strip between the sea and the highway that runs through this area. It is a coastal edge that has seen considerable rural modifications and taken on a rural working character and yet despite this overlay, the powerful coastal elements remain. Natural character values, though reduced, remain high. These soft, sweeping cliffs are a significant, coherent landform but they are vulnerable and in many places are eroding into the sea, taking the farmland with them.

Any development in this area threatens its unique character and by diluting the powerful legibility of this coastal landscape.

The landscape above the road has experienced similar agricultural modifications including isolated forestry blocks. The variation in the undulating slopes and the absorbing framework of the bush above increases the capacity of this landscape to absorb further development. The existing settlement of Orepuki has modified its surrounding environment and is capable of accommodating further growth within the settlement, without significant further impacts on this landscape.

2.4.4 Visual Sensitivity

This length of coastline provides a unique and spectacular scenic experience for residents and travellers along the state highway. It has a predominantly open character however there are a few variations in topography and some intervening shelterbelts that visually separate some areas and restrict views to the sea in places.

The landscape on the inland side of the road is capable of visually absorbing further development.

2.4.5 Landscape Issues (threats and opportunities)

The main landscape issues that need to be considered in this coastal character area are:

- clearing of the existing coastal shrublands
- shelter planting adjacent to the sea-cliffs that impinges on coastal views
- erosion of coastal cliffs and gullies
- development that impinges on coastal views
- developing coastal access

2.4.6 Development Suitability Guidelines

3A Coastal Cliffs:

This coastal strip is a modified rural area with dramatic views and areas of expansive open character. The physical and visual relationship between the shoreline and the eroding, upper sea-cliffs, is a particular feature of this area. This unit should be managed essentially as it is with no further conventional development encouraged.

There may be opportunities to enhance remnant coastal vegetation such as considering ecological links between the Longwood Forest and the coast through riparian connections. These are efforts that may also contribute to stabilising eroding gullies.

There may be opportunities to increase the number of public access points to the beach or lookout points without detracting from the areas high natural character.

3B Lower Longwoods:

This unit has a pleasant rural character however the topography and vegetation provide some ability to absorb small-scale, sensitively located development without detracting from that character. Any proposals for further development should be comprehensively assessed to ensure the existing rural amenity values and the attractive transition between the Longwoods and the farmland are maintained.

Given the relatively contained visual landscape and modified context of the small Orepuki settlement, there appears to be potential for further growth in this area. While a strategic, integrated development review would enable all resource management issues to be considered, from a landscape perspective concentrating growth in a few areas which have already been modified and contain some existing infrastructure is preferable to allowing ribbon development to extend along this coastline.

2.4.7 Recommendations (see Figure 8)

No further conventional development encouraged in the Coastal Cliffs unit – considered a significant visual and landscape character area.

The Lower Longwoods landscape unit is considered suitable for some forms of small scale development

The existing settlement of Orepuki is considered a suitable area to accommodate further development. Prepare a settlement structure plan of the township of Orepuki to focus on identifying development opportunities, densities and the extent and nature of future growth.

2.4.8 Points for Further Discussion

Geomorphology and landform

Investigate appropriate mechanisms to protect legibility and character of coastal cliffs and ensure that any further land disturbance is minimised.

Ecology

Encourage restoration/enhancement of coastal vegetation around the sea-cliffs, particularly in gullies - opportunities to make ecological riparian connections between the shoreline and wider coastal setting.

Encourage protection/enhancement of bush pockets on lower Longwood slopes.

Key vistas and aesthetics

Discourage tall, linear shelter planting parallel to the road and the sea-cliffs that may screen views.

Settlement and landuse

Investigate opportunities to enhance coastal recreational opportunities.

Restrict the size of forestry blocks in the Lower Longwoods unit and prevent forestry in the Coastal Cliffs landscape unit.

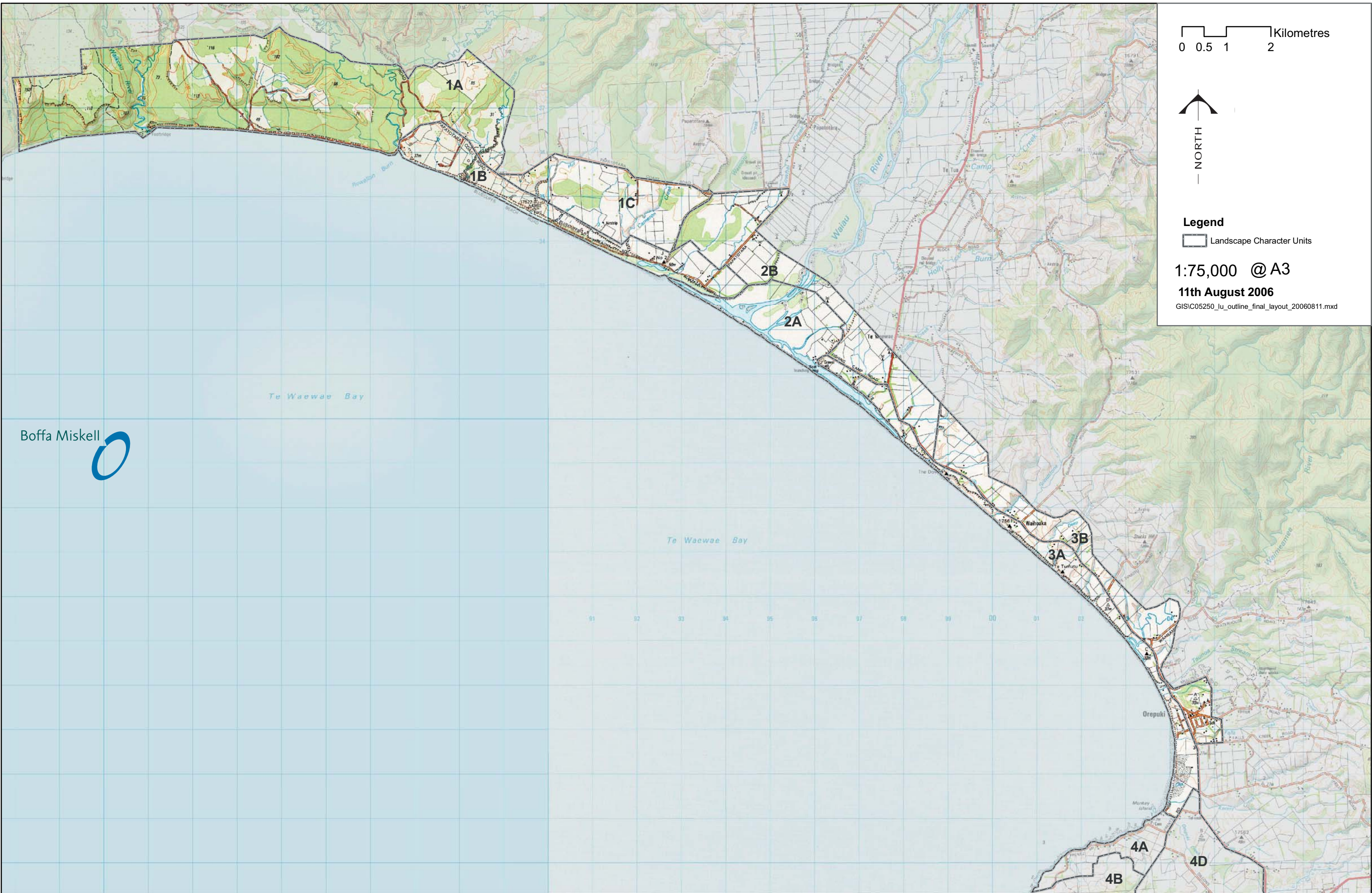


Figure 3: Te Waewae Bay Regional Coastal Character Area






Figure 4: Te Waewae Bay - Land Cover

0 0.5 1 2 Kilometres



Legend

-  Landscape Character Units
-  SNA areas
-  Reserves

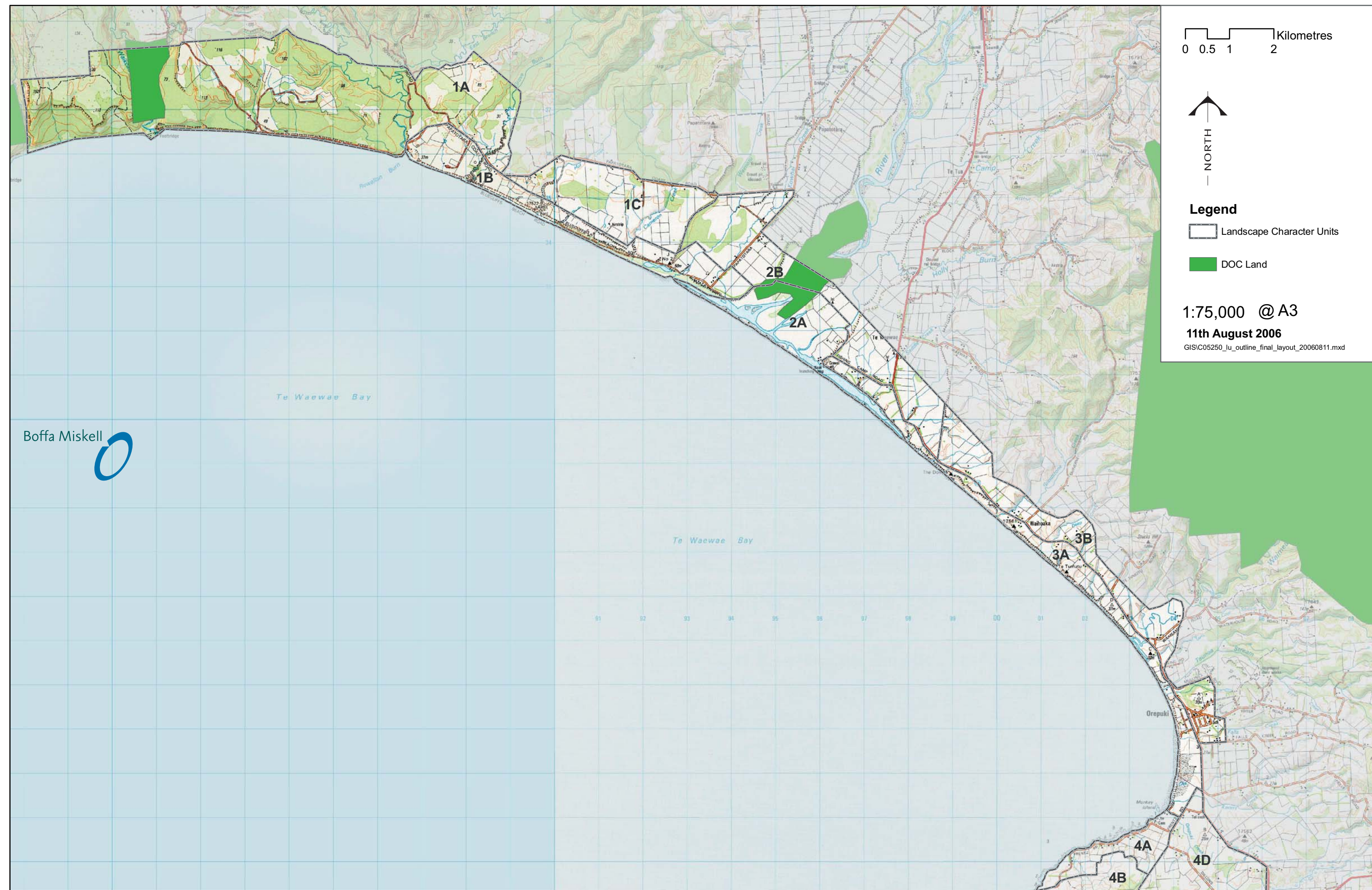
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Figure 5: Te Waewae Bay - Reserve Areas



Boffa Miskell

Figure 6: Te Waewae Bay - DoC Land

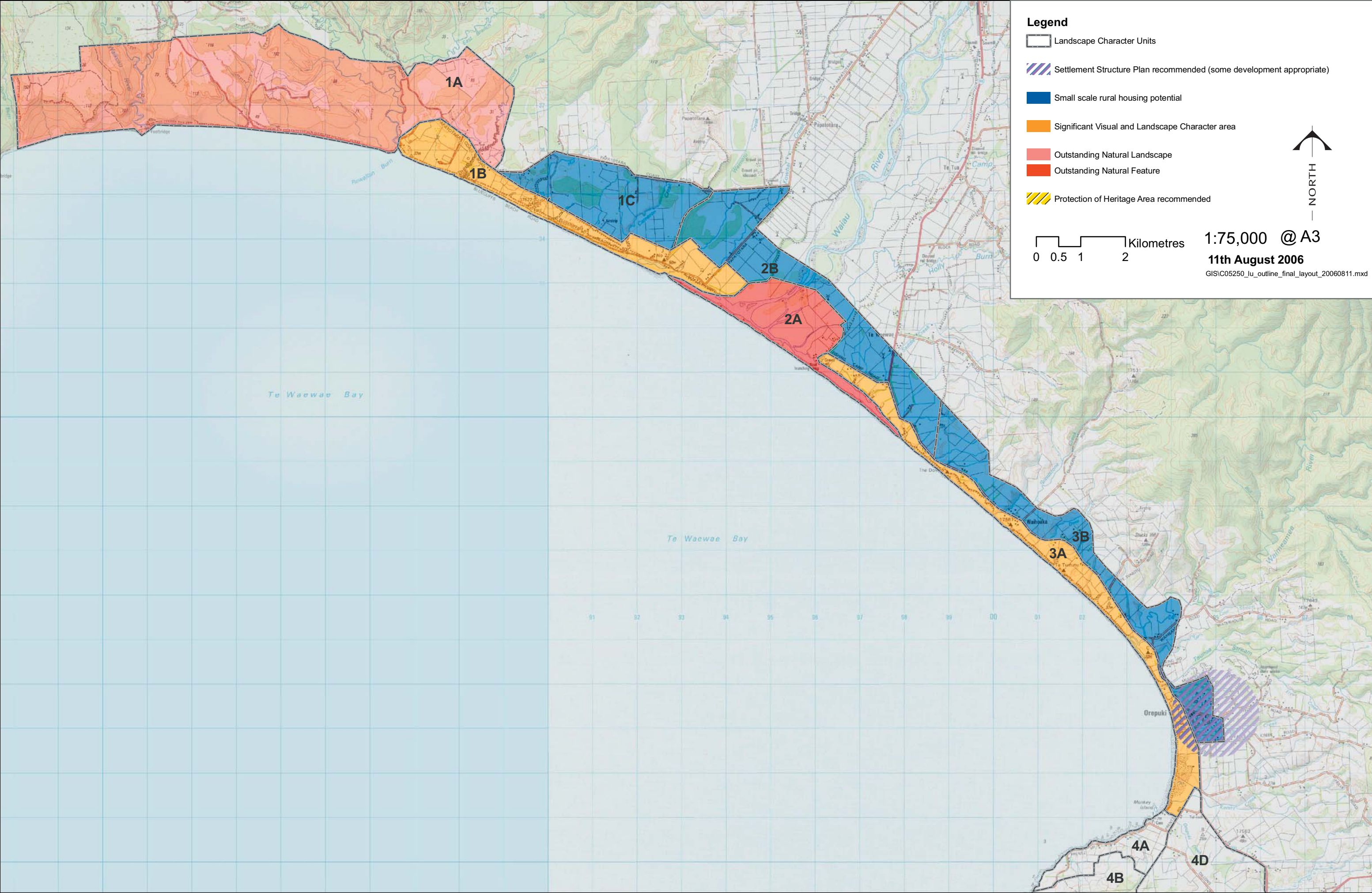


Figure 8: Te Waewae Bay - Development Suitability

Key Landscape Characteristics



Expansive views west across Te Waewae Bay to the mountains of Fiordland National Park



The pastoral landscape of the Waiiau river flats with the bush covered Longwood Range in the distance

Key Landscape Characteristics



Interpretation of some of the sea-life and other attractions of Te Waewae Bay



The Waiiau River, where it flows through Tuatapere



The cliff-tops above Bluecliffs Beach



The Hump Burn Landscape unit marks the edge between forested conservation areas and rural, working farmland

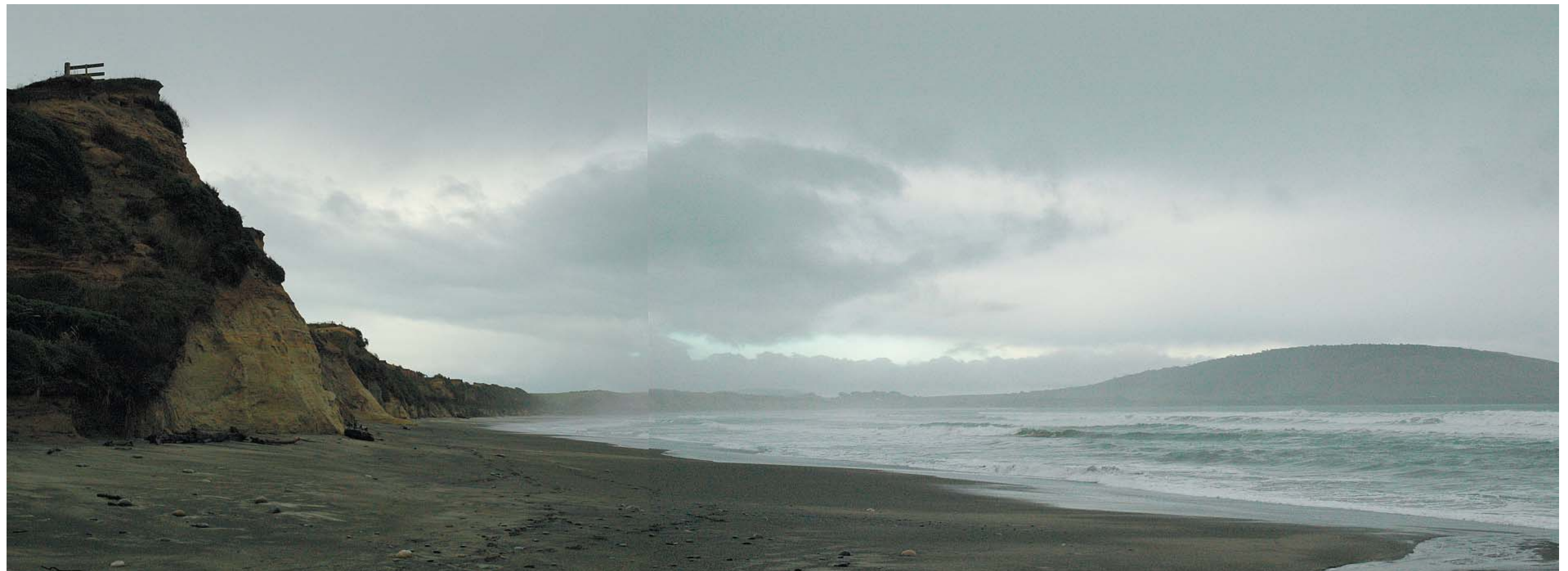


Bluecliffs beach cribs overlooking Waiiau River Mouth and Lagoon, and wind-shorn vegetation

Key Landscape Characteristics



The open character of the Waiau Flats landscape provides expansive views across the river to the hills and mountains beyond



The soft, crumbling seacliffs that separate the shoreline from the coastal platform are a key feature of Te Waewae Bay

Key Landscape Issues



Development that may impinge on views and the relationship between shoreline and coastal margin



The natural character of the lagoon system is modified by encroaching farmland



Maintaining the transitional nature of this landscape

Section Three

RIVERTON REGIONAL COASTAL CHARACTER AREA

3.1 Landscape Boundaries

The Riverton Coastal Character Area extends east from the coast around Pahia Point to Otaitai Beach/upper Oreti Beach at Ferry Road. See Figure 9.

The Shoreline

The shoreline between Pahia and Riverton is generally rocky and indented, with small bays separated by rugged headlands with the exception of two large sandy embayments at Kawakaputa Bay and Colac Bay. Rock features include crags, pillars, boulder beaches, reefs and off-shore stacks and islands.

Between Riverton and Ferry Rd, the shoreline is dominated by dunelands and salt marsh. The mouth of the Jacobs River estuary is an important feature in the town.

The shoreline in this area is valued for various types of recreation activity including boating, swimming, surfing, picnicking and rock climbing.

There are many sites of importance to Iwi in this coastal area including: for mahika kai such as mussels, paua, kina and koura, for kelp, harakeke and raupo, for urupa, waahi tapu sites, azullite, middens and canoe landing sites.

The Coastal Platform

The landscape in this coastal platform is characterised by rolling, undulating topography and a wet coastal plain. Land-use and land cover are dominated by agricultural patterns.

This area once supported extensive areas of pingao sandfield dunes and other indigenous vegetation communities however very few coastal communities remain intact. Nevertheless, although the coastal margins and dune systems have been modified, natural character values remain high and those remaining areas such as coastal tussock grasslands, coastal gravel, mudflats, dunes and peatland ecosystems provide important habitat for a diverse

range of species.

Significant protected areas in this regional landscape type include: Lake George Wildlife Management reserve, Pahia Hill Scenic reserve, Mores Scenic Reserve and Howells Point Reserve.

The Coastal Setting

The backdrop to much of this landscape area is dominated by the Longwood Range, indigenous forest which is largely managed by the Department of Conservation as part of the conservation estate. The lower slopes have generally been converted to pasture though some forest remnants remain. Elsewhere, the landscape setting is dominated by the agricultural southland plains.

This regional character area appears to be the most populated of the four regions examined in this study. It contains a number of small coastal settlements and clusters of dwellings as well as the larger township of Riverton.

There is an important history of goldmining in the area which occurred throughout the Longwoods and is still evident at Round Hill.

This area provides some of the most easily accessible coastal recreation opportunities near Invercargill. Coastal oriented activities include picnicking, scenic driving, swimming, surfing, walking, seafood gathering and fishing and duck hunting. The Longwoods provide a broad range of recreational opportunities including hunting, walking, picnicking, mountain biking and 4WD/motorbiking.

3.2 Pahia District Coastal Character Area

3.2.1 Coastal Environment Context

Pahia Hill, a smooth round outcrop marking the southeastern end of Te Waewae Bay, is the dominant landscape feature in this character area. Native shrublands form a distinctive cap on the top of the hill. The coastline of this area is characterised by low headlands with reefs and islands offshore, and sheltered coves. Inland, the landscape has a varying topography including the relatively smooth back-slopes of Pahia Hill and the Ruahine Hill range, and more complex, undulating hills further inland towards the Longwoods.

In this instance the study area has been extended beyond the Coastal Resource Area. BML considers the CRA is an accurate reflection of the dominant coastal zone however there are areas where some influence and characteristics of the coastal environment extend further than the boundaries of the CRA and they have been included for the purposes of this study.

The main road bypasses the coastline, skirting the outer extent of the study area at the base of the Longwoods. However there are a number of minor roads that provide access across this character area.

3.2.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Pahia coastal area (see Figure 9) are:

Geomorphology and landform

- The rounded form of Pahia Hill is a key feature in the area
- Monkey Island is a distinctive landscape feature. It is the anchor stone of the Takitimu canoe and a popular picnicking and swimming site
- Rugged, remote and exposed headlands and intimate, rocky bays

Ecology

- The landscape includes some remnant native shrublands and coastal herbfields

Key views and aesthetics

- The visual prominence of Pahia Hill
- High visibility of the Ruahine back slopes
- Expansive coastal views from an elevated minor road in the area

Settlements and land-use

- The historic and unique character of the fishing settlement at Cozy Nook
- The status of Pahia Hill as a Scenic Reserve

3.2.3 Landscape Character Sensitivity

This is a predominantly modified rural area with a pleasant, green, agricultural landscape and a rugged coastline with little public access to much of it.

Most of Pahia Hill is grazed with the native vegetation on top fenced off to protect it from grazing. Its Reserve status provides protection from further development. The gentle western slopes of Pahia Hill that overlook Te Waewae Bay have been farmed in the past and accommodated a small group of dwellings at the end of the road. The predominantly rural character of this landscape has recently changed due to new subdivisions constructed in this area. At the time of the field work for these investigations, no houses had been constructed however the infrastructure had been put in place. The location of the new development is very close to the low, coastal cliffs above the shoreline and the large number of lots in this location will have a considerable impact on the natural character of the coast in this part of the character area.

The intimate character of the small rocky bays is sensitive to large-scale development or landscape change and Cozy Nook, will be particularly sensitive due to the threat to dilute its unique historic connections.

The varying relief and modified and intensively managed rural character in the area between the Ruahine back slopes and the main road provides potential for absorbing further development if the visible ridgeline and upper slopes are avoided.

3.2.4 Visual Sensitivity

The southern face of Pahia Point is largely screened by Pahia Hill while the northern slopes are highly visible to travellers on State Highway 1. These grazed slopes are smooth and open. New development near Monkey Island is in a relatively visible area.

Similarly, the north facing slopes between Ruahine Hill and Wakapatu Point are highly visible and relatively open in character. Having said that however, there are some variations in topography and textures that would help to absorb landscape change in this area.

The landscape between the SH and these back-slopes is more complex - dissected and undulating, creating a variety of shadows, textures and spaces. There is capacity in this area to visually absorb further development without adversely affecting its pleasant amenity values.

3.2.5 Landscape Issues (Threats and Opportunities)

The main landscape issues that need to be considered in this coastal character area are:

- Residential development pressures
- opportunity to improve the ecological gradient of protected vegetation on Pahia Hill by extending the protected area further down the slopes to the shoreline.
- grazing and trampling of coastal vegetation- possibly along dunelands and marshes
- removal of coastal forest and destruction of coastal turf communities at Pahia Headland - not currently well represented in protected areas.
- plantation forestry

3.2.6 Development Guidelines for Local Character Areas

4A Monkey Island:

This is an attractive coastal, rural area with northwest oriented slopes, expansive views over Te Waewae Bay and a small cluster of cribs/farm dwellings along the road, sheltered somewhat by the impressive landform of Pahia Hill. This area has a high level of landscape and amenity value although natural character values have been reduced by agricultural and residential-related modifications. It is also an important site as the anchorstone for the Takitimu waka. The area is becoming more intensively developed with a large new subdivision currently under construction, close to the sea-cliffs. The nature of this suburban-style development may impact adversely on the current predominantly rural, coastal character of the area. In order to retain the area's values, the extent and nature of further development needs to be carefully addressed. This area does have potential to accommodate some growth, however it needs to be planned in a strategic and sensitive manner.

4B Pahia:

Pahia Point should be seen as a separate entity from adjacent character areas. This southern edge of the headland, beyond the road, is considerably more remote and wild and visually separated by the landform from inland areas. Despite limited visibility, the character of this area is considered particularly sensitive to landscape change and development here should not be encouraged.

4C Ruahine Seacliffs:

This rugged, southwest facing coastal strip currently contains little apparent development. It is generally enclosed and not highly visible however it displays high levels of natural character and some historical values which prevent much of the area from being suitable for conventional development. However, there may be some opportunities for small-scale, sensitive development in strategically identified locations where it could be absorbed into the landscape.

4D Ruahine:

The northeast oriented slopes in this area are comparatively open and visible to travellers on local roads and from parts of SH 1. There are some dips and gullies however that may provide opportunities to absorb some landscape change, though this should be restricted to the lower slopes. Further north, beyond these slopes, this rolling rural countryside may also provide some opportunity to absorb small-scale growth.

3.2.7 Recommendations (see Figure 14)

Consider the classification of the Pahia landscape unit as an Outstanding Natural Feature.

Initiate a strategic settlement structure plan for the Monkey Island and Ruahine Sea-cliffs landscape units in order to define the nature, density, extent and character of any future development.

The inland Ruahine landscape unit is considered suitable for some forms of small-scale development.

Recommend protection of historic character at Cozy Nook.

3.2.8 Points for Further Discussion

Geomorphology and landform

Protect the remote and wild character of this rocky coastline with its intimate bays by ensuring any development is discreet and environmentally sensitive and that land disturbance is minimised.

Ecology

Investigate opportunities for protection of coastal forest and coastal turfland at Pahia Point while reviewing potential for encouraging recreational/educational opportunities.

Key views and aesthetics

Protect the expansive views of Te Waewae Bay from the Monkey Island recreation area.

Protect the highly visible ridgelines and prominent upper slopes in these landscape units.

Settlements and land-use

Restrict development on Pahia Point and Pahia Hill and identify recreational opportunities in this area.

3.3 Colac Bay District Coastal Character Area

3.3.1 Coastal Environment Context

This coastal character area is distinguished by the attractive, sandy, crescent-shaped Kawakaputa Bay and larger Colac Bay, and the prominent, rocky headlands that contain them. The coastline is backed by low-lying, swampy ground that includes the Lake George Wetland Reserve.

Colac Bay is the main settlement in this area, centred primarily in the western corner of the bay. Significant, recent development pressures are changing the character of this bay, particularly visibly so in the form of the extension of housing in a ribbon along the sandy foreshore and creeping up the slopes of both headlands.

Access to Colac Bay is off the main highway which passes close by, beyond the dunes. Inland from the road, the land is farmed but includes pockets of indigenous vegetation and some small forestry blocks.

3.3.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Colac Bay coastal character area (see Figure 9) are:

Geomorphology and landform

- contained between prominent, protruding headlands
- Lake George with surrounding peatlands

Ecology

- lowland matata-flaxland-sedgeland in wetlands
- the dune ecosystems that back the bays

Key views and aesthetics

- scenic values of attractive sweeping, sandy bays

Settlement and land-use

- settlement of Colac Bay
- Lake George is a DoC Reserve

3.3.3 Landscape Character Sensitivity

There is considerable development and modification of the Colac Bay area but little apparent development at Kawakaputa Bay with the exception of a small group of dwellings in the southwestern corner. A number of coastal roads cross this area including State Highway 99.

Outside of the settlements, the area is mostly farmed however it also contains extensive, sensitive dune and wetland ecosystems and rugged headland landforms with high natural character and landscape values.

3.3.4 Visual Sensitivity

The Colac Bay character area is an attractive coastal environment and a popular scenic and recreational destination.

There are a number of coastal roads through this area that provide easy access to Colac Bay though Kawakaputa Bay is more removed and only the southwest corner can be easily accessed.

Colac Bay is highly visible for much of SH 99 between the Riverton saddle and near Lake George. Intervening vegetation and the low lie of much of this stretch of road minimise expansive vistas. The Colac Foreshore Road provides access to the bay off the highway, and panoramic views of the bay are currently possible from this road. Recent housing developments on the dunes immediately east of this road will limit the expansiveness of some views once the dwellings are constructed in the foreground.

Kawakaputa Bay and the Lake George area are less visible and likely to be viewed by considerably fewer numbers of people.

3.3.5 Landscape Issues (Threats and Opportunities)

The main landscape issues that need to be considered in this coastal character area are:

- Residential development pressures - Coastal ribbon development and development on prominent headlands
- Exotic forest plantation
- Drainage of swamps and peatlands
- coastal pingao sandfield restoration opportunity in the Kawakaputa Bay area

- coastal forest restoration opportunity in Kawakaputa Bay
- opportunity for restoration of natural corridor from Lake George to Kawakaputa Bay
- maintaining/enhancing easy access to coastline and coastal recreation opportunities

3.3.6 Development Guidelines

5A Kawakaputa Bay

The existing small cluster of dwellings at Kawakaputa Bay is mostly tucked into the western curve of the bay and not visually apparent. Natural character, and landscape values are high and it contains important dune forest despite the area having been modified in the past with grazing and gold mining operations. This bay has a low threshold for absorbing development. Should further development be permitted it must be carefully sited and address the rural, relatively isolated character of this bay. The sensitive nature of the dune systems at the eastern end of the bay means that any development here would threaten these landscape values. Given the level of development currently occurring in Colac Bay, there is an opportunity to maintain the current low level of modification in this bay. This also creates an opportunity to enhance the landscape, amenity and natural character values by creating an ecological corridor between Lake George and the eastern corner of Kawakaputa Bay and Oraka Point. There are few intact sequences like this in Southland.

5B Lake George

Housing development should not be permitted and the area continued to be managed as a reserve.

5C Colac Bay

The bulk of the settlement in this area has historically been concentrated at the sheltered, western end of Colac Bay, between the coast and the highway. However, recent growth is extending development in ribbon-like fashion, east around the bay, to the slopes above Tihaka Road. Much of Colac Bay is now developed to a level of modification that has reduced

natural character values, although landscape and amenity values remain high. Nonetheless, while the doors to development have opened here, and there is capacity for further growth, given the dominance of the coastal environment in this landscape unit, the nature, location and extent of any further development and the treatment of existing open space, must both be addressed in a more strategic and environmentally sensitive manner.

5D Inland Colac Bay

This unit remains predominantly rural in character. The landscape has some capacity to absorb small-scale development in keeping with its rural context.

5E South Howells Point

Although some development is beginning to creep up the slopes from Colac Bay into this character unit, it remains relatively inaccessible, rugged and remote. The ridge is also covered in a considerable area of indigenous vegetation, some of which is protected as Mores Scenic Reserve and Howells Point Reserve. An additional reserve area is apparently proposed that would connect these reserves. This is a wonderful opportunity to create a protected corridor and ecological sequence between the ridge and the coast which would further enhance the landscape, natural character and amenity values of the unit. In addition to the existing loop walk possible through Riverton, Mores Reserve and Howells Point, a coastal walk that links Riverton to Colac Bay could also be considered.

Due to the high level of landscape character sensitivity in much of this unit, the ability for this landscape to absorb development is very limited. However, there is some capacity to absorb a few individual, low-scale and carefully sited dwellings on the lower slopes at the Colac Bay end of the unit.

3.3.7 Recommendations (see Figure 14)

Suggest containing development in Colac Bay, within the bay and avoiding extension onto the headlands. Prepare a Settlement Structure Plan to identify most suitable locations, scale and forms of development that might best reflect the character of this landscape.

Consider classification of the Kawakaputa Bay and Lake George landscape units as an Outstanding Natural Landscape.

Suggest preparing a Settlement Structure Plan for the western corner of Kawakaputa Bay where some further development may be appropriate, the nature and extent of which should be carefully considered.

The Inland Colac Bay landscape unit is considered suitable for some form of small-scale development.

Consider classification of South Howell Point landscape unit as an Outstanding Natural Landscape

3.3.8 Points for Further Discussion

Geomorphology and landform

Identify mechanisms to prevent further destruction of the sensitive dune system at Colac Bay.

Protect and enhance dune system at Kawakaputa Bay.

Ecology

Consider opportunity to create an ecological corridor between Lake George and the eastern corner of Kawakaputa Bay and Oraka Point.

Key views and aesthetics

Protect the open rural character to views of Colac Bay from the Riverton/Colac Bay saddle above Tihaka.

Settlement and land-use

Support proposed Reserve area at Howells Point.

Commercial scale forestry should not be considered an appropriate land-use in this area

3.4 Riverton District Coastal Character Area

3.4.1 Coastal Environment Context

In the west, this coastal character area is defined by the inland boundaries of Jacobs River Estuary and Howells Point headland that physically and visually separates Riverton from Colac Bay and the landscape beyond. The eastern boundary of this character area extends to the Invercargill City boundary at Ferry Road.

The estuary, the prominent headland and the extensive, tidal beach that sweeps all the way south to the New River Estuary at Invercargill, are the dominant physical features of this landscape.

The large township of Riverton is the most noticeable cultural overlay. Riverton is a village of two halves – the eastern part lies on the flat sand spit between the estuary and the sea and contains the more industrial and commercial services of the town. It has little relationship to either the sea or estuary. The western part is predominantly residential and the old cottages and cribs are clustered around the lower slopes and coastal margins of the estuary and headland. Parts of the town north of the bridge have a strong relationship with the estuary while the bulk of the settlement is oriented towards the sea, with elevated coastal views. Many of these older dwellings and holiday homes are being renovated and joined by new houses since the area has become a popular choice for more permanent residents – the western side in particular.

As housing pressure increases in this area, there is likely to be demand for development to extend up the open, grazed slopes behind the current extent of the housing.

The highway runs between the estuary and the slopes of the headland landform with elevated views over the estuary possible between intervening vegetation. The highway crosses the estuary near its mouth, where there are views inland over the estuary, and beyond the fishing boats and cottages of Riverton, to the sea. These are the last views of the coast from the main road which continues to Invercargill, many kilometres inland from the coastline.

3.4.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Riverton Township coastal character area (see Figure 9) are:

Geomorphology and landform

- Prominent slopes and ridgeline above Riverton
- Sheltered bay with sandy, tidal flats and rocky outcrops
- Jacobs River Estuary – its extensive mud and sand flats and connections with the serpentine Aparima River and smaller Pourakino River

Ecology

- the native vegetation along the ridge of Howells Point headland (Mores Reserve)
- native trees, shrubs and flaxes have been planted along the estuary
- the estuary is considered important for ecological values such as birds, salt marsh vegetation, shellfish and fish

Key views and aesthetics

- Views over the bay and estuary from much of the main road

Settlement and land-use

- Popular for various seaside recreational activities including short forest and coastal walks
- Fishing boats and infrastructure
- long history of maori occupation
- Amenity values - popular for recreational fishing and shooting

3.4.3 Landscape Character Sensitivity

This coastal character area has an attractive combination of a sizeable village settlement laid over very strong natural features. The scale of housing is such that it does not overshadow these physical landscape features and key public views to the estuary and the sea can still be enjoyed from the roads, beaches and lookout areas.

The Riverton township landscape unit is clearly highly modified by semi-urban infrastructure and is therefore considered to have a low level of landscape character sensitivity and the ability to easily absorb some landscape change in the form of further housing development. However, the historic character of the township and the way it relates so successfully to its coastal environment are among the reasons why people find it an attractive place to visit and to live and as such it is vulnerable to a potential large scale of change.

Jacobs River Estuary is an important habitat for a variety of fish and bird species and is important as the mouth of one of southlands major rivers, the Aparima. This estuarine character is extremely sensitive to landscape change.

3.4.4 Visual Sensitivity

The elevated, sloping aspect of the western part of the Riverton township landscape unit is open to views from north and east, including the main highway to and from Invercargill. These views to the town are backdropped by the slopes and fingers of vegetation that continue above the current built extent of the town, and absorb the settlement into the landscape. Maintaining part of these slopes in their current, un-built state would help continue to visually absorb any further growth.

The vegetation in Mores Scenic Reserve lies within the adjacent landscape unit but is a prominent dark cap to the ridge, high above the town. It provides a popular viewpoint, accessible by road through Riverton, with two walking tracks. Walking access to the southern face of this headland in the adjacent unit, is possible via these tracks.

The open character of the estuary unit is sensitive to views from the main road and minor roads that skirt the unit and from some parts of Riverton township.

3.4.5 Landscape Issues (Threats and Opportunities)

The main landscape issues that need to be considered in this coastal character area are:

- Development of buildings out of scale with current settlement
- Development too high on prominent slopes above township
- Stormwater – water quality/pollution – particularly around estuary
- Threats to estuary habitat – encourage riparian vegetation on estuary margins

- Erosion – encourage riparian vegetation on estuary margins
- Education
- Restoration - Coastal turf is an ecosystem that requires particular protection because it is not currently well represented.
- Walkways – including historic building walk

3.4.6 Development Guidelines

6A Jacobs River Estuary

Development on the margins of the estuary should not be permitted and the unit should be managed as a significant landscape feature.

6B Riverton Township

The existing settlement at Riverton is attractive and tends to fit well into the surrounding landscape. In order to ensure that Riverton retains and builds upon its historic, cultural and natural character associations, a structure plan for the area should be prepared to determine the nature and extent of further growth.

As land along the coastline is quickly developed, pressure to accommodate growth will inevitably move to the slopes above the town. There is some room for extension here however small scale, discreet locations would be required. There also appears to be pressure to develop land alongside the highway between Riverton and Colac Bay. Such ribbon development could diminish the character of both areas. Further development should be focussed within the bounds of the existing township first and a distinction should be maintained between Riverton and Colac Bay that reflects their different character. Ideally a strategic approach through a Riverton-focussed structure plan or similar should be adopted to drive further development so that it achieves well-planned, sensitive environmental outcomes.

3.4.7 Recommendations (see Figure 14)

The Jacobs River Estuary is a significant visual and landscape character area, and its margins are not suitable for accommodating conventional development.

Initiate a Settlement Structure Plan for the Riverton area to identify development opportunities, suitable locations, densities and the extent of future growth.

3.4.8 Points for Further Discussion

Geomorphology and landform

Consider setting elevation limit for further development on slopes above township to protect legibility and open character of the landform.

Ecology

Encourage protection of and/or enhancement to riparian estuary margins.

Key views and aesthetics

Investigate mechanisms to ensure a distinction is maintained between the settlements of Riverton and Colac Bay.

Settlement and land-use

Investigate opportunities to extend local walkway network to enhance existing coastal recreation opportunities and interpret historic sites and a variety of coastal and estuarine processes.

3.5 Otaitai District Coastal Character Area

3.5.1 Coastal Environment Context

It is the broad and seemingly endless sweep of the sandy beach and the flat, farmed plains inland that are the most distinguishing characteristics of this coastal character area.

Large areas of these coastal margins and their natural dune systems are modified, with dunes generally dominated by marram grass and often farmed close to the foreshore.

The plains are predominantly farmland. Only small remnants of original vegetation remain. However, although this is a modified rural environment, it contains some important natural features that include coastal ponds or lagoons, and peaty wetlands.

The river systems in this area provide habitat for many birds including fernbird, marsh crane, dotterel, black-billed gull, South Island Pied Oystercatcher, black-fronted tern and plover.

In this section the main road, carrying most travellers east and west along this coastline, is many kilometres inland from the coastal environment. Minor, gravel roads criss-cross the study area however, providing access to the scattered farmsteads and occasional access through the low dunes to the beach.

3.5.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Otaitai coastal character area (see Figure 9) are:

Geomorphology and landform

- large sweeping sandy beach, backed by dunes of marram grass
- Otaitai Ponds
- Waimatuku Mouth Lagoon/Wetlands
- Waimatuku Stream

Ecology

- Pockets of indigenous vegetation such as coastal herbfields and flaxlands

Key views and aesthetics

- long, open vistas from the beach
- Inland, views across the plains are expansive at times but also often limited by intervening shelterbelts

Settlement and land-use

- scattered, isolated farmsteads
- historic flaxmill

3.5.3 Landscape Character Sensitivity

Intact dune systems have largely disappeared from many parts of Southland; pasture currently extends up to the narrow fringe of dunes which are typically covered in marram grass.

This area is sparsely settled. Farmsteads, fences and paddocks typify the pleasant rural character of the area. Waterways and wetlands are also key characteristics though viewed within a modified, working, rural context. The Waimatuku Mouth Lagoon/Wetlands are

protected by a QEII covenant and have recently been restored to their original water level and the Otaitai Ponds have also been identified as having important habitat values. They represent the many small coastal wetlands which would once have occurred between Invercargill and Riverton. The Waimatuku Stream also has important natural character values and provides a productive native fish habitat. However overall, few native vegetation communities remain in this area.

3.5.4 Visual Sensitivity

There is a visual and experiential separation between the coast and main public routes through area where the large scale, rural character and openness of the plains and the 'big sky' dominate the coastal environment.

Narrow, gravel roads criss-cross this area however direct vehicle access to the beach is restricted to just a few points. Views to the coast from these roads are very limited due in part to their distance from the coast, their lack of elevation above the beach and intervening vegetation – mainly shelterbelts.

This is an open landscape with very little relief into which new structures could be absorbed. Although few people are likely to be directly affected by changes to the visual landscape here, in many places, small changes will be highly visible.

3.5.5 Landscape Issues (Threats and Opportunities)

- Restoration/ protection of dune systems from erosion.
- Small size of remnants so large edge effect and wind damage.
- May be future pressure for development of Riverton to expand east into this area.

3.5.6 Development Guidelines

7A and 7B

Although natural character in this area has been considerably modified through agricultural development, it remains high overall. Nevertheless, due to these modifications, the low-lying topography of the area and the large physical area it covers, there is capacity for the area to absorb some small-scale clusters of sensitively designed dwellings. Each development

- layout, house design, infrastructure and landscape design would have to be in keeping with rural character. Suburban or ribbon development along the coastline would not maintain the special values of this area. Maintaining a sense of openness and awareness of the low horizon will maintain current coastal plains rural amenity values.

This is a sensitive landscape in spite of farming modifications and future development would need to reflect this and should be used as an opportunity to restore and enhance existing ecological values.

3.5.7 Recommendations (see Figure 14)

Both the Otaitai Beach and Ferry Road landscape units are considered suitable for further small-scale development.

3.5.8 Points for Further Discussion

Geomorphology and landform

Identify opportunities to protect and enhance the sensitive dune system from development.

Review protection and opportunities to enhance wetland/lagoon features.

Ecology

Future development should avoid disturbance of the sensitive wetland areas and may provide opportunities to enhance some areas.

Where future development is permitted, landscape guidelines should encourage use of indigenous coastal shrublands and species found in the area.

Key views and aesthetics

Future development should maintain the open character of these plains.

Settlement and land-use

Development should maintain the open, rural character of this area.

0 0.5 1 2 Kilometres



Legend
Landscape Character Units

1:100,000 @ A3

11th August 2006

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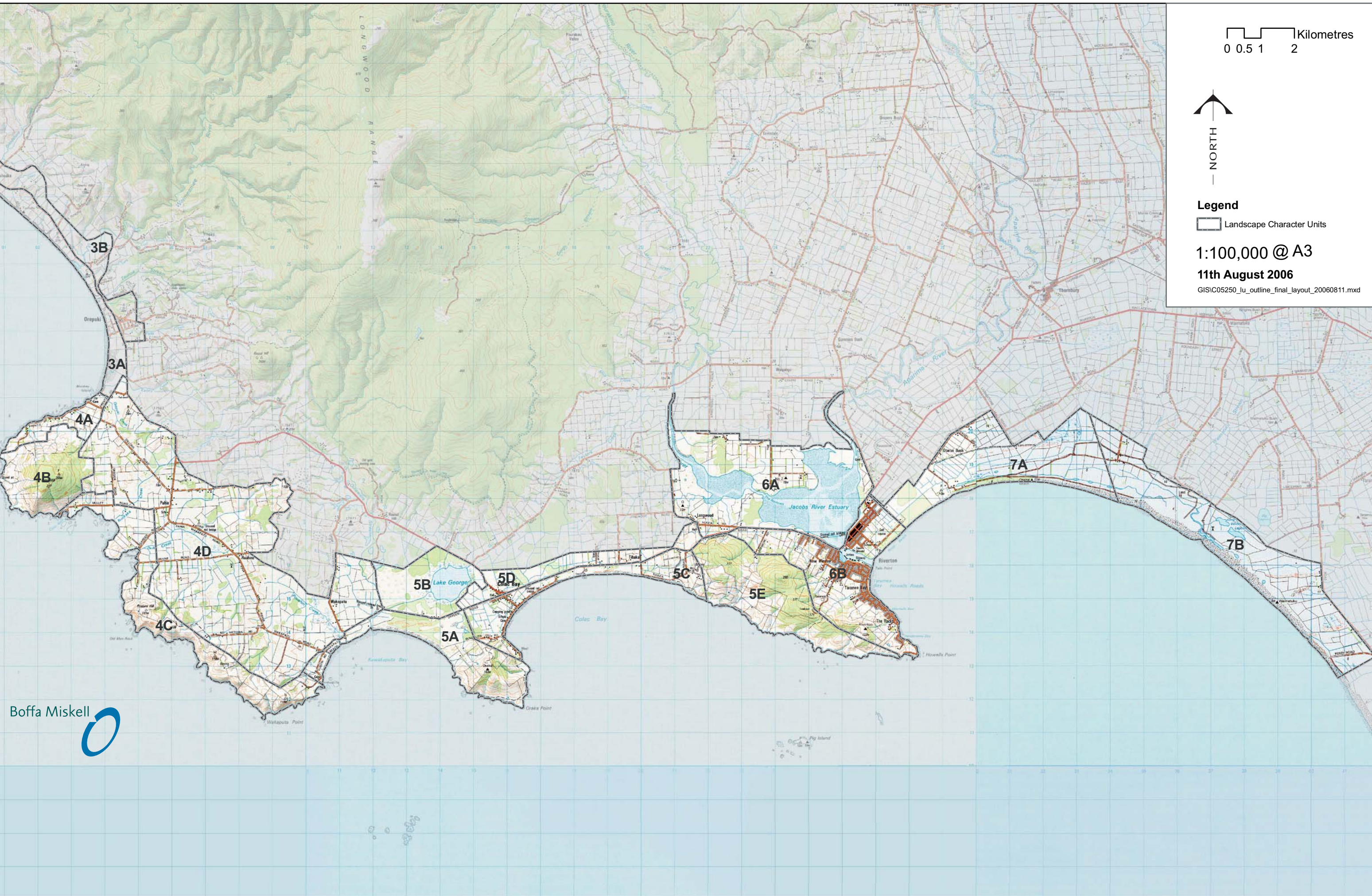


Figure 9: Riverton Regional Coastal Character Area

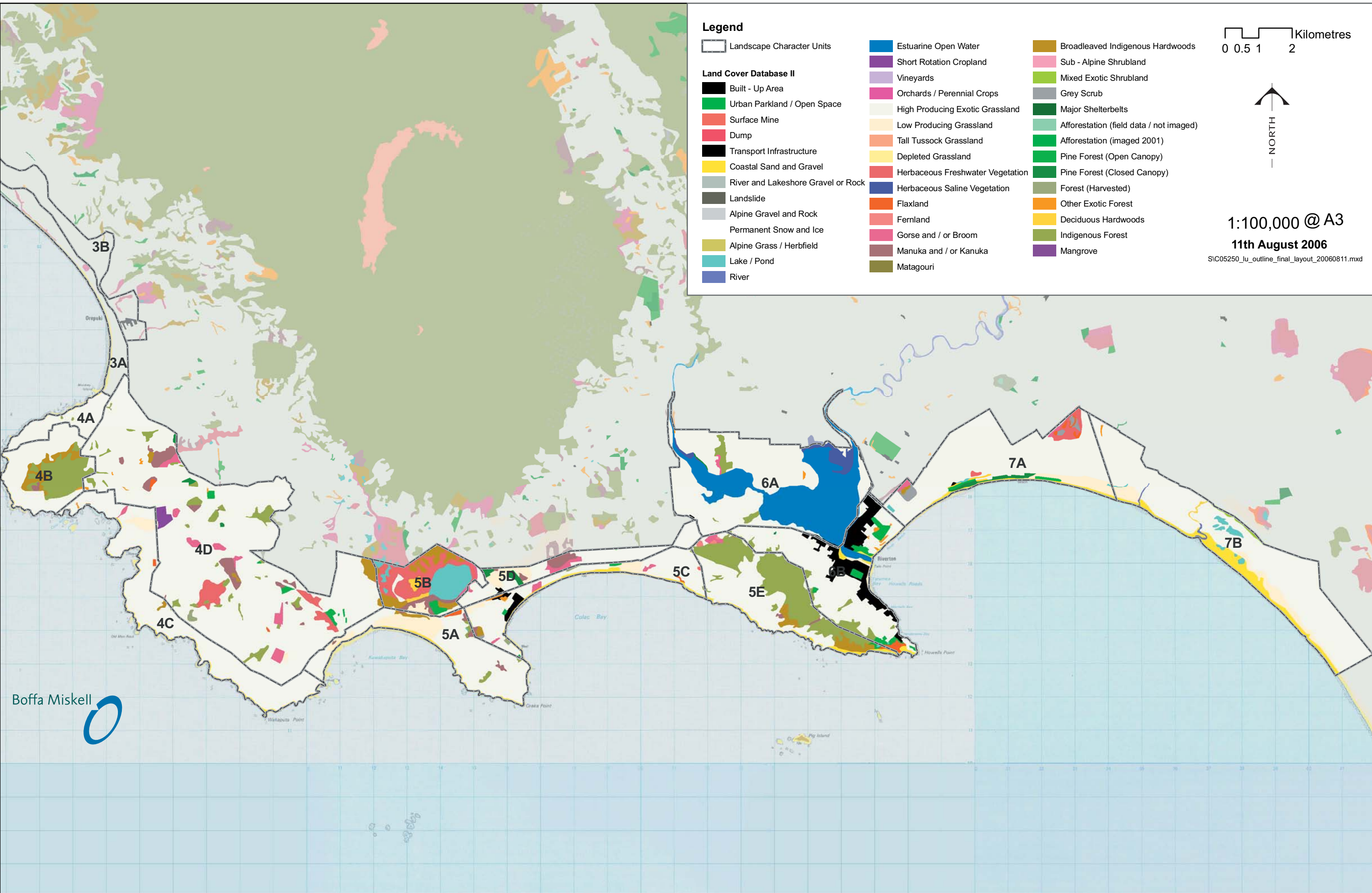


Figure 10: Riverton - Land Cover

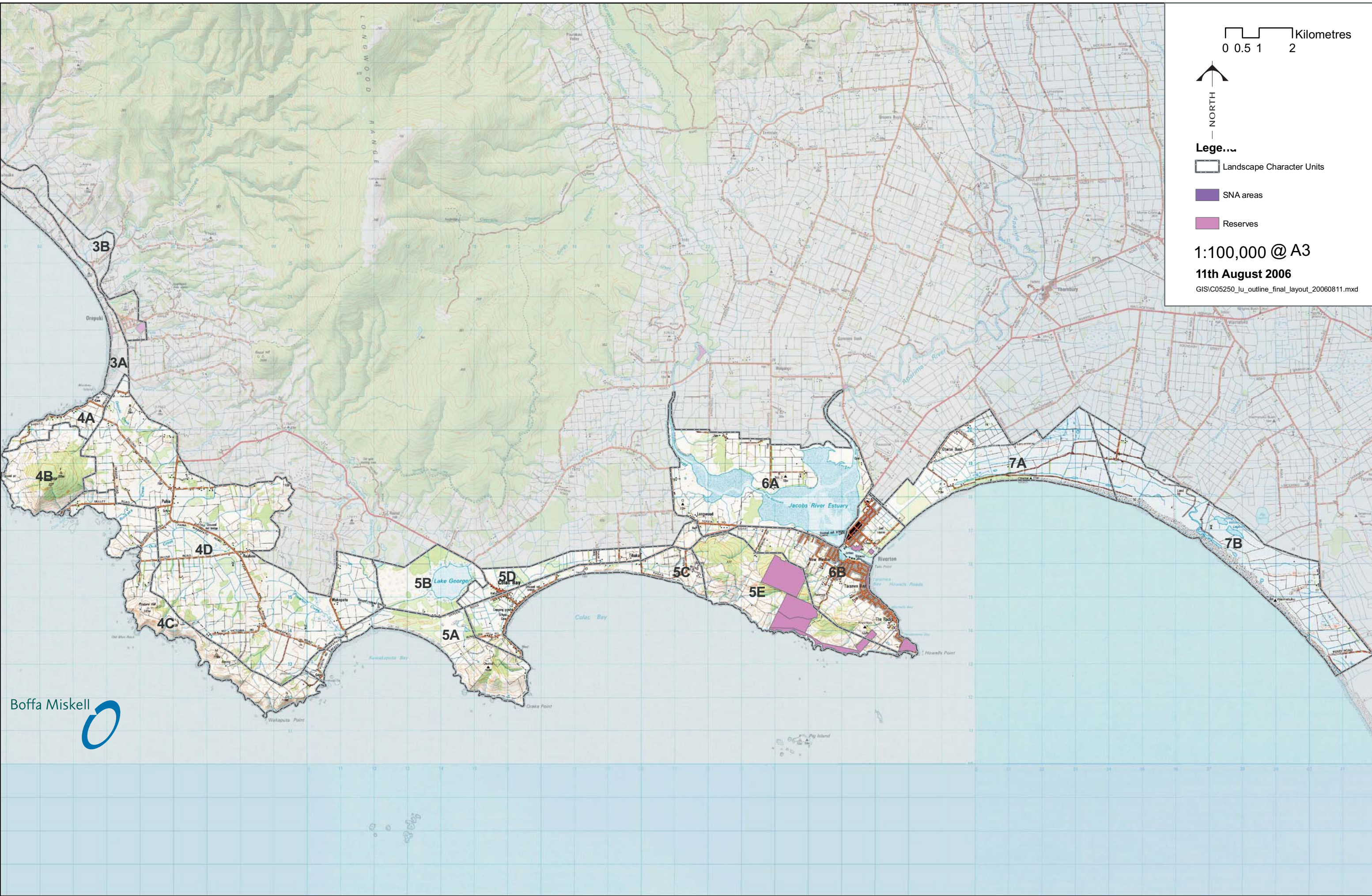


Figure 11: Riverton - Reserve Areas

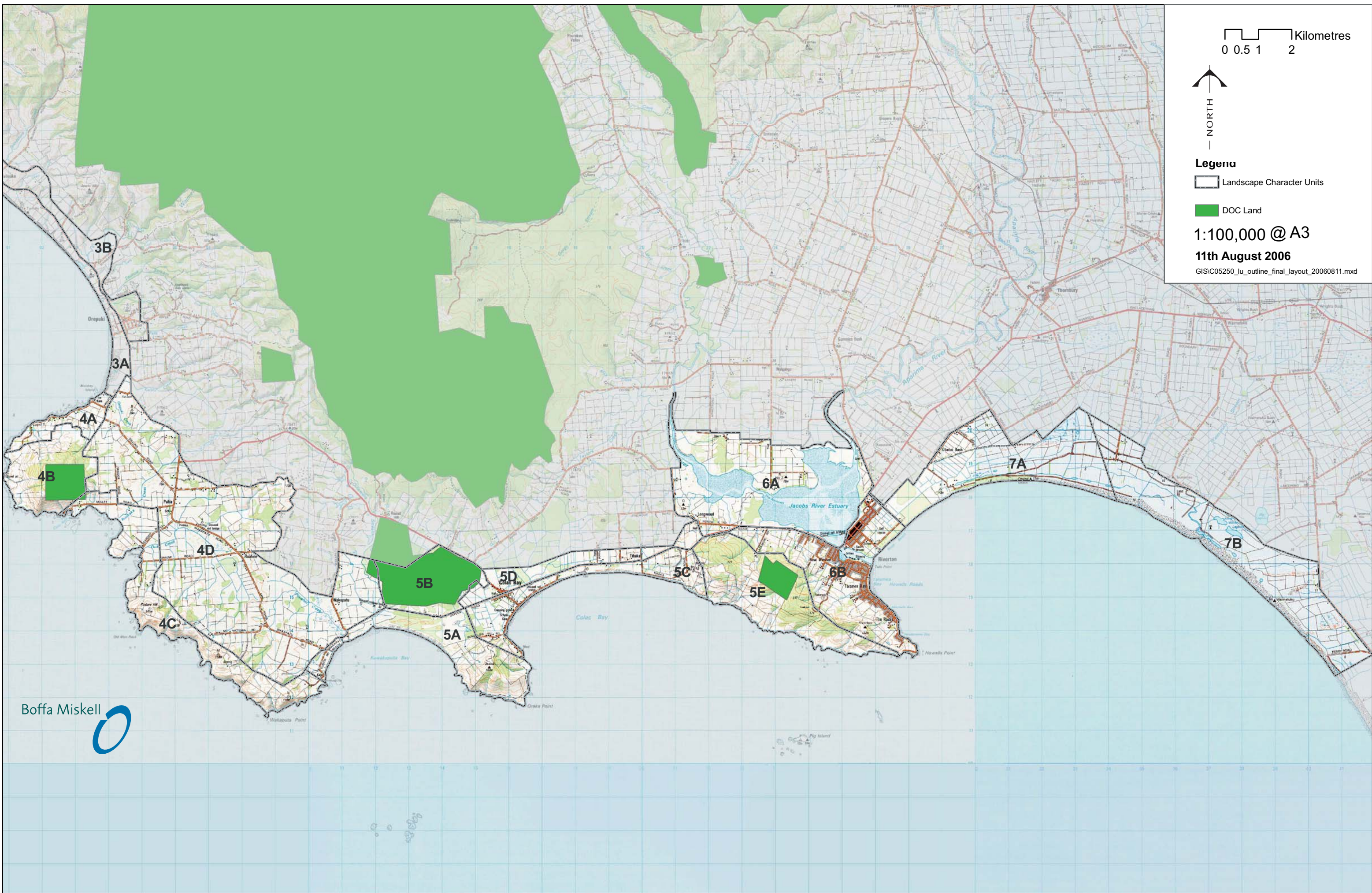


Figure 12: Riverton - DoC Land

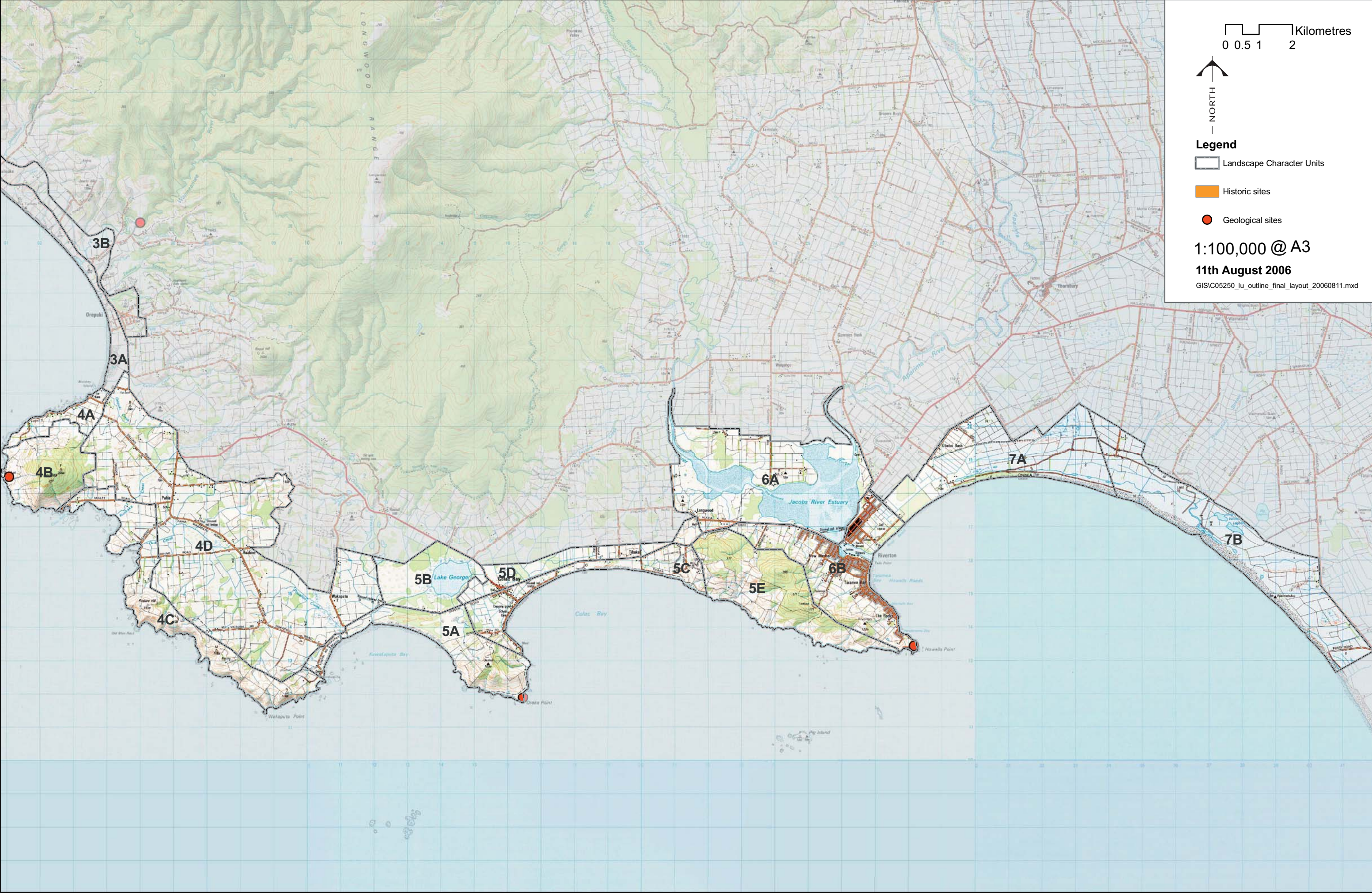


Figure 13: Riverton - Geological and Historic Sites

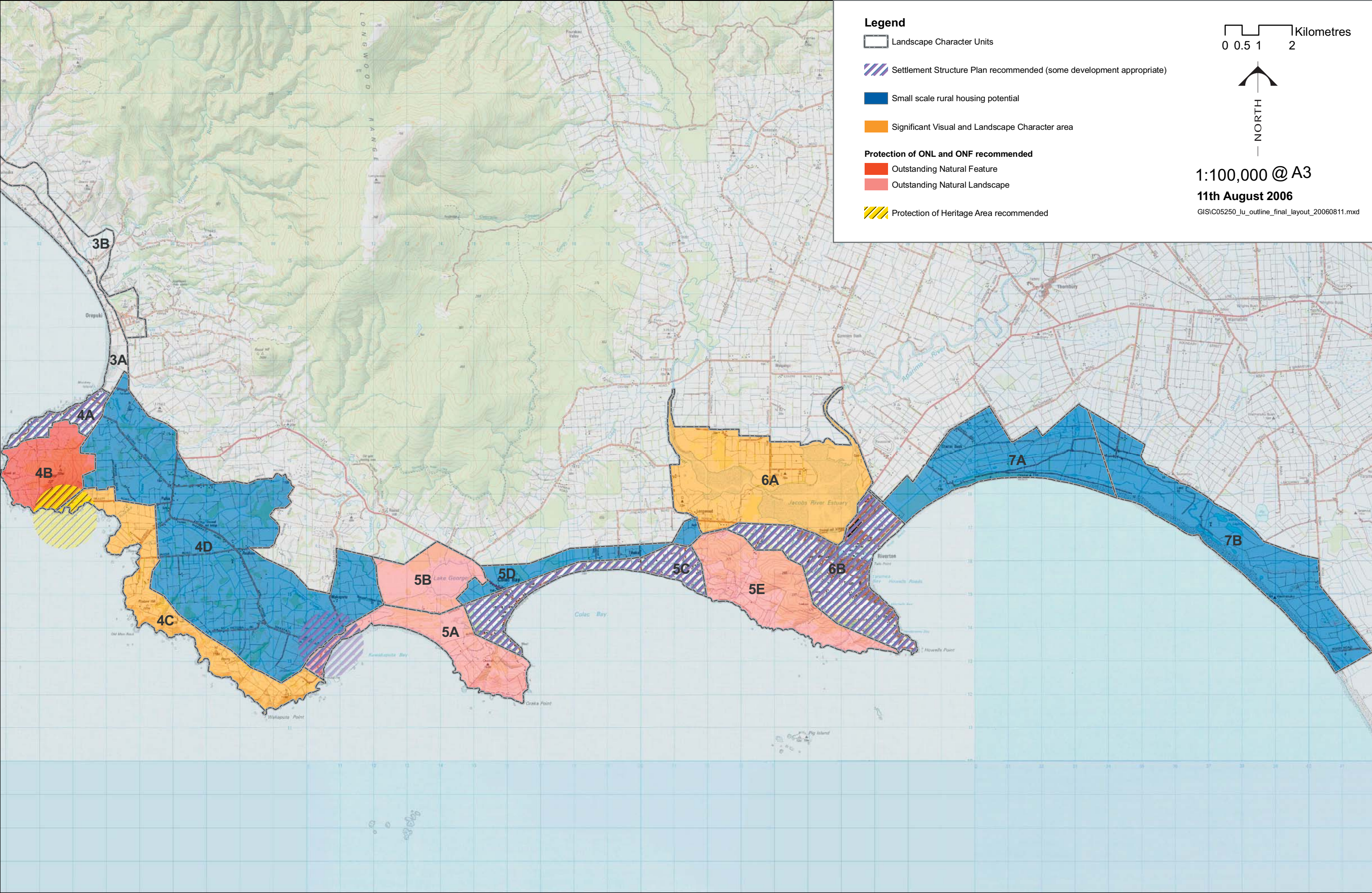


Figure 14: Riverton - Development Suitability

Key Landscape Issues



Boffa Miskell

Development that may impinge on views and the relationship between shoreline and coastal margin

The natural character of the lagoon system is modified by encroaching farmland



Maintaining the transitional nature of this landscape

Key Landscape Characteristics



The visual prominence of Pahia Hill



The existing rural setting and character of the dwellings near Monkey Island at Pahia Point



Monkey Island, the anchor stone of the Takitimu waka and popular picknicking and swimming spot



The eastern curve of Te Waewae Bay with the Longwood Range in the background

Key Landscape Characteristics



The wetland area around Lake George



The distinctive silhouette of the Ruahine Range



The cluster of historic cribs at Cozy Nook and the rocky coastline that characterises much of this area

Key Landscape Characteristics



Oraka Point, the sweeping, sandy beach of Colac Bay and the existing rural character in the foreground, at the eastern end of Colac Bay



The existing settlement at Colac Bay, mostly tucked into the bays western curve



View of the exposed tidal flats of Jacobs River estuary from the main road between Riverton and Colac Bay

Key Landscape Characteristics



The working fishing boats and infrastructure at Riverton, near the mouth of the estuary



The settlement of Riverton Rocks with the Howells Point Range behind and the bush 'cap' of Mores Reserve visible along the ridgeline

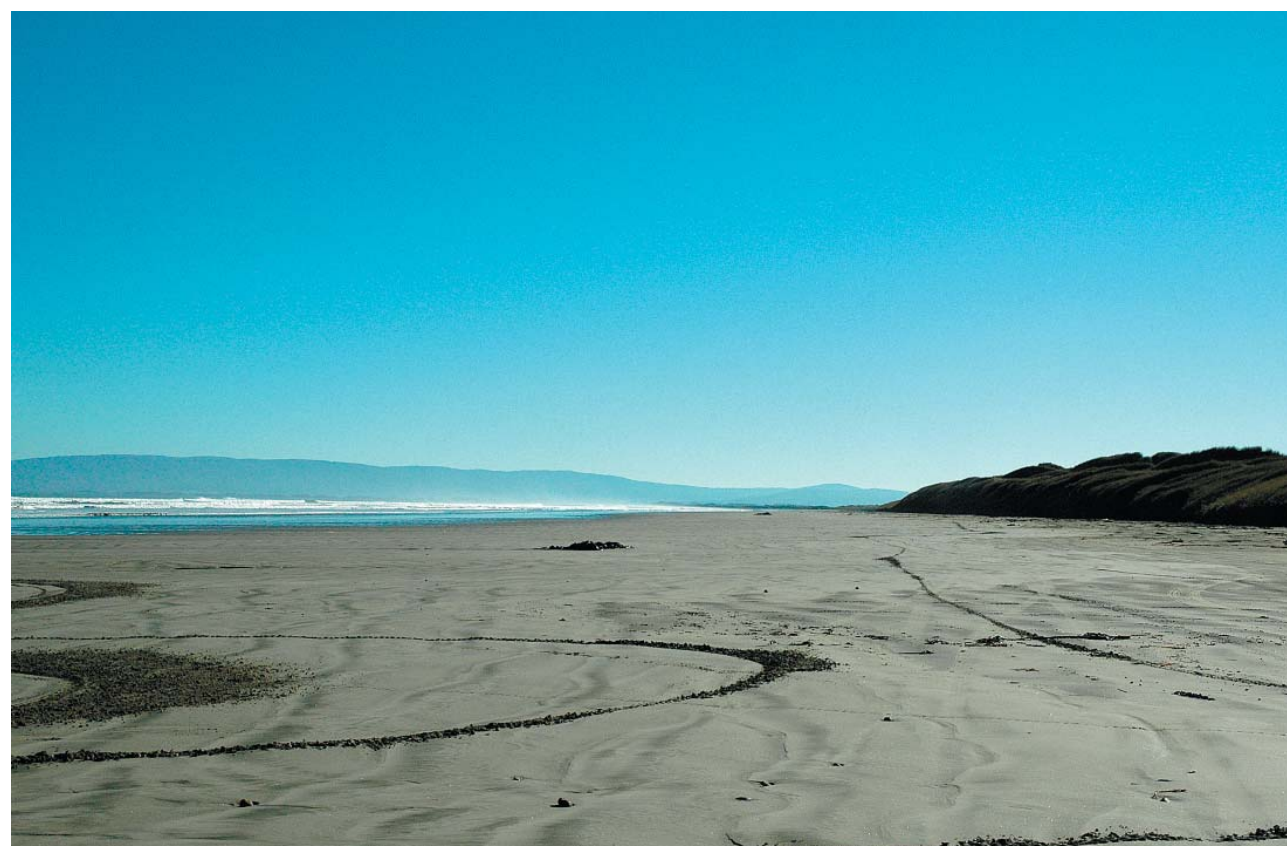


The remote qualities and lack of built structures at the end and to the south of Howells Point

Key Landscape Characteristics



Riverton and Howells Point viewed across shallow tidal flats from Otaitai Beach



The endless broad sweep of Otaitai/Oreti beach



The Waitahuna lagoons ponding behind Otaitai Beach dunes

Key Landscape Issues



Residential development pressures on the Te Waewae coast near Pahia Point



Maintaining the areas rural, coastal amenity and natural character of values under development pressures



Opportunity to maintain current low level of modification at Kawakaputa Bay



Residential development pressures in Colac Bay - new subdivision on foreshore



Settlement is beginning to extend in a ribbon around the bay

Key Landscape Issues



Maintaining the open, rural character of the landscape around Jacobs River Estuary



Threat of development of new buildings that are out of scale/character with existing settlement at Riverton



Threat of ribbon development along main road between Riverton and Colac Bay

section two



Threat to estuary habitat from development on estuary margins



Opportunity to build upon Riverton's historic associations

Section Four

SOUTH COAST ESTUARIES REGIONAL COASTAL CHARACTER AREA

4.1 Landscape Boundaries

The Estuaries Character Area extends from the Invercargill City boundary in the west (on the Awarua Plains) to the township of Fortrose in the east. See Figure 15.

Shoreline

The shoreline in the Estuaries character area is distinguishable from the beaches, bays and headlands already described further west, by its steep sand and quartz pea gravel beaches, sand spits, harbours, and large estuaries.

Coastal Platform

This area is characterised by the large, tidal Waituna Lagoon and Toetoes Harbour. Most of the area was once peatland dominated by wirerush, manuka, shrubland, flax, tussock and swamp. Today, most of the catchment is intensively farmed and the remaining wetland complex has highly modified margins that have been intensively drained and developed.

Access is difficult or convoluted to much of this area with the exception of Fortrose which is on the main road and southern scenic route. However, the route to Waituna lagoon is well signposted from the main road.

Fortrose is the main settlement in this regional character area. There are few dwellings elsewhere within the study area other than a few cribs and isolated farmsteads.

There are a number of known protected sites of importance to Iwi in this area, including middens, stoneworking sites and ovens.

The recreation opportunities in the Estuaries coastal character area are typically associated with game bird hunting, angling and birdwatching.

Coastal Setting

The swampy landscape that characterises this regional character area is part of the wider Awarua wetland system between Invercargill and Fortrose. Between the main road – Gorge Road/Invercargill Highway and the coast, the landscape is dominated by these wetland/lagoons and an agricultural plains landscape. North of this road, the topography is more rolling and treed.

The Mataura River is a significant Southland River running through this catchment. Dynamic coastal processes at the mouth of the river have formed the harbour and sandspit.

4.2 Waituna Lagoon District Coastal Character Area

4.2.1 Coastal Environment Context

Waituna Lagoon is a large shallow coastal lagoon fed by three main waterways (Waituna Creek, Moffat Creek and Currans Creek) which pass through highly developed pastoral lands.

The lagoon is an important feature for a range of ecological values including the presence of rare and threatened wildlife.

The Waituna Wetlands are a Scientific Reserve and have been designated as a Wetland of International Importance because of its populations of birds, fish and plants, and its extensive complex of relatively unmodified lagoon landscapes. Botanically, it is also unique for the sub-alpine vegetation that grows there near sea level.

Access to this coastal character area has been identified as a limiting factor for drawing visitors to this special area, but because of this, the lagoon feels remote and isolated and the intact indigenous vegetation and landforms continue to dominate the character of the landscape.

4.2.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Waituna Lagoon coastal character area (see Figure 15) are:

Geomorphology and landform

- steep and dynamic sand and quartz beaches
- Waituna Lagoon

Ecology

- low coastal vegetation on barrier beach

Key views and aesthetics

- Flat contours with intervening vegetation screening views

Settlement and land-use

- Fishing, bird-watching and game bird hunting
- scattered fishing cribs and a small number of isolated farm dwellings

4.2.3 Landscape Character Sensitivity

The extensive estuarine area is the dominant feature in this coastal character area. Levels of modification within the study area appear low and natural character is high. It is an area with very high and fragile coastal and ecological values which have some protection mechanisms laid over them. The margins of the lagoon are particularly sensitive to surrounding agricultural land-use. In some places, modified paddocks extend very close to these riparian lagoon margins.

Although the landscape along the approach to the lagoon has a predominantly rural, working character, the limitations of accessibility and the effort it takes to get to the area, increase its sense of remoteness and naturalness.

4.2.4 Visual Sensitivity

Visibility into and from within this flat, vegetated landscape is relatively low, however most visitors are likely to come with expectations of high levels of wilderness and particularly, naturalness. Any form of development in this landscape would appear out of character.

4.2.5 Landscape Issues (Threats and Opportunities)

The key landscape issues that need to be considered in this coastal character area are:

- restoration opportunities exist for a number of indigenous vegetation communities in Waituna Creek and the margins of other waterways that drain directly into the lagoon and wetlands
- any vertical structural elements that protrude above the relatively low-growing vegetation in this flat landscape will threaten the natural character of this area
- drainage and nutrient enrichment
- Catchment protection/restoration opportunity
- Effects of opening the mouth of the lagoon
- Developing access to and visitor education/interpretation/recreation opportunities at the site

4.2.6 Development Guidelines

8A Waituna Lagoon

The high natural character values of the coastal platform should continue to be protected. This protection could be further secured with a catchment-based approach to minimise potential effects from ongoing improvements to surrounding farmland.

High natural character and amenity values of the shoreline and its wild, remote landscape character should be maintained.

8B Lagoon Margins

This landscape unit between Waituna lagoon and Toetoes harbour is characterised by its drained and modified coastal farmland, surrounded by swamp and wetlands. Although this area has a modified, rural working character, its location adjacent to these areas of high and fragile natural values means that housing development here would also threaten the values of these adjacent units.

4.2.7 Recommendations (see Figure 20)

Consider applying overlay of Outstanding Natural Feature to Waituna Wetlands.

The Lagoon Margins landscape unit is considered unsuitable for conventional development.

4.2.8 Points for Further Discussion

Geomorphology and landform

Investigate adoption of catchment-based approach to protection of Waituna Wetlands.

Ecology

Identify opportunities to further interpret ecological significance of the area and encourage access to it without adversely impacting on its values.

Key views and aesthetics

Consider limiting the height of structures in close visual proximity to the Waituna Lagoon landscape.

Settlement and land-use

Any development in the Lagoon Margins landscape unit must be discreet and environmentally sensitive.

4.3 Toetoes Harbour District Coastal Character Area

4.3.1 Coastal Environment Context

Toetoes harbour is an expansive tidal estuary and sandspit at the mouth of the Maitara River. The harbour and the township of Fortrose are the key features that dominate this coastal character area. The area also includes several kilometres of the snaking Maitara River, Titiroa Stream and a large area of swampy, semi-improved land in-between.

Fortrose is a small, coastal settlement on the main road, with a pleasant aspect overlooking Toetoes Harbour.

From the saddle on the Gorge Road/Tokanui Highway, east of the Titiroa Stream, there is an expansive view towards Fortrose, of the harbour, spit and coastal setting of this area.

There is a strong relationship between public viewing points such as the main road and the township of Fortrose, and the coastal character area.

4.3.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Toetoes Harbour coastal character area (see Figure 15) are:

Geomorphology and landform

- Toetoes harbour and Fortrose Spit
- Maitara River

Ecology

- The Toetoes Harbour and Fortrose Spit provide significant wetland/wildlife habitat

Key views and aesthetics

- There are panoramic views of Fortrose and the harbour from elevated stretches of the main road

Settlement and land-use

- Most of the coastal spit is managed by DoC as an area of conservation value
- Fortrose township
- The wreck of the steamship Ino is visible in the harbour at low tide

4.3.3 Landscape Character Sensitivity

Key elements in this coastal character area are vulnerable to landscape change. Fortrose spit contains one of the two most natural remaining dune systems on the southern Southland Coast. The Maitara River is a slow, single-channelled river and a major native fishery and important water fowl habitat. These landscape features have no capacity to absorb development without threatening the unique natural qualities of the area.

The settlement at Fortrose is clearly a modified environment although at a small village scale. The character of this landscape unit is considerably less fragile than the adjacent units and appears suitable for accommodating further development.

4.3.4 Visual Sensitivity

This character area has a moderately high level of visibility. The main road between Invercargill and the Catlins provides elevated views to much of this area and the small community at Fortrose also has views overlooking the harbour and spit. The high level of naturalness and amenity present in the Toetoes Harbour landscape unit means this landscape is sensitive to visual modifications. Some visual modifications due to further housing development would be more readily absorbed into the landscape in the adjacent Fortrose unit.

4.3.5 Landscape Issues (Threats and Opportunities)

The main landscape issues that need to be addressed in this coastal character area are:

- vertical structural elements in the Toetoes Harbour Unit
- drainage and nutrient enrichment/water quality
- restoration opportunity for lower Maitava River and harbour riparian vegetation
- damage to the dune system from use of road around Fortrose Spit
- manner in which development may change the small-scale village character of the coastal village community of Fortrose

4.3.6 Development Guidelines

9A Toetoes Harbour

The fragile environment of this landscape means that any residential development in this area would considerably reduce the natural character and amenity values of the unit.

Continue to protect values of the spit and estuary and consider opportunities for improving water quality through enhancing riparian vegetation in the lower Maitava River.

9B Fortrose

There is some capacity for further development in this landscape unit. In landscape terms, the existing housing and infrastructure could absorb further housing development, particularly close to the existing township. To ensure that Fortrose retains its historic, cultural and natural character associations and pleasant amenity values, the area would benefit from preparation of a structure plan to determine the nature and extent of further growth.

4.3.7 Recommendations (see Figure 20)

Consider the classification of the Spit and lower Maitava River as Outstanding Natural Features.

While conventional development is not considered appropriate elsewhere in the Toetoes Harbour landscape unit, there may be some opportunities for discreetly located, low-key, isolated dwellings or eco-tourist related developments that support the area as a 'gateway' to the Catlins.

Prepare a Settlement Structure Plan to investigate the potential of the Fortrose township as a focus for strategic growth at this 'gateway' to the popular Catlins area.

4.3.8 Points for Further Discussion

Geomorphology and landform

Protect and enhance the sandspit and the coastal and riparian margins of the harbour and waterways that feed into it.

Ecology

Investigate opportunities to improve water quality of the harbour by fencing off riparian margins of lower Maitava River and harbour and encouraging riparian vegetation.

Key views and aesthetics

Protect key panoramic coastal views at the western approach to Fortrose.


Settlement and land-use

Minimise potential landscape impacts by discouraging conventional residential development in the Toetoes Harbour character area.

0 0.5 1 2 Kilometres



Legend

 Landscape Character Units

1:75,000 @ A3

11th August 2006

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Figure 15: South Coast Estuaries Coastal Character Area

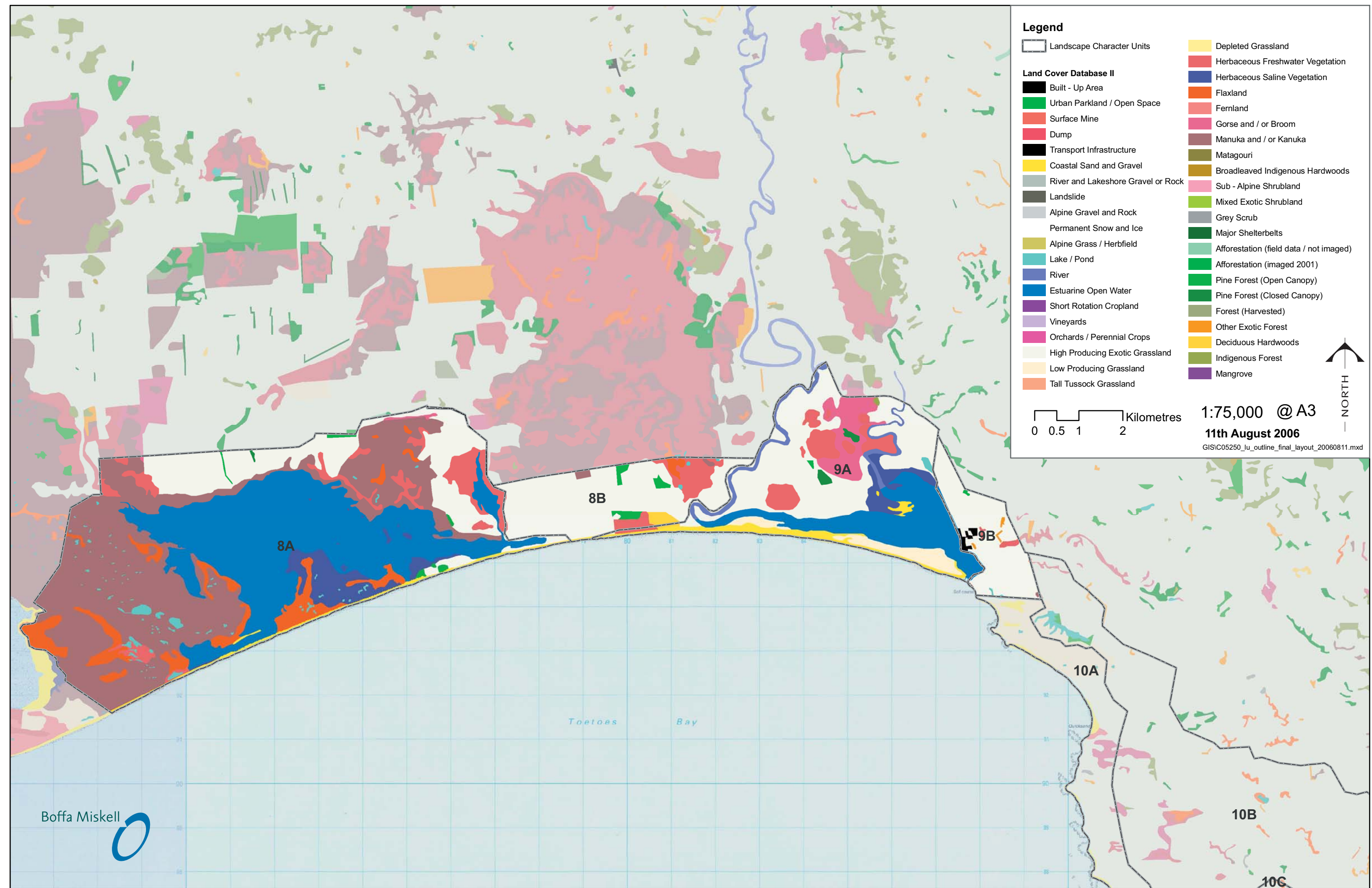
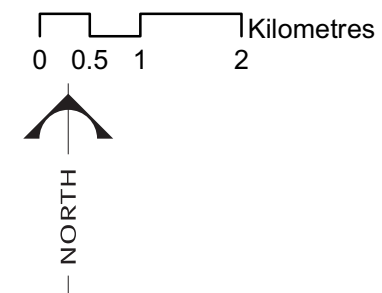


Figure 16: South Coast Estuaries - Land Cover



Legend

-  Landscape Character Units
-  SNA areas
-  Reserves

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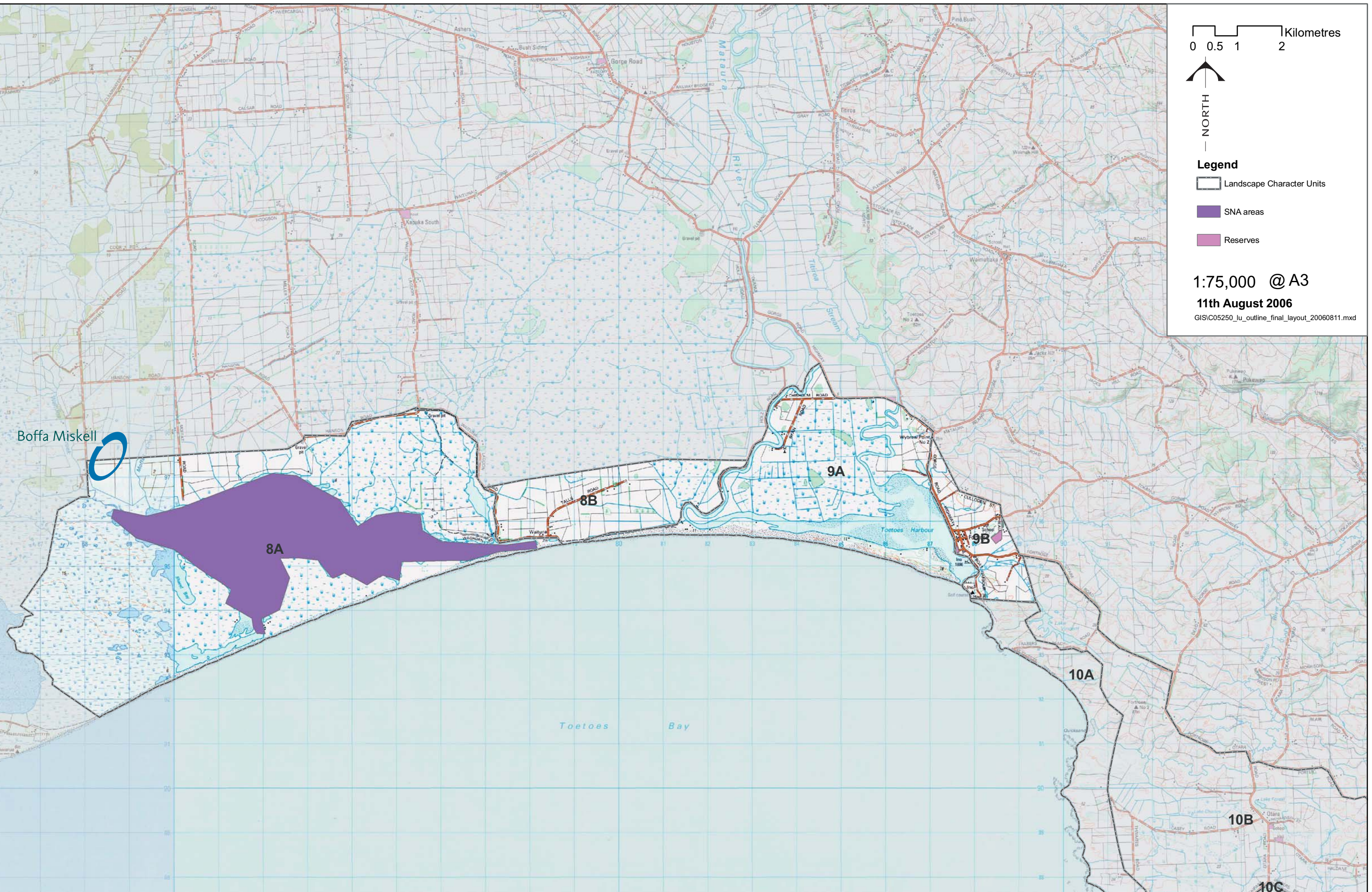


Figure 17: South Coast Estuaries - Reserve Areas

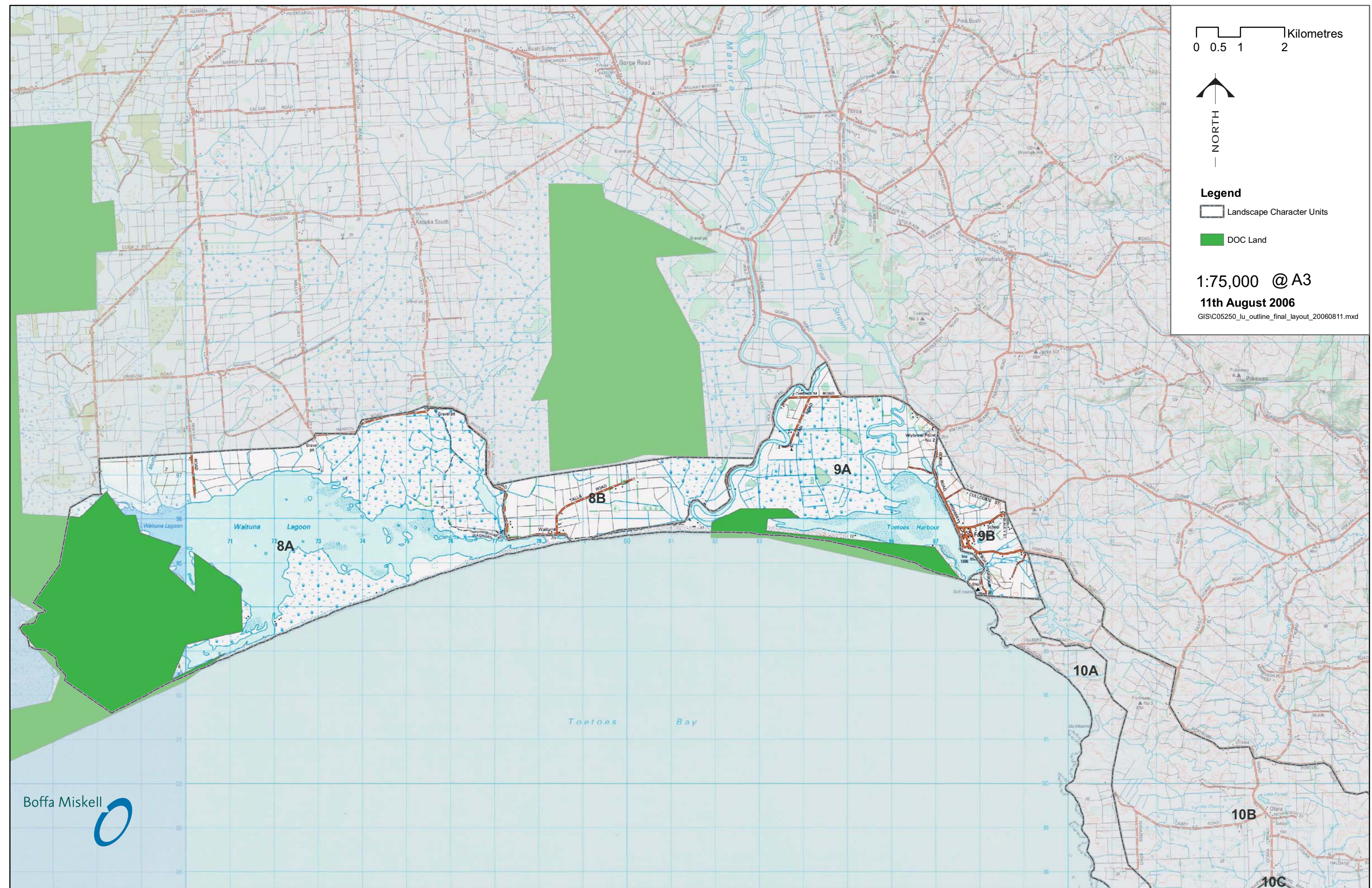


Figure 18: South Coast Estuaries - DoC Land

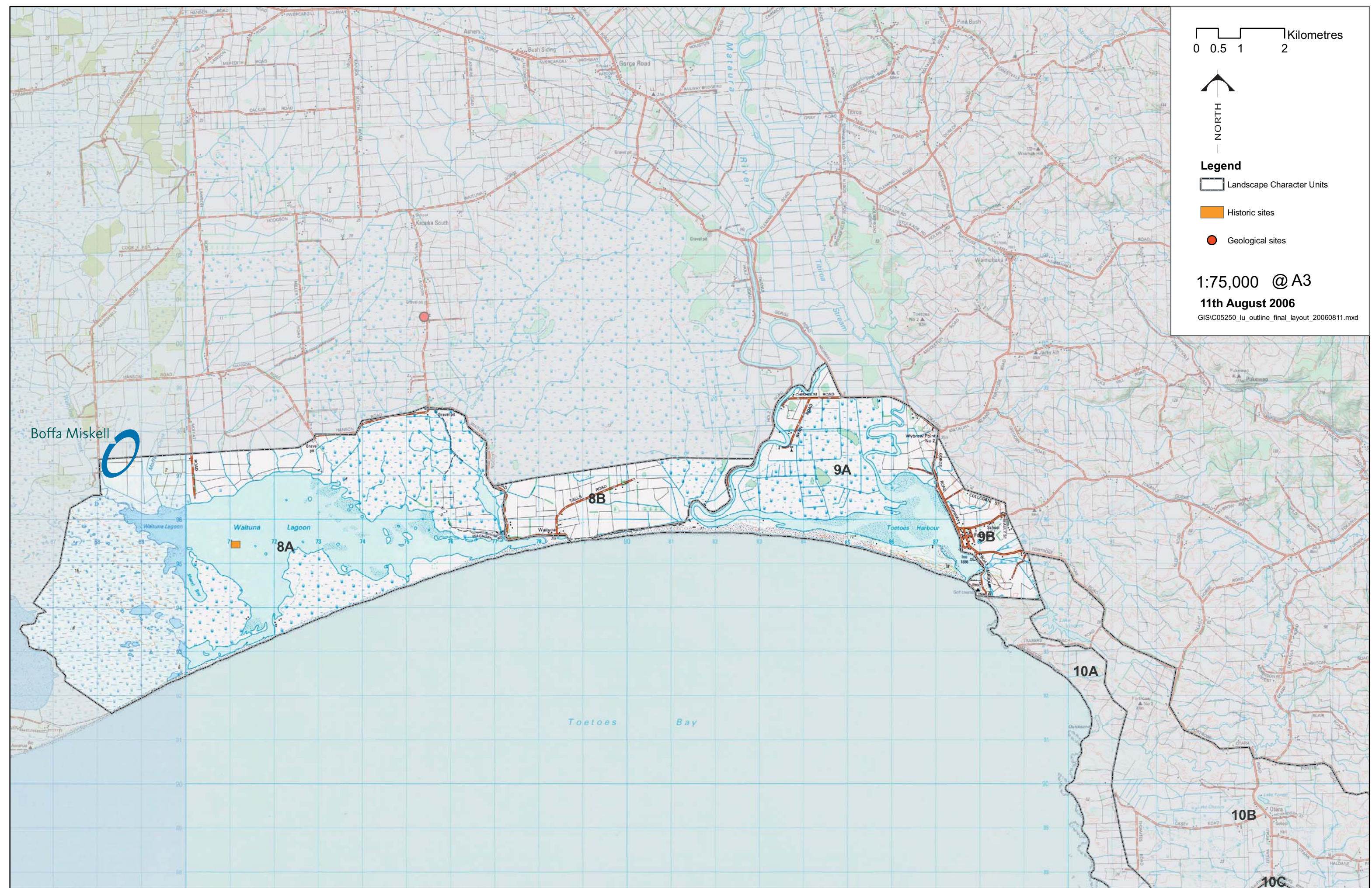


Figure 19: South Coast Estuaries - Geological and Historic Sites

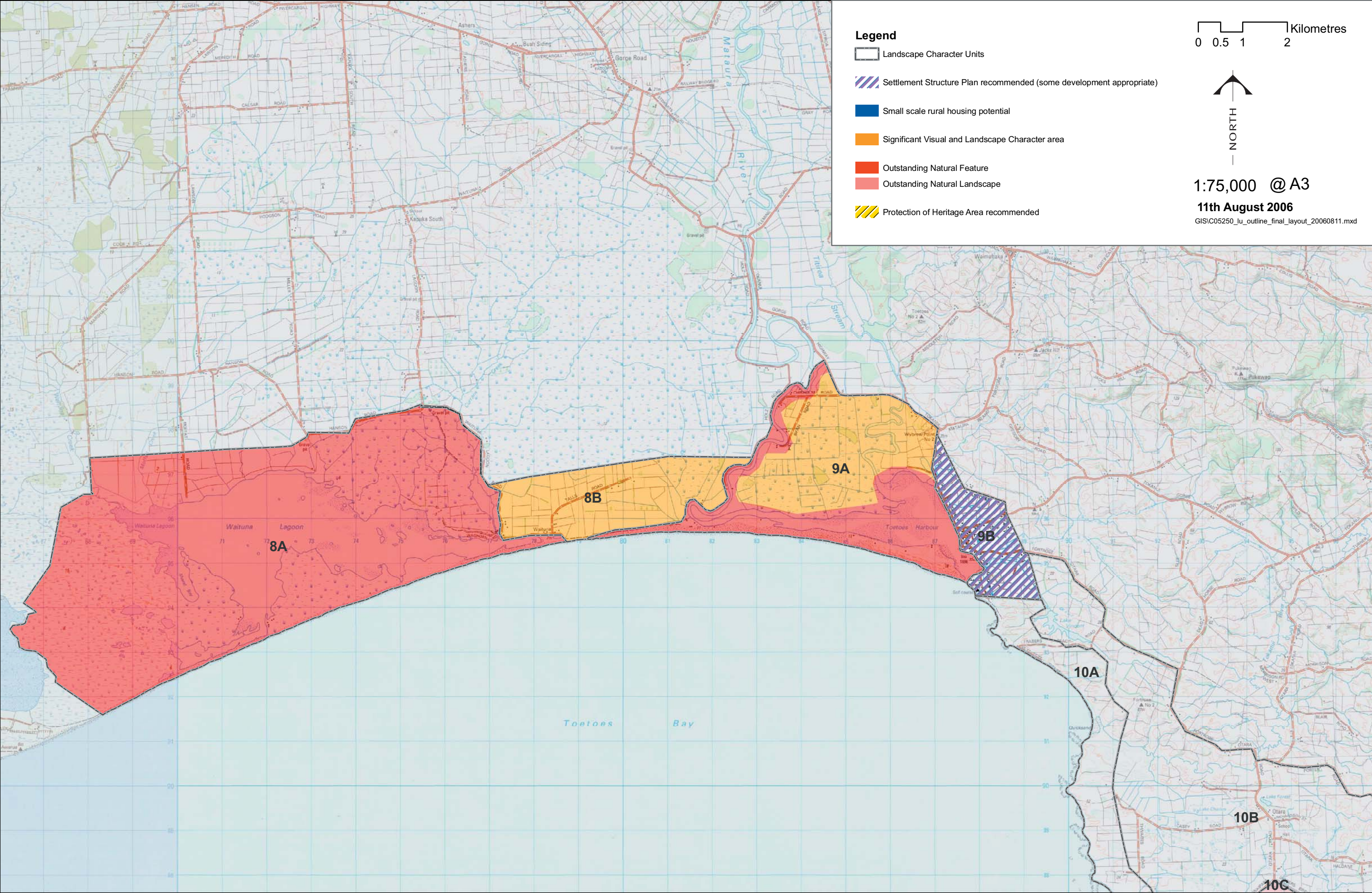


Figure 20: South Coast Estuaries - Development Suitability

Key Landscape Characteristics and Issues



The dunes and beach beyond Waituna Lagoon



Vegetation at Waituna Lagoon



Waituna Lagoon flats



View to Fortrose and Toetoes Harbour and the sandspit beyond from the main road



The agricultural plains landscape that surrounds Waituna Lagoon

Section Five

SOUTHWEST CATLINS REGIONAL COASTAL CHARACTER AREA

5.1 Landscape Boundaries

The Southwest Catlins Regional Coastal Character Area extends from the end of Boat Harbour Road near Fortrose, to Brothers Point on the eastern side of Waikawa Harbour. See Figure 21.

The Shoreline

Between Slope Point and The Brothers Point, the shoreline is characterised by rocky bluffs, cliffs, coastal platforms, coastal ponds, estuaries and sweeping, sandy beaches. This landscape has been identified by the Department of Conservation as an area containing significant values.

Waikawa Harbour and Haldane Estuary are two particularly prominent features of this coastline. These tidal estuaries are largely unmodified and provide important habitat for many valued fish and bird species. Waikawa Harbour also provides a sheltered haven for a number of fishing boats.

The Coastal Platform

Much of the original coastal vegetation is now improved pasture and farmland. The estuaries and waterways are under some pressure from surrounding agricultural land use.

Settlement patterns across this regional character area include scattered farm dwellings, holiday cribs clustered around Porpoise Bay and the small rural communities at Haldane and Waikawa with a 'diffused' settlement pattern. At Waikawa for example, the settlement contains several different nodes of development - towards the jetties, around the junction with Stevens Road, and on the main road with the church and museum.

The southern scenic route between Invercargill, the Catlins and Dunedin is a popular alternative to the main highway north. The level of coastal influence that extends across

the coastal platform is a gradient from low to high between the western landscape units in this regional character area, and the eastern. While long stretches of the road are several kilometres inland and mark the inward extent of the coastal resource area or beyond, there are areas between where the road rejoins the coast or harbour or expansive coastal views suddenly open up in front of the traveller.

The Coastal Setting

The wider Catlins area marks the southeastern extent of the distinctive parallel northwest-southeast line of hills, escarpments and valleys known as the Southland Syncline. The linear landforms are barely noticeable from within this study area with the exception of some prominent ridges at the head of Waikawa harbour and around Brothers Point.

The original vegetation cover included podocarp forest, podocarp-kamahi forest, rata, areas of red tussock and wetland, flax swamps, coastal shrubland, turf communities and herb-fields. Much of the lower valleys are now modified farmland however, the upper hills and slopes generally remain in forest. This dark, mature bush setting is a dominant feature of a large part of the Southwest Catlins regional character area; particularly, further east. The bush screens views, creates a sense of enclosure and dilutes the sense of coastal influence while adding a different sense of naturalness and wilderness.

Most of the forested hilltops visible from the main road are privately owned and buffer the larger DoC lands beyond.

5.2 Otara District Coastal Character Area

5.2.1 Coastal Environment Context

The coastal landforms in this area are characterised by a series of low headlands and rocky reefs with sandy beaches between.

Inland, the landscape is typically modified, rolling, rural farmland with pasture and cropping in paddocks that often extend as far as the narrow fringe of marram grass on the beach slopes. The characteristic land-cover is dominated by improved grassland, with exotic shelterbelts and scattered, small blocks of pine forest providing some tall vegetation cover. There are some low-lying, swampy areas in places between the main road and the coastline, much of which drains to Lake Brunton.

There is no sizeable settlement in this character area. The settlement pattern is typically made up of scattered farm dwellings with the main exception being a small cluster of dwellings set around the main road at Otara.

The main road, the Fortrose-Otara Road, marks the inland extent of the coastal resource area. Access to Frasers Beach and Waipapa Point is easy, though some distance from the main road, but little access is possible to the coast between these points.

This coastline is popular for activities such as beach walking, and picnicking, while the Waipapa Point lighthouse is a popular destination on the southern scenic route.

5.2.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Otara coastal character area (see Figure 21) are:

Geomorphology and landform

- Sheltered, intimate beaches between rocky reefs and headlands
- dunelands and coastal ponding
- peatlands and sand plains
- brackish coloured streams

Ecology

- small pockets of remnant coastal and wetland vegetation
- Lakes Cook, Vincent and Forest and Brunton provide important fish habitat.

Key views and aesthetics

- views from main road have a pleasant, inland, rural, working character

Settlements and land-use

- shores are accessible for recreational activities such as paua gathering, scuba diving, snorkelling and surfcasting
- Waipapa Pt Lighthouse, gold dredge at Lake Cook and the Tararua Shipwreck are important historic sites in the area
- Agricultural landscape extends to the beach slopes and cliff-tops

5.2.3 Landscape Character Sensitivity

The shoreline and near foreshore or coastal platform typically have a wild, remote character where natural coastal processes and patterns are dominant. Beyond this shoreline/platform boundary however, farming developments have modified the coastal environment so that much of the landscape beyond the immediate coastline is characterised more by a rural, working landscape.

The natural character of this coastal character area has been reduced by the extension of farmland to the shoreline, however there are a number of areas where variations in elevation mean that natural coastal values along the shoreline are minimally affected by modifications to the coastal platform.

The fragile dunes and peatland/coastal pond ecosystems are characteristics of this area that are particularly vulnerable to landscape change.

5.2.4 Visual Sensitivity

The coastal Catlins are part of a very popular scenic route between Dunedin and Invercargill. However the main road through this district coastal character area, between Fortrose and Haldane, is several kilometres inland from the coast. There is limited access directly to the coast in this area although these access points – particularly Waipapa Point – are popular and relatively well signed and publicised.

Therefore, while the coastal landscape has attractive landforms and coastal features and relatively high amenity value, its visual sensitivity is moderated by the topography in some places and the limited access in others.

Inland, along the main road, the modified, rolling landscape could absorb some visual change although it also has a relatively open character in many places, which limits the nature and scale of change that could be accommodated.

5.2.5 Landscape Futures (Threats and Opportunities)

The main landscape issues that need to be considered in this coastal character area are:

- pingao sandfield and coastal pond vegetation restoration opportunities
- siting of buildings in unsympathetic way

- loss of peatlands and coastal ponds
- large-scale commercial forestry

5.2.6 Development Guidelines

10A Frasers Beach

There is little capacity in this character area for standard residential development though a small number of small-scale, sensitive housing developments or development that supports the recreational/eco-tourism opportunities in the area may be located in areas where structures would not be visible from the shoreline.

10B Otara

There is capacity for further development in this local character area without impinging on coastal landscape values. However, there are relatively few buildings in this agricultural landscape and any new building must therefore be designed and sited carefully to maintain the pastoral character and continue to reflect a sense of spaciousness. The location and nature of further development should be part of a broader, strategic examination of growth issues along the Catlins scenic route.

10C Waipapa Beach

This local character area is made up of the long, linear beach, coastal ponds such as Lake Brunton, and the narrow dune system bordering the modified farmland in the adjacent character area. There is no potential for further development here without significantly impacting on landscape, natural character and amenity values.

5.2.7 Recommendations (see Figure 26)

Consider the classification of the Waipapa Beach landscape unit as an Outstanding Natural Landscape.

The Frasers Beach landscape unit is not considered suitable to accommodate further conventional development.

Consider a protective heritage overlay on the Waipapa Point area to protect the historic character of the lighthouse and landscape context.

The Otara landscape unit is considered suitable for some form of further development.

5.2.8 Points for Further Discussion

Geomorphology and landform

In any development of the Frasers Beach character area, the coastline should be maintained as an open, unmodified space while applications for development inland from the coastline should be subject to strict design and visibility guidelines.

Investigate opportunities to minimise further drainage around lakes Cook, Vincent and Forest and Brunton

Ecology

Review opportunities to protect and enhance the ecological values of lakes Cook, Vincent and Forest and Brunton.

Key views and aesthetics

Maintain open, expansive coastal views from Waipapa Point.

Settlement and land-use

Investigate opportunities for the Otara landscape unit to accommodate further development so long as rural amenity can be maintained

5.3 Haldane Bay District Coastal Character Area

5.3.1 Coastal Environment Context

The Haldane coastal character area is a complex landscape that incorporates five distinct local character areas within its boundaries.

Slope Point, Haldane estuary, Haldane Bay, and the Reservoir, are the key features of the coastal landscape.

Smooth green fields and pockets of remnant bush at Slope Point are situated high above a jagged coastline of sea-cliffs and steep headlands. Views from this area are expansive and dramatic.

Physically and visually, Haldane estuary is a well-defined landscape, effectively contained by rising hills on three sides. It is relatively unmodified and important for mahika kai, middens and cultural materials such as harakeke.

Haldane Bay is the sandy bay at the mouth of the estuary. It is attractively formed, inserted neatly between two headlands. With no apparent vehicle access, it seems relatively remote and isolated.

The Reservoir is a man-made coastal lake set into low rolling farmland.

Elsewhere, the landscape is characterised by hills and gullies of pastoral farmland, shelter-belts, and the bush-covered hills to the north that visually contain this landscape.

To date, settlement in this area is typically rural in character. Farm homesteads are scattered across this area with some dwellings clustered more closely around Slope Point. Other modifications include the main road through the Haldane character area, which at times affords charming rural and bush-edge views and at times, windows of spectacular, elevated views to the estuary and coast. At the estuary, the road passes through the coastal margins.

This coastal character area marks the southern-most hills of the landform known as the southern syncline, with its distinctive northwest/southeast oriented ridges although they are not very visually distinctive from within this area.

5.3.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Haldane coastal character area (see Figure 21) are:

Geomorphology and landform

- Many rocky promontories and sea-cliffs and two large, deeply curved, sandy, bays
- Haldane estuary with tidal salt marshes and estuarine rushland - identified in the Geopreservation index as a regionally significant landform
- high bush-covered hills enclosing the landscape from the north

Ecology

- coastal forest and shrubland remnants
- coastal pingao sandfield at Haldane beach

Key views and aesthetics

- Attractive distant views from stretches of the elevated main road, down toward Haldane Estuary and Haldane Bay
- Close views of the estuary from Haldane Curio Road

Settlement and land-use

- historic marine beacon at Slope Point - southern-most point of the south island
- Campground at Weirs Beach
- Haldane 'Reservoir' – a low 'man-made' coastal lake formed from gold dredging processes in the area

5.3.3 Landscape Character Sensitivity

Extensive agricultural development has occurred within the coastal margins, and in many areas this extends almost to the coastline itself. However, there are many elements that make up the character of this area that increase the levels of natural character in this setting.

This is a complex landscape made up of a number of attractive and undeveloped landforms and landscape features.

Haldane estuary is a contained landscape with relatively high natural character values, modified primarily by the surrounding developed farmland and the campground close to its riparian margins.

Haldane Bay and Reservoir are set in modified, rolling farmland and the reservoir itself is a modified waterbody. While vehicle access is possible to some parts of this landscape unit, direct access to the bay and spit is limited. This is a more sensitive landscape and one that has a low threshold in terms of its ability to absorb change without adversely affecting its natural character values. The steep cliffs and rugged coastline between Haldane Bay and South Head has similarly high levels of natural character and sensitivity. Inland, around the Reservoir, there are some locations where the agricultural landscape and varying relief, provide some limited capacity to accommodate development.

At Slope Point, the landscape unit is well away from the main road although some of the area is open to good views from the main road where it passes alongside the estuary. The elevated landscape rises up away from the coastline and estuary with varying degrees of steepness. It is made up mostly of improved pasture and pockets of remnant bush. While the character is typically a modified rural working landscape, the dramatic nature of the coastline means high natural character continues to dominate the coastal margins. This is particularly true of the outer coast beyond the mouth of the estuary where the sensitivity of the landscape character is higher. Existing dwellings are mostly clustered around the top and bottom of School Road, overlooking the mouth and spit of Haldane Bay. There are applications for further development around these areas. The sensitivity of this landscape increases beyond the spit.

5.3.4 Visual Sensitivity

The complex nature of the landscape in this character area means that there are some areas with the ability to visually absorb some development, while other areas close by are likely to be highly visually sensitive to future change.

The estuary and bay are open to a number of views from public viewpoints – particularly the roads and campground – as well as from private properties. Development in these areas would be highly visible.

The coastal and estuarine margins are highly visually sensitive as they tend to be either in key view shafts or in remote areas where visitors are likely to expect a natural, undeveloped character to views.

Parts of the green hills of Slope Point are plainly visible from the main road, rising up above the estuary. The estuary itself is popular for a number of recreational activities, and views are possible from the water to parts of all the surrounding hills.

There are a number of existing houses clustered along the minor roads towards Slope Point, modifying the view. Some parts of these slopes may be able to accommodate further development without threatening the level of amenity currently enjoyed. The skyline however, is extremely sensitive, as are the hills above the outer coastline, around Slope Point itself.

The Reservoir unit is more of an internally focussed landscape with some locations amongst the low rolling hills, away from the roads where some well-designed, clustered development may be accommodated.

5.3.5 Landscape Issues (Threats and Opportunities)

The main landscape issues that need to be considered in this coastal character area:

- further degradation of forest remnants & loss of fringe species in native forests
- removal of riparian vegetation around estuaries
- development on the hills that surround the estuary and overlook the bay and coastline

- siting of forestry or structures on skylines
- Estuary restoration
- Reservoir at Haldane Bay may have potential for providing further recreational opportunities

5.3.6 Development Guidelines

11A Haldane Road

This rural landscape has some capacity to absorb further development, in carefully selected locations. Structures should be sited so as not break the skyline, to blend in as much as possible into the hillsides, and to generally minimise visibility from public viewpoints and particularly from Slope Point itself and the local walking tracks.

11B Slope Point

This coastal dominated area has very little capacity for further housing development other than for a few isolated houses within a small triangular area between Barnett Road, Slope Point Road and School Road where the landscape may be able to accommodate a small number of low-scale housing designed to be unobtrusive and sensitive to the coastal landscape character.

11C Haldane Estuary

The high landscape, amenity and natural character values of the estuary should be protected and opportunities to enhance the coverage of riparian and wetland vegetation, water quality and other estuarine values, recreation opportunities should be reviewed.

Key vistas towards the estuary and coast, particularly from the southern scenic road, but also from the minor local roads should be protected.

11D Haldane Hills

This local character area is characterised by its sloping, bush-backed paddocks. There is some capacity to accommodate development tucked within the varying topography of this area. These slopes are visible from the main southern scenic route and some parts will be visible

from the estuary and Reservoir so development that is low-scale, and reflects the rural character of the wider area could be absorbed within the dips and gullies.

11E Haldane Bay

The Haldane Bay character area includes the low, rolling hills around the Reservoir and extends to the land behind Curio and Porpoise Bays.

The Bay and estuary 'mouth', the Reservoir, and the steep sea-cliffs and rocky headlands between the bay and South Head are the key elements that characterise this area.

The focus of much of this area should be on maintaining and enhancing the existing recreation opportunities which are already popular in the Haldane area. While there is vehicle access around 3 sides of this local character area, there is no direct vehicle access to the bay or to the reservoir which creates a special experience for visitors that should be maintained. There is some capacity for further development close to Porpoise Bay around the Waikawa - Curio Bay Road.

5.3.7 Recommendations (see Figure 26)

Consider an overlay of Outstanding Natural Landscape over the Slope Point landscape unit.

Prepare a Settlement Structure Plan for the Haldane Estuary landscape unit to focus on identifying the most appropriate development densities, locations, extent and nature of future growth.

The Haldane Bay landscape unit is largely unsuited to conventional development.

The Haldane Road and Haldane Hills landscape units are considered to have the capacity to accommodate some further growth.

5.3.8 Points for further Discussion

Geomorphology and landform

Review opportunities for catchment-based approach to managing landscape values related to Haldane Estuary.

Ecology

Investigate opportunities to enhance ecological values of the estuary.

Protect and enhance remnant pockets of bush around Slope Point.

Key views and aesthetics

Maintain open, rural character to panoramic coastal views currently available from public roads.

Settlement and land-use

Although the Haldane Bay landscape unit has been identified as having particularly significant visual and landscape character, there is some capacity for sensitive development at the eastern end of this area, near the Curio Bay and Porpoise Bay landscape units.

5.4 Porpoise Bay District Coastal Character Area

5.4.1 Coastal Environment Context

This coastal character area is centred on the sweeping beach and dunes of Porpoise Bay and Curio Bay.

Curio Bay is a small bay between Ferry Head and South Head. Sea-cliffs separate the rock shelves in the bay from the land above. These coastal shelves are exposed at low tide, and embedded in them are the remains of a petrified forest, identified as a significant geological feature. Curio Bay is a popular attraction on the southern scenic route and offers an established camping ground close by. It has strong similarities with parts of both of the adjacent landscape units however it also has unique values in terms of its Reserve status and its management as a visitor attraction.

Porpoise Bay, immediately north of Curio Bay, is an attractive, long, sweeping curve of sand, the end of which forms a spit at the mouth of Waikawa Harbour. It is also a well-contained landscape, defined by the bush-covered hills rising steeply to the north, above the main road.

The bach settlement at Porpoise Bay is a distinctive ribbon of beach cribs on the dunes between the main road and the beach, overlooking Porpoise Bay. Housing is clustered more towards the southern end of the bay where dwellings are currently sited side-by-side in single lots. A recent development in this corner of the bay has subdivided the lots so that there are two lots between the road and the beach and an access road between them. There is likely to be pressure for further housing development in this attractive bay.

5.4.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Porpoise Bay coastal character area (see Figure 21) are:

Geomorphology and landform

- petrified fossil forest at Curio Bay - has a reserve status and identified as an internationally rare geological feature.
- dunes along curving bay with sandy beach, visually contained by hills

Ecology

- Populations of Hector's dolphins, Yellow-eyed penguins and Fiordland Crested penguins and other sealife
- Flaxlands around Curio Bay
- indigenous forest on hill slopes above Porpoise Bay

Key views and aesthetics

- views to Porpoise Bay from the main road when approaching from the west are possible through the gaps between dwellings
- views of Porpoise Bay from public viewpoint at the campground
- views towards Porpoise and Curio Bays from main road, approaching from the east.

Settlement and land-use

- Porpoise Bay popular for swimming and viewing
- Typical beachside settlement pattern
- campground at Curio Bay with unique flax shelter
- low levels of modification associated with Curio Bay petrified forest visitor experience

5.4.3 Landscape Character Sensitivity

Curio Bay has well-recognised, unique geological qualities and displays high levels of natural character and amenity value. Consequently, it also has a low threshold in terms of absorbing landscape change. However, the area is currently protected by reserve status and managed as such. Current use of part of South Head as a DoC campground has modified this area however it is a low scale of modification and its situation tucked amongst flaxlands has helped it to have little effect on reducing the overall natural character of the area.

Porpoise Bay is an attractive landscape with an intimate scale and character that is largely coastal although it also sits within a rural context. While aspects of the bay continue to display high levels of natural character, it is far from pristine, particularly on the coastal platform or dunes, above the beach. However, although development has occurred on these sensitive dunes, the existing settlement pattern appears in scale and character with the coastal environment. From the shoreline, the level of modification appears considerably lower due to the intervening dunes, particularly at the northeast end of the bay, further from the focus of the existing settlement.

Porpoise Bay is backed by a sensitive dune system. Marram grass has been introduced in the past to stabilise coastal erosion of these dunes however it appears that erosion is continuing, particularly at the Waikawa Spit end of the bay.

The location of the main road close to the bay but between the hills and the houses or dunes, means the landscape is experienced by most visitors as an intimate, lightly settled, rural, coastal landscape.

5.4.4 Visual Sensitivity

The main road through this area passes close by the coastal margin. Although views of the sea are possible from some locations along the road, the coastal margin and relationship between the land and the sea is not easily distinguished apart from views from the beach itself and from South Head.

Views towards the bay from the road are mostly seen with the cribs in the foreground or midground and glimpses of the sea are possible in the gaps between dwellings. A key view is along the approach to the bay when travelling east from Haldane. The road is slightly elevated and affords a first glimpse of the coast, over the roofs and in the gaps between the cribs before descending to sea level. To the east, the bare North Head landform dominates the background and adds to the sense of a rural context. Other elements in this landscape indicate that this is a coastal environment, whether or not the shoreline is visible – sand dunes and marram grass, macrocarpa shorn by the wind, and the style of housing is typical of New Zealand coastal baches or cribs.

The existing level of modification lowers the visual sensitivity of this landscape, however due to the intimate scale of the area and the high level of amenity currently enjoyed by visitors and residents, further development could only be accommodated in this area if it is appropriate in terms of scale, form, siting, nature and maintaining a relationship with its natural coastal and rural surrounds.

5.4.5 Landscape Futures (Threats and Opportunities)

The landscape issues that need to be considered in this coastal character area are:

- effects of further subdivision development, lifestyle lots and holiday home or bach improvements
- upgrade of infrastructure and development of commercial/tourist services particularly any development of the campground
- intensive recreational activities on sand dunes
- coastal erosion of dune systems

5.4.6 Development Guidelines

12A Curio Bay

Maintain current level of protection. Prevent private development of campground land.

12B Porpoise Bay

Some capacity for further development though this should be modest and structures should be in scale and character with the area.

Put limit on northern/eastern extent of housing encroachment. Limit on building height, minimum curtilage/maximum building coverage, and provide guidelines for building materials and colours. To protect values from beach and South Bay headland and campground

12C Porpoise Bay Hills

Some capacity for a small number of individual houses and one or two small developments tucked into these slopes but at very low density, and low scale. Keep bush/rural character. There is an opportunity to use the bush as a visually absorbing backdrop to new houses. Locations for acceptable clusters need to be investigated at a finer scale.

5.4.7 Recommendations (see Figure 26)

Consider classification of the Curio Bay landscape unit as an Outstanding Natural Feature.

Prepare a Settlement Structure Plan for the Porpoise Bay landscape unit.

The Porpoise Bay Hills landscape unit has some capacity to accommodate future growth.

5.4.8 Points for Further Discussion

Geomorphology and landform

Maintain visible, legible relationship between shoreline and coastal environment at Porpoise Bay.

Ecology

Discourage clearance of indigenous forest on the Porpoise Bay hills.

Encourage planting of appropriate indigenous coastal species around new developments.

Key views and aesthetics

Consider the use of height limits/building setbacks and minimum curtilage/maximum building coverage rules to minimise visibility from the shoreline at Porpoise Bay, while maintaining views over the top of and between buildings.

Settlement and land-use

Investigate suitable locations for small cluster development within the 'Hills' local character area.

5.5 Waikawa Harbour District Coastal Character Area

5.5.1 Coastal Environment Context

The Waikawa coastal character area is a large, well-defined landscape, centred on the sheltered harbour and enclosed by steep hills of pasture, forestry blocks and bush.

Waikawa Harbour is a large, relatively unmodified estuary, fed mostly by the Waikawa River. It has important natural values identified in the Geopreservation inventory. The harbour mouth and spit also contain maori archaeological sites and it is an important area for mahika kai.

The main road skirts the western margins of the harbour before crossing the river near the head of the harbour. A number of minor roads provide access to the eastern margins.

Land use in this area is generally related to farming and forestry while DoC manages some of the bush on the hills above. A small fishing fleet operates out of the harbour. Clusters of cribs and farmhouses are scattered across this landscape but predominantly on the western shores as part of the community of Waikawa. Interestingly, this settlement contains several different nodes of development with clusters of dwellings towards the jetties, around the junction with Stevens Road, as well as on the main road with the church and museum.

5.5.2 Key Landscape Features and Characteristics

The key landscape characteristics of the Waikawa Harbour coastal character area (see Figure 21) are:

Geomorphology and landform

- Intimate bays and contained landscapes within the larger harbour setting.
- The exposed tidal flats of the estuary

Ecology

- Waikawa Harbour identified as a wetland of national importance to fisheries

Key views and aesthetics

- patterns of rivulets in the exposed mud flats
- clear relationship of the harbour with the surrounding landscape

Settlement and land-use

- Fishing boats and the jetties at Waikawa.
- History of whaling and sawmilling
- Waikawa harbour as a scenic reserve; offers a variety of recreational activities such as canoeing, swimming, fishing and is also valued for seafood gathering

5.5.3 Landscape Character Sensitivity

While the scale of the harbour is large, from the land, and the main road in particular, this character area is experienced as a number of quite discrete smaller landscapes, defined by physical landforms and screening vegetation.

The two sides of the harbour are also quite different from each other. The gentle lower slopes and flats of the western side of the harbour, are mostly modified farmland but include many trees, shrubs and shelterbelts and fingers of vegetation extending down the slopes from the bush-clad hills above. By comparison, the hills that ring the eastern side of the harbour have slopes of predominantly bare pasture extending to the shoreline. There are fragments of remnant vegetation in gullies and also in pockets along the shoreline further south.

In spite of the farming modifications to the margins of the harbour, natural character remains high in this area. Waikawa Harbour itself is relatively unmodified and has very high natural values. The estuarine margins are sensitive to landscape change and have a low threshold in terms of their ability to absorb development. However, the complexity of the surrounding landscape and its rural working character provides some capacity for development absorption beyond the riparian margins.

Although it is largely grazed, the Brothers Point character area is the most wild and unmodified landscape with attractive and legible coastal landforms. The landscape character of this area has a high level of sensitivity to change.

5.5.4 Visual Sensitivity

As described above, this enclosed character area is experienced as a number of small discrete landscapes within it, which reduces the level of visual sensitivity in the area.

The harbour is the physical and visual centre of this landscape area and so development on, or close to its margins will be more noticeable and less able to be visually absorbed.

The main road runs through the western side of this area and Waikawa, the main settlement is also on this western side. However, although they are minor roads, the eastern side of the harbour is also easily accessed. It currently has a much lower level of settlement.

There are many open vistas possible of the eastern hills and harbour from public viewpoints on the west. The level of visual sensitivity is therefore higher on the eastern side, than the west, and most high around North Head and the least accessible Brothers Point local character area.

5.5.5 Landscape Issues (Threats and Opportunities)

The main landscape issues that need to be considered in this coastal character area are:

- Modification to the estuary in terms of changes to both its waters and its margins.
- Maintaining the health of the estuary requires protection to be addressed at a catchment-wide scale.
- Opportunities to enhance riparian vegetation
- Spread of forestry closer to the coastal margins
- Intensification of recreation/boating activities on the harbour
- Development on the open slopes of the eastern harbour
- Waterfront development ringed around the harbour (Loss of views of shoreline and to the other side of the harbour)

5.5.6 Development Guidelines

13A Waikawa

There is capacity for absorbing future development within the undulating and vegetated landscape of this character area. Concentrating further growth around the existing nodes of development around Waikawa would minimise potential landscape impacts. Key views to the estuary should be maintained and protected from inappropriate development.

13B Niagara

There is some capacity for further development tucked into the hills around the head of the estuary.

13C Yorke Road

The hills that rise up from the estuary around Yorke Road are visually open to the road on the western side of the harbour. These open slopes are not a suitable focus for further growth however there is some capacity for accommodating new dwellings within this landscape unit where they can be better visually absorbed, in the valleys behind these open slopes and in other less prominent areas.

13D and 13E Inland Brothers Point and Brothers Point

This area is relatively remote and although much of it has experienced some modification from agricultural development, it has a predominantly natural character. While there is capacity to absorb a small number of new houses in some parts of this area, the existing differences in the levels of modification between the west and east sides of this harbour provide an opportunity to continue to focus development on the western side while protecting the isolated, rural and wild coastal character of the eastern coast from North Head to Brothers Point. Development of the prominent North Head, at the entrance to Waikawa Harbour should be avoided.

5.5.7 Recommendations (see Figure 26)

Initiate a comprehensive Settlement Structure Plan for the Waikawa landscape unit as a basis for determining the extent, nature, location and form of future development.

The Brothers Point landscape unit is not considered suitable for conventional development – it is a significant visual and landscape character area.

The Niagara, Yorke Road and Inland Brothers Point units all have some capacity to absorb some level of further development.

5.5.8 Points for Further Discussion

Geomorphology and landform

Investigate opportunities to manage the Waikawa estuary/harbour based on a catchment-wide approach.

Ecology

Investigate opportunities to enhance riparian vegetation.

Key views and aesthetics

Maintain the open views to the harbour and protect and enhance the visible relationship between the estuary and the surrounding landscape.

Maintain the prominent open slopes of North Head free from development.


Settlement and land-use

Concentrate future development around the existing settlement nodes at Waikawa.

0 0.5 1 2 Kilometres



Legend

 Landscape Character Units

1:100,000 @ A3

11th August 2006

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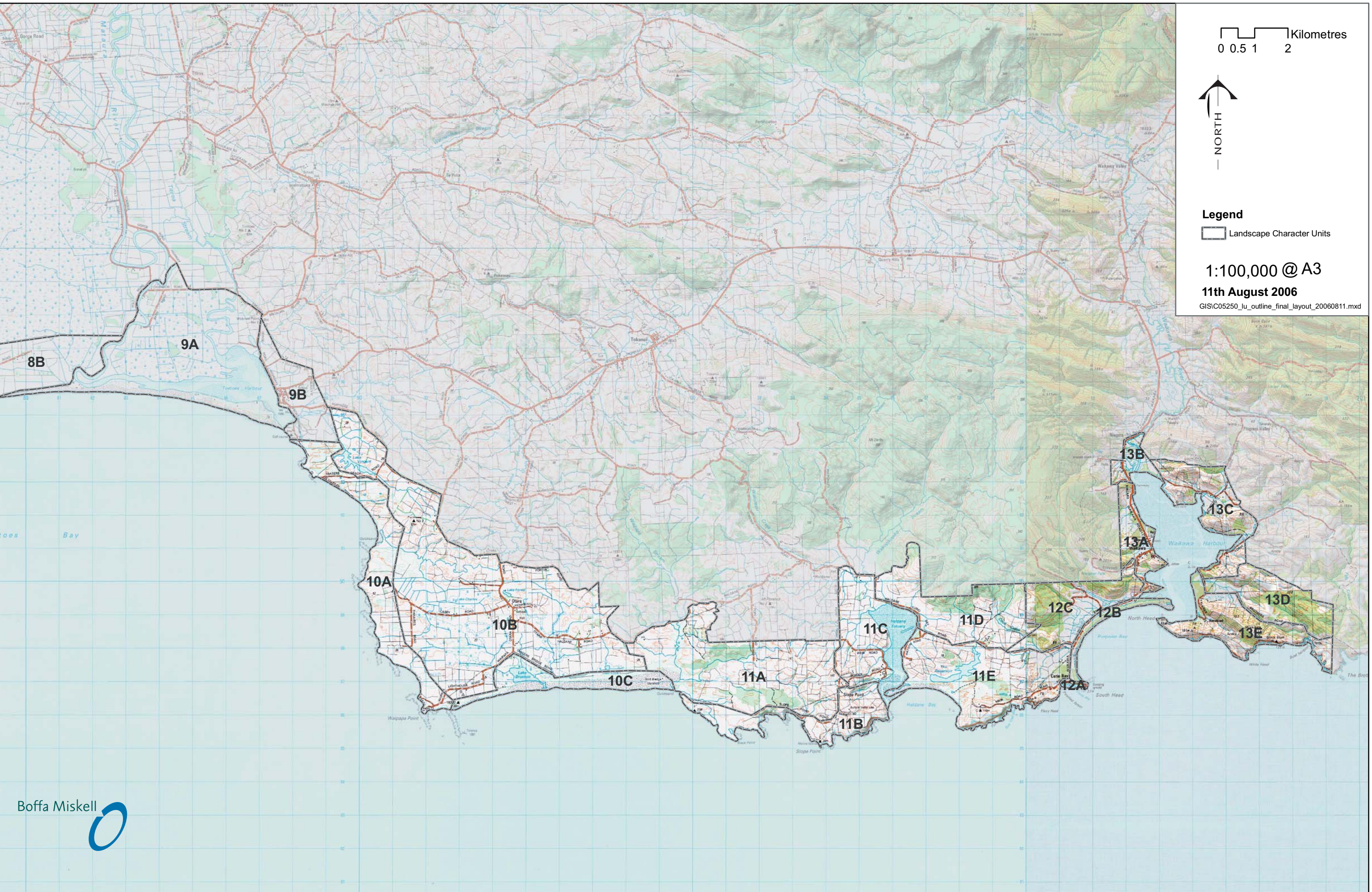


Figure 21: Southwest Catlins Coastal Character Area

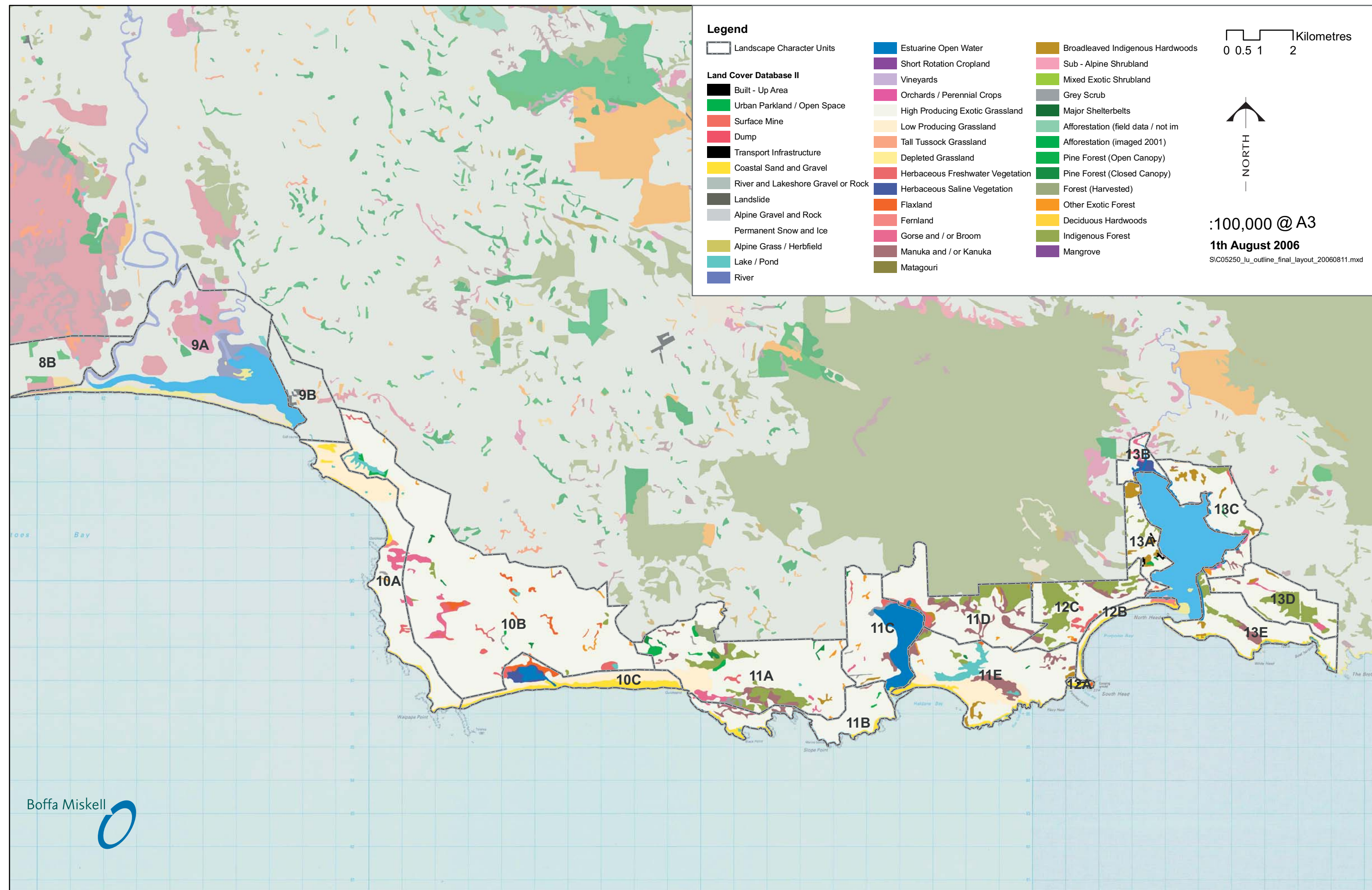


Figure 22: Southwest Catlins - Land Cover

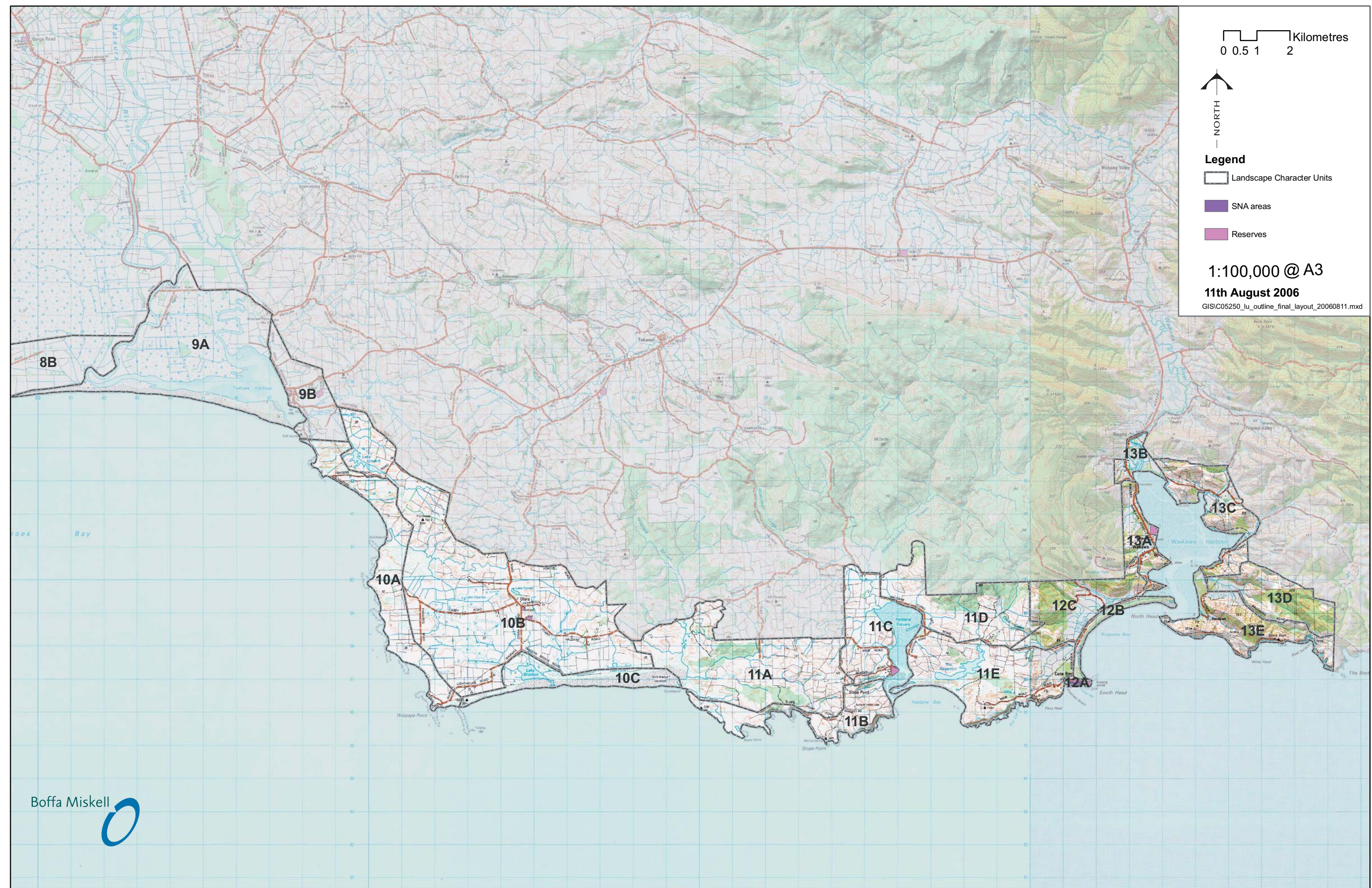


Figure 23: Southwest Catlins - Reserve Areas

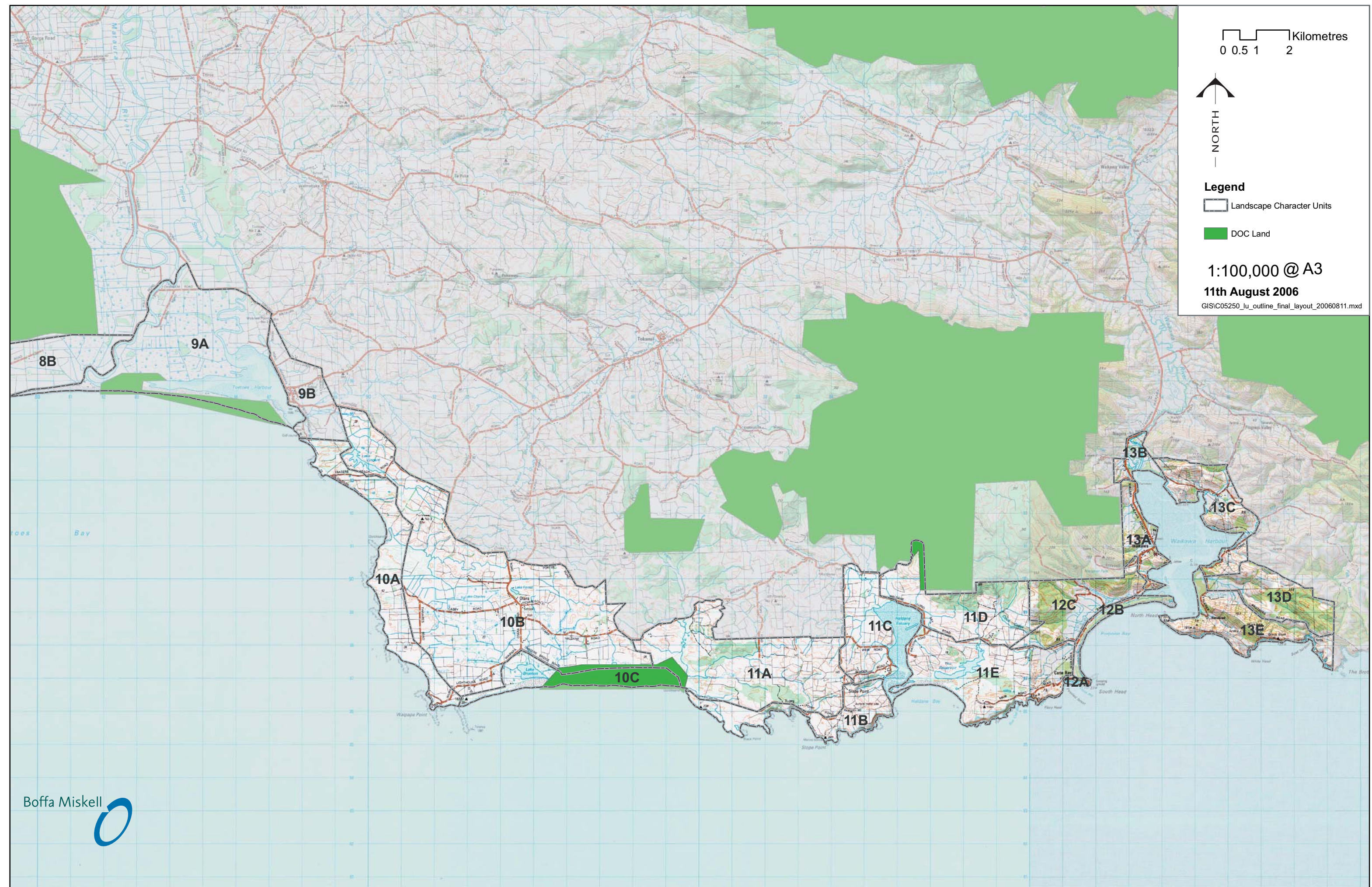


Figure 24: Southwest Catlins - DoC Land

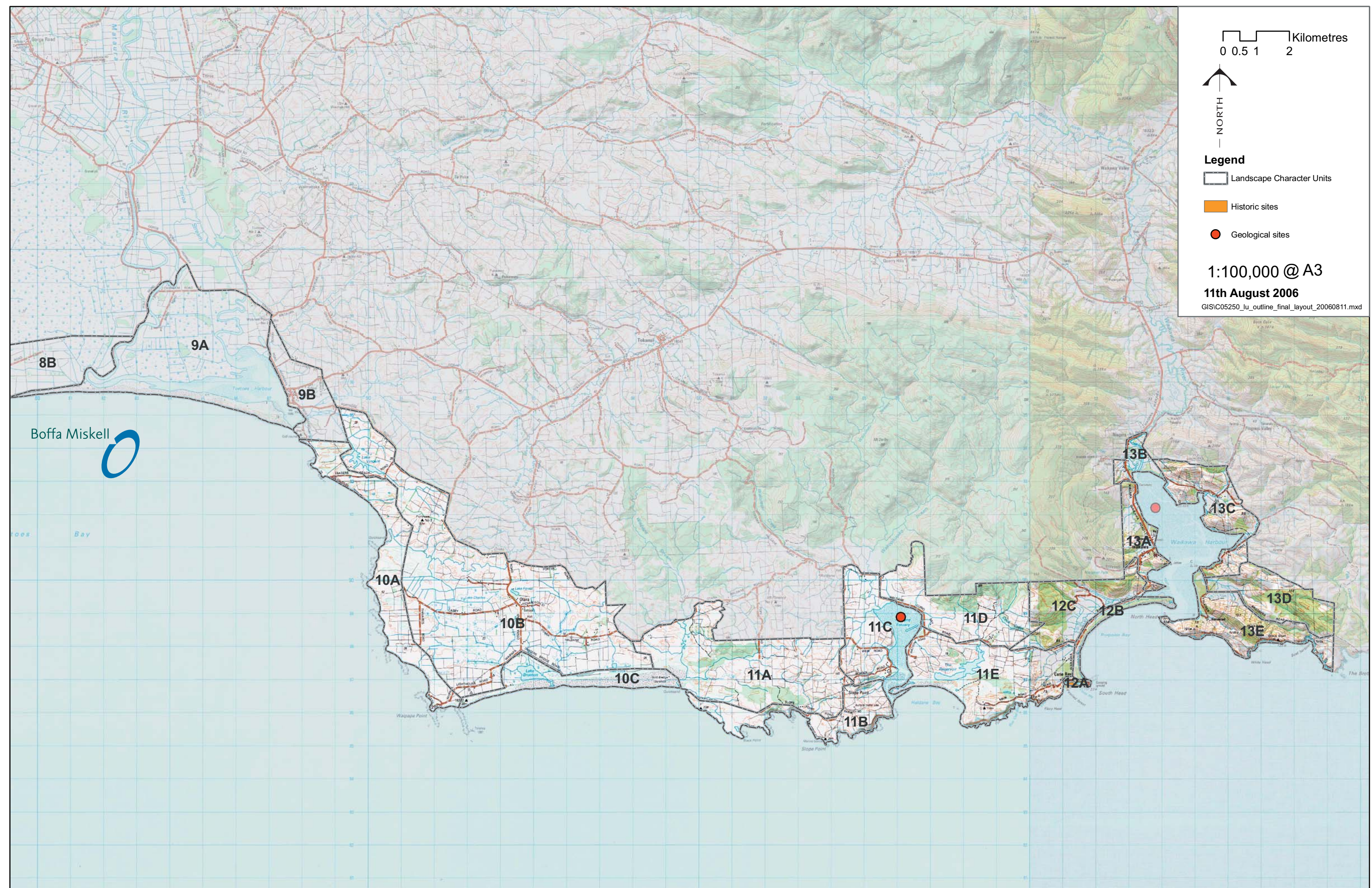


Figure 25: Southwest Catlins - Geological and Historic Sites

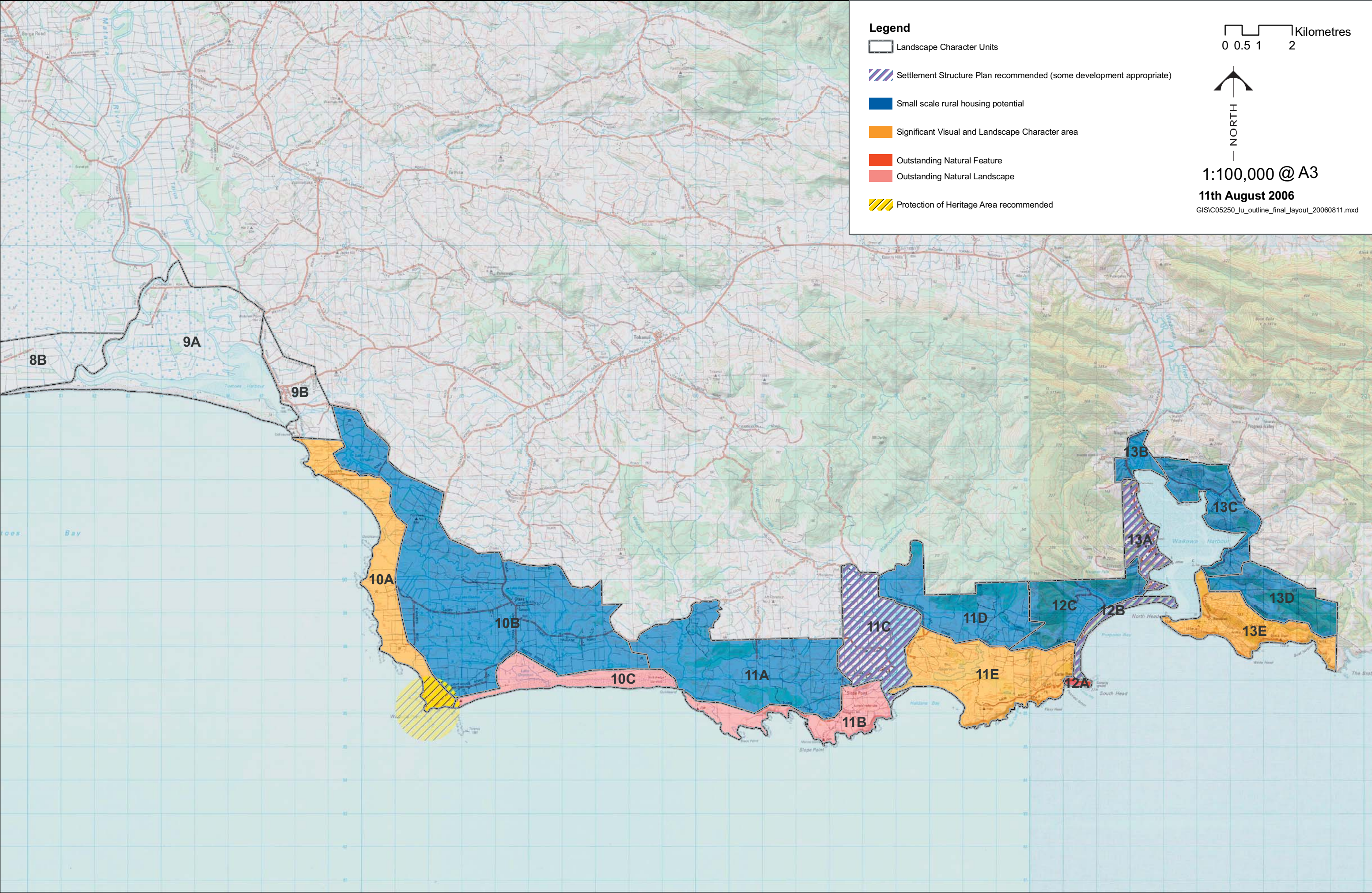


Figure 26: Southwest Catlins - Development Suitability

Key Landscape Characteristics



Waipapa Point lighthouse - a popular visitor attraction on the Southern Scenic Route



Rocky headlands between Frasers Beach and Waipapa Point



Typical marram grass-covered beach dunes in this area

Key Landscape Characteristics



View to Haldane Estuary and surrounding farmland from the main road



Haldane Bay and the Reservoir beyond



The coastline and pockets of remnant bush near Slope Point



The farmed slopes and windshorn trees near Slope Point

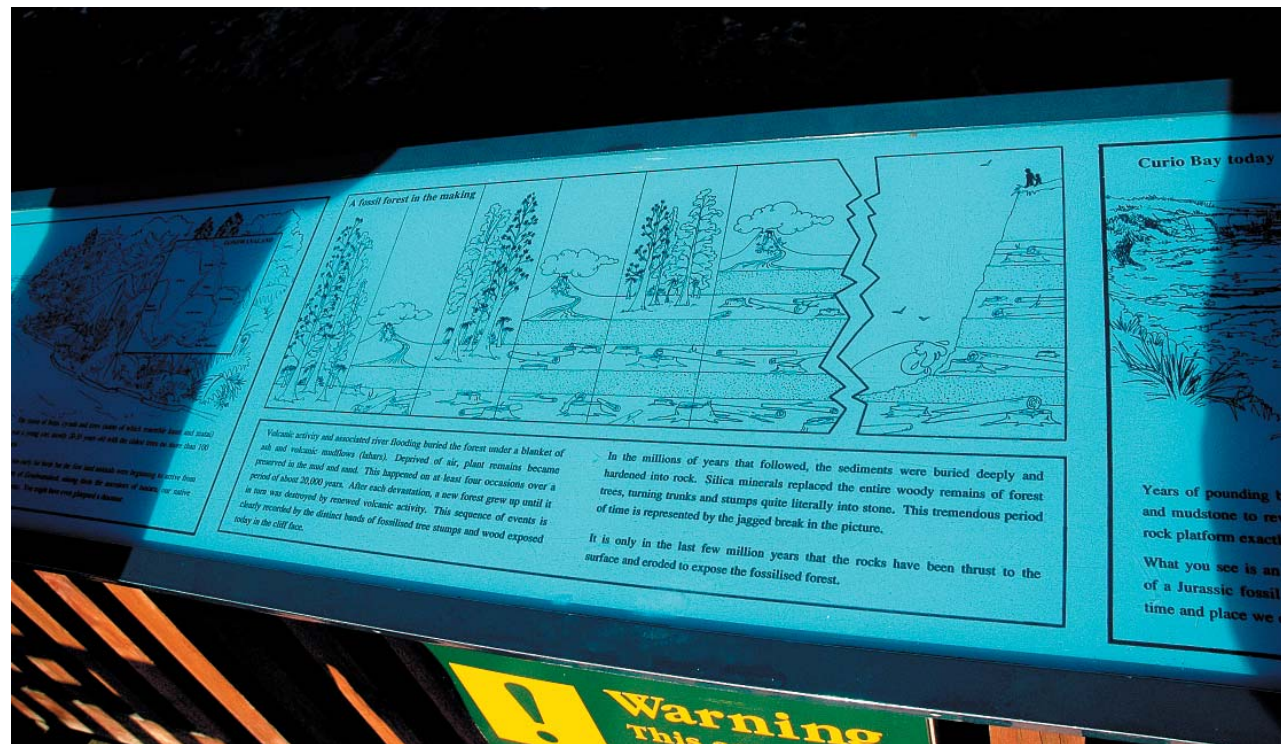
Key Landscape Characteristics



The Curio Bay Campground with distinctive flax shelterbelts



View to Porpoise Bay settlement from main road, approaching from the west. North Head is prominent in the background



The petrified forest of international significance at Curio Bay



The rocky coastal platforms and headlands of Curio Bay

Key Landscape Characteristics



This large harbour is experienced as a series of intimate landscapes



The settlement of Waikawa is made up of a number of clusters of houses rather than one central development



This western side of the harbour is more vegetated, more easily accessed and more settled than the eastern side



The more isolated hills and valleys near Brothers Point



The fishing industry at Waikawa Harbour adds to the character of the area

Key Landscape Issues



Visibility development in this open coastal landscape



Development pressure at Slope Point



Visibility of development on skyline around Slope Point



Maintaining views to the sea over and between the houses at Porpoise Bay



Development pressure at Porpoise Bay



Maintaining character of the existing relationship between coastal margin and beach from open views to the bay at South Head

Key Landscape Issues



Effects of waterfront development around Waikawa Harbour



Development on these open slopes on the less modified, eastern side of the harbour



View to part of the remote North Head in the Brothers Point landscape unit

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APPENDIX ONE - METHODOLOGY

COASTAL CHARACTER ASSESSMENT

A. Resource Studies

Environment Southland will provide literature and GIS maps on potential natural hazards and ecological values (derived from DOC). The available resource information will be used to distinguish key no-go areas for development. These areas will be covered in the landscape character assessment. However, no detailed guidelines for development from a landscape point of view will be developed.

B. Landscape Analysis

Definition of Coastal Character Areas and Units

In landscape terms the Southland coastal environment (area boundary provided by ES) will be defined based on viewshed characteristics of areas. For the purpose of coastal landscape assessment, the study area will be defined as a series of Coastal Character Areas. We suggest the use of similar coastal landscape units as for the report "Landscape and Ecology in Southland District" (Boffa Miskell, 1993), namely:

- Catlins Coast Character Area
- Estuaries Coast Character Area
- Invercargill City Coast Character Area (potential to include this unit)
- Invercargill City – Riverton Coast Character Area
- Riverton – Orepuki Coast Character Area
- Te Wae Wae Coast Character Area

Each of these Character Areas can be further classified into three distinctive coastal zones, the Shoreline, the Coastal Platform and the Coastal Setting.

These more extensive Coastal Character Areas are regional in scale and define the major landscape character types, which make up the Southland Coast. Within those character areas, Coastal Units will be defined on the basis of their particular and distinctive characteristics. These units of broadly homogenous landscape character are mapped and described for the study area. This investigation is mainly based on existing planning documents, maps, literature and aerial photos. It includes a review of natural landscape features and existing development within the study area.

Description and Analysis of Landscape Character:

The descriptions of the landscape units focus on the physical resource - the topography and geomorphology. The landscape character description of the study area is based on the mapping outlined above.

Analysis of Landscape Character Sensitivity: Common patterns in the landscape are highlighted and distinctive visual characteristics are described in detail for each coastal unit. The analysis is based on judgements about sensitivity of aspects most likely to be affected. These characteristics can be categorised as follows:

- Physical (landform, topography)
- Visual (vegetation cover, texture and water/ drainage patterns)
- Landscape quality/condition
- Representation of typical character
- Cultural and human activities (land use pattern)
- Connections /transitions (visual links and movement)
- Aesthetic Factors (scale, enclosure, pattern, form/line)

Photographs serve as examples and will be used to refer to the physical and visual character of each unit within the study area.

C. Landscape Assessment

The landscape will be assessed and categorised by defining the value of each landscape unit. The value assessment will be based on findings from the landscape analysis described above and findings from existing planning documents.

From a landscape point of view the following criteria will need to be taken into account for this assessment:

- Existing land use
- Patterns and scale of landscape character units
- Visual absorption capability
- Scope for mitigation
- Values placed on the landscape

Designations on both a national and local level will be considered as well as other criteria indicating value, such as tranquillity, remoteness, wilderness and conservation interests.

Units with similar characteristics will be categorised according to their value and an indicative assessment made of their suitability for future development (outstanding landscape, significant landscape and landscape suitable for development).

This will lead to an identification, in the context of Part 2 of the Resource Management Act 1991, of any locations, landscapes or natural features (by defining the physical extent of these areas on maps) within the study area that we consider to require specific recognition and protection from inappropriate future development.

D Coastal Study Report

A landscape report (including maps) will be produced from the findings identifying 'outstanding' and 'significant' landscapes and natural features as well as identifying specific areas where opportunities exist for appropriate development. The nature of those opportunities will be clarified

Note: The results from the factors outlined above and an assessment of natural hazards will eventually lead to a conclusion about the inherent quality and the suitability for potential future development of each landscape character unit within the study area. The collation of

findings is not included in this proposal.

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