Proposed Regional Policy Statement for Otago



Mō tātou, ā, mō kā uri ā muri ake nei

For us and for the generations that come after us

23 May 2015





Chairman's Foreword

This document is Otago's second Regional Policy Statement. Although the Otago Regional Council is responsible for its production, it is the Otago communities' document.

This time around, we want to look beyond the problems we face in resource management, to the Otago our community would like to see, and be proud to pass on to those who come after us.

We have spoken to people throughout Otago to get an idea of what is important for Otago's future. Predictably, Otago's resources support a wide range of values for our communities, and we'll need to work together to guide Otago's prosperity and development.

The Treaty partnership between the Crown and Kāi Tahu is a vital part of this collaborative effort. Kāi Tahu have been kaitiaki for Otago's resources for hundreds of years, and we value their guidance and input.

We will have some big changes and challenges to work through, such as the effects of climate change, and balancing land use intensification with the ongoing health of our land and water.

However, focusing only on the problems at hand risks missing the opportunities that present themselves and neglecting the bigger picture. We need to watch the road, but we also need to know where we're headed.

Thank you to all of those who have provided comments through the review process and assisted to prepare this document. It now remains for the wider Otago community to have their say and we welcome your feedback through the submission process.

Together we can create a Regional Policy Statement that benefits all of Otago's communities now, and into the future.

Stephen Woodhead

Mossikoag

Chairman

Otago Regional Council

RPS at a glance

PART A

INTRODUCTION

- The Otago region
- Kāi Tahu The treaty partner
- RPS framework

PART B

CHAPTER 1

Kāi Tahu values, rights and interests are upheld and kaitiakitaka is expressed

- ObjectivesPolicies
- Explanations and reasons for adopting

PART C

IMPLEMENTATION

- Methods and responsibilities
- Anticipated Environmental Results and Monitoring Programme

PART D

SCHEDULES AND APPENDICES

- Suporting information and criteria for policy implementation
- Statutory Framework
- Treaty Of Waitangi
- Glossary



CHAPTER 2

Otago has high quality natural resources and ecosystems

- Objectives
- Policies
- Explanations and reasons for adopting



CHAPTER 3

Communities in Otago are resilient, safe and healthy

- Objectives
- Policies
- Explanations and reasons for adopting



CHAPTER 4

People are able to use and enjoy Otago's natural and built environment

- Objectives
- Policies
- Explanations and reasons for adopting

Contents

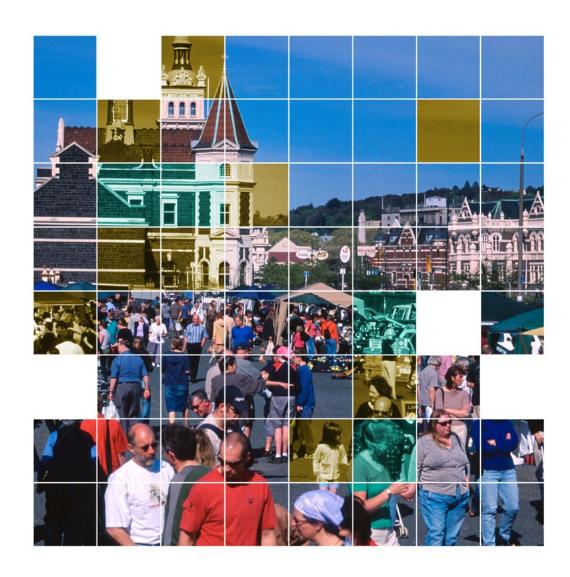
Chairman's Foreword RPS at a glance	i ii
Part A Introduction	4
The Otago Region Kāi Tahu - The Treaty Partner RPS Framework	4 6 10
Part B Chapter 1 Kāi Tahu values, rights and interests are recognised and kaitiakitaka is expressed	24
Objective 1.1 The principles of Te Tiriti o Waitangi are taken into account in resource management decisions	17
Objective 1.2 Kāi Tahu values, rights and interests and customary resources are sustain	ed 19
Part B Chapter 2 Otago has high quality natural resources and ecosystems Objective 2.1	23
Objective 2.1 The values of Otago's natural and physical resources are recognised, maintained and enhanced	26
Objective 2.2 Otago's significant and highly-valued natural resources are identified, and protected or enhanced	32
Objective 2.3 Natural resource systems and their interdependencies are recognised	39
Part B Chapter 3 Communities in Otago are resilient, safe and healthy	43
Objective 3.1 Protection, use and development of natural and physical resources recognises environmental constraints	47
Objective 3.2 Risk that natural hazards pose to Otago's communities are minimised	48
Objective 3.3 Otago's communities are prepared for and able to adapt to the effects of climate change	54

Objective 3.4 Good quality infrastructure and services meetc ommunity needs	56
Objective 3.5 Infrastructure of national and regional significance is managed in a sustainable way	59
Objective 3.6 Energy supplies to Otago's communities are secure and sustainable	61
Objective 3.7 Urban areas are well designed, sustainable and reflect local character	64
Objective 3.8 Urban growth is well designed and integrates effectively with adjoining urban and rural environments	67
Objective 3.9 Hazardous substances and waste materials do not harm human health or the quality of the environment in Otago	70
Part B Chapter 4	
People are able to use and enjoy Otago's natural and built environment	75
Objective 4.1 Public access to areas of value to the community is maintained or enhanced	78
Objective 4.2 Historic heritage resources are recognised and contribute to the region's character and sense of identity	79
Objective 4.3 Sufficient land is managed and protected for economic production	82
Objective 4.4 Otago's communities can make the most of the natural and built resources available for use	85
Objective 4.5 Adverse effects of using and enjoying Otago's natural and built environment are minimised	87
Part C Implementation	93
Roles and Responsibilities	93
Methods	94
Anticipated Environmental Results and Monitoring Programme	108

Part D Schedules and appendices	121
Schedule 1 Takata whenua values and interests Schedule 2	121
Statutory acknowledgement areas	133
Schedule 3 Significance threshold	134
Schedule 4 Criteria for the identification of natural features and landscapes	136
Schedule 5 Criteria for the assessment of the significance of indigenous vegetation and habitat of indigenous fauna	137
Schedule 6 Urban form and design	138
Schedule 7 Matters for the identification of historic heritage values	140
Schedule 8 Urban growth boundaries	142
Appendix 1 Statutory framework	144
Appendix 2 Te Tiriti o Waitangi	145
Glossary	147
Glossary of Te Reo Terms	152

Abbreviations

AER	Aniticipated Environmental Results
ORC	Otago Regional Council
RMA	Resource Management Act 1991
RPS	Regional Policy Statement



PART A INTRODUCTION

Overview

Continued prosperity and wellbeing is essential to ensuring the community is equipped to face the environmental, economic, cultural and social changes of the 21st century, and to provide opportunities for all people to realise their aspirations. A thriving and healthy natural environment is vital to sustaining our wellbeing.

The RPS is a high level policy framework for sustainable integrated management of Otago's resources and identifies the regionally significant issues that are addressed by that framework. It also gives effect to requirements of the Resource Management Act 1991. Appendix 1 outlines the statutory framework.

The framework for the RPS has been developed to distil the best of the distinct life-style Otago has to offer: outstanding and wild environments, prosperity, abundant recreational opportunities, a sense of rich local history, and community pride. It also seeks to provide for the values held by takata whenua and the priorities expressed by the wider Otago community.

The Otago Region

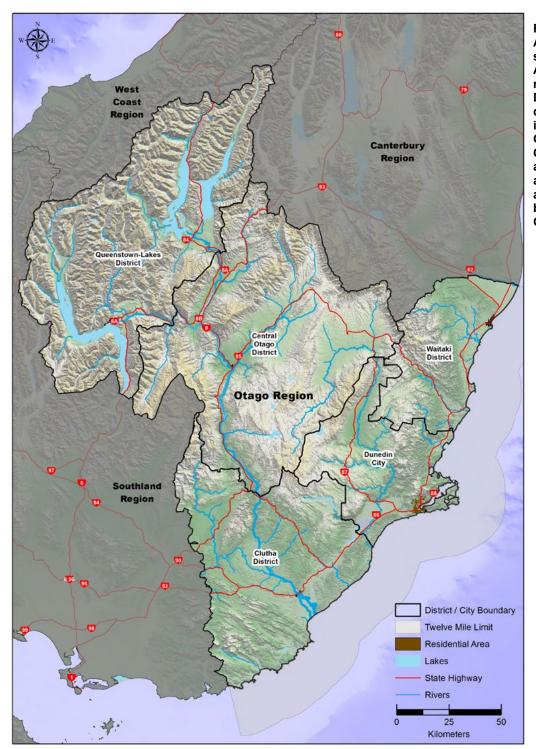
Otago is the second largest region in New Zealand, at about 32,000 km² (12% of New Zealand's land area). It stretches 480km along the South Island's eastern coast, from the Waitaki River in the north to The Brothers Point in the south. It reaches inland to the alpine lakes Wakatipu, Wanaka and Hawea, encompassing the Clutha Mata-au, and Taieri catchments.

Otago covers a vast range of geography and ecosystems: tussock and tor covered block mountains and dry inland basins, glacial lakes and their mountain settings, broad grassy valleys fringed with beech forests extending well into the Southern Alps and dramatic coastlines around the Otago Peninsula and the Catlins. The vegetation is similarly diverse, from the lowland podocarp forests of the Catlins, through the dryland, grassland ecosystems of Central Otago to the high rainfall beech and alpine areas of Mount Aspiring/Tititea National Park.

Human activity has left its mark on the landscape, including Māori archaeological sites, hydro lakes, tailings and bridges from the gold rush era, pastoral landscapes, and historical architecture. Introduced species have become a valued part of the natural environment in some cases, and troublesome pests in others.

Agriculture has formed the basis of Otago's economic development and continues to be a major source of revenue. However, tourism now provides more than a quarter of Otago's Gross Domestic Product – the highest rate in New Zealand.

At the 2013 census, Otago's regional population of 202,467 was the seventh largest of New Zealand's 16 regions, and about 4.8% of New Zealand's total population. The Queenstown Lakes District was the second fastest growing territorial authority area in New Zealand.



Five Territorial
Authorites
share Otago:
A city council
representing
Dunedin, and
district councils
in Clutha,
Central Otago,
Queenstown Lakes
and Waitaki (whose
administrative
area straddles
both Otago and
Canterbury).

Kāi Tahu¹ - The Treaty Partner

Te Tiriti o Waitangi (the Treaty of Waitangi) is the founding document for New Zealand, the basis on which the partnership between Māori and the Crown was established. The Kāi Tahu rakatira Karetai and Korako signed the Treaty at Pukekura (Taiaroa Head) on 13 June 1840. The Treaty was also signed by Kāi Tahu at Akaroa, Ruapuke and Cloudy Bay. Kāi Tahu considered that the Treaty bound the whole tribe of Kāi Tahu irrevocably to an agreement which imposed responsibilities on both signatories, the Crown and Kāi Tahu.

Principles of the Treaty

In drafting legislation, Parliament has chosen to refer to the principles of the Treaty, rather than its explicit terms. The principles of the Treaty, as enunciated by the Waitangi Tribunal and the courts, include:

- The principle of tribal rakatirataka/self-regulation: Recognising the right of Kāi
 Tahu to manage resources and exercise kaitiakitaka over their ancestral lands,
 waters and other taoka.
- The principle of partnership. Mutual obligations to act reasonably and in good faith.
- The principle of active participation in decision making.
- The principle of active protection of Kāi Tahu interests.
- The principle of development. The Treaty principles are not confined to customary
 uses or the state of knowledge as at 1840 but are to be adapted to modern, changing circumstances.

There are two versions of the Treaty of Waitangi, the English version and the Māori version (See Appendix 2). The Māori language text, as the version signed by the Kāi Tahu rakatira, should prevail if there is ambiguity.

Partnership

The Otago Regional Council (ORC) has an established relationship with Kāi Tahu based on the treaty partnership. Kāi Tahu values the relationship with the ORC and is committed to working with the wider community towards a positive future for all people in Otago. Partnership between the ORC and Kāi Tahu embodies the principles of the Treaty of Waitangi in decision making and local environmental management.

¹ In the south of the South Island, the local Māori dialect uses a 'k' interchangeably with 'ng'. The preference is to use a 'k' so southern Māori are known as Kāi Tahu, rather than Ngãi Tahu. In this document, the "ng" is used for the iwi in general, and the "k" for southern Māori in particular. See the glossary for a complete definition.

Expression of Te Tiriti o Waitangi

The RPS has been developed in collaboration with Kāi Tahu and identifies the matters that have the potential to affect cultural values and wellbeing, and enables takata whenua to participate in resource management processes.

Particular matters of interest to Kāi Tahu include:

- Recognising the rights and interests of Kāi Tahu to be involved in natural and resource management in Otago, including decision making processes and implementation.
- Identifying and protecting important natural and physical resources, including the coast, waterways, lakes, wetlands and indigenous flora and fauna.
- Protecting traditional food gathering sites from any use or development which may threaten the values of these areas.
- Protecting mahika kai and restoring access to mahika kai areas;
- Protecting wāhi tūpuna and urupā.
- Enabling development of land and resources within native reserves, including papakāika housing.

The ORC's commitment to their Treaty responsibilities is reflected throughout this Regional Policy Statement.

Takata whenua

Kāi Tahu are takata whenua of the Otago region. Although Waitaha were the first people of Te Waipounamu (the South Island), Kāti Māmoe and then Kāi Tahu followed. Through warfare, intermarriage and political alliances a common allegiance to Kāi Tahu was forged. Kāi Tahu means the 'people of Tahu', linking them by name to their common ancestor Tahu Pōtiki.

The Kāi Tahu tribal area extends from the sub Antarctic islands in the south to Te Parinuiowhiti (White Cliffs, Blenheim) in the north and to Kahurangi Point on Te Tai o Poutini (the West Coast).

Te Rūnanga o Ngāi Tahu (the iwi authority) is made up of 18 papatipu rūnaka, of which four are in Otago. In addition, there are whānau rōpū (whanau grouping) associated with the papatipu rūnaka. Located predominantly in traditional coastal settlements, papatipu rūnaka are a focus for whānau and hapū (extended family groups) who have takata whenua status within their area. Takata whenua hold traditional customary authority and maintain contemporary relationships within an area determined by whakapapa (genealogical ties), resource use and ahi-kā-roa (the long burning fires of occupation).

Seasonal trips would be made from the coastal settlements to inland Otago to visit relations, harvest various species and gather plants and stone resources. Journeys were also made along the coast, including trips south to the Titi (Mutton Bird) Islands or north to trade. Trails along the Otago coast and inland became well established. Waterways and the coastal waters also provided transport routes.

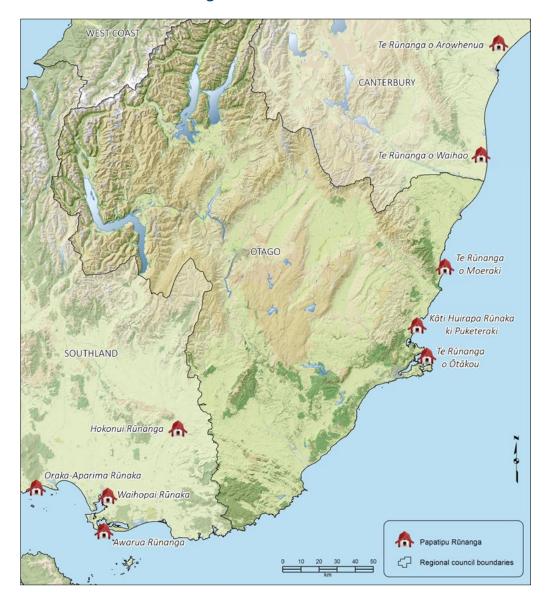
Otago is also home to Māori from other iwi and hapū (mātāwaka). The Araiteuru marae in Dunedin and Te Whare Koa in Oamaru are important pan-tribal cultural centres for mātāwaka and sit within the manaakitanga of the takata whenua.

In 1998, the Ngāi Tahu Claims Settlement Act 1998 was enacted to settle historical

Ngāi Tahu claims against the Crown. Among other things, this Act identifies some taoka species, establishes tōpuni, statutory acknowledgements, dual place names and nohoaka sites. These instruments recognise the special association of Ngāi Tahu with these areas and resources and assist with Ngāi Tahu participation in processes under the Resource Management Act 1991 and the Local Government Act 2002.

The iwi consultancy services, Kāi Tahu Ki Otago Ltd. and Te Ao Marama Inc., provide a first point of contact, and facilitate Kāi Tahu engagement in resource management processes.

Mana whenua in Otago

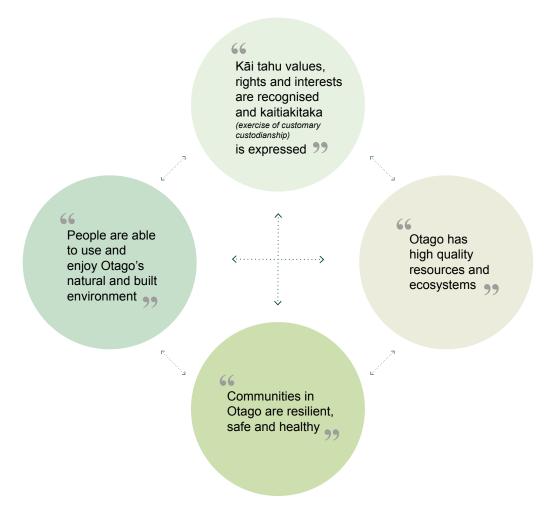


Kāi Tahu with mana whenua in Otago are Te Rūnaka o Moeraki, Kati Hūirapa Rūnaka ki Puketeraki, Te Rūnaka o Ōtākou, and Te Rūnaka o Hokonui. They share an interest in the inland lakes and mountains of Otago with Papatipu Rūnaka located beyond the boundaries of the Otago region. The interests of Otago rūnaka are given in more detail in Schedule 1B (Interests specific to particular papatipu rūnaka).

The areas of shared interest originate from the seasonal hunting and gathering economy that was a distinctive feature of the southern Kāi Tahu lifestyle. This seasonal mobility was an important means by which hāpu and whānau maintained customary rights to the resources of the interior and ahi kā.

RPS Framework

Four inter-related outcomes are sought in managing the region's resources:



These outcomes provide the framework for sustainable, integrated management of resource use for us and for the generations that come after us - $M\bar{o}$ $t\bar{a}tou$, \bar{a} , $m\bar{o}$ $k\bar{a}$ uri \bar{a} muri ake nei.

These outcomes form the chapters of Part B, out of which come the inter-related objectives and policies. The focus of each chapter is outlined below:

Kāi Tahu values, rights and interests are recognised and kaitiakitaka is expressed

The treaty partnership between takata whenua and the Crown, arising from Te Tiriti o Waitangi, provides a unique opportunity for resource management in New Zealand.

This first chapter incorporates the principles of Te Tiriti o Waitangi and sets out general considerations for the incorporation of Kāi Tahu values, rights and interests into planning, consenting, and implementation processes in Otago.

Otago has high quality natural resources and ecosystems

Society relies heavily on the systems and services of the natural environment.

This chapter addresses our fundamental reliance on natural resources and ecosystem services to sustain us, our way of life, cultural identity and our economy. Agriculture and tourism, Otago's biggest earners, both rely on having a great environment. The chapter deals with the resources that are most important to us, and the inherent qualities of the natural environment that give it value beyond human use.

Communities in Otago are resilient, safe and healthy

This chapter deals with our response and ability to be resilient to resource limitations or contraints, shock events, system disruptions, natural hazards, and climate change.

For the Otago community to thrive, we need to ensure that the growth and development of our communities and economy occurs in a way that helps us to become more resilient to the effects of expected and unexpected change, whether these changes are natural or human induced.

Our management of resources, including renewable energy sources, the use of hazardous substances and our management of waste materials will, in the long term, all help ensure our communities are resilient and continue to prosper.

People are able to use and enjoy our natural and built environment

Our individual and community wellbeing is built on use and development of resources.

This fourth chapter builds on the previous ones by enabling people to use the natural and physical environment for enjoyment and making a living, while ensuring that resources are sustained. It also deals with managing conflicting or incompatible uses.

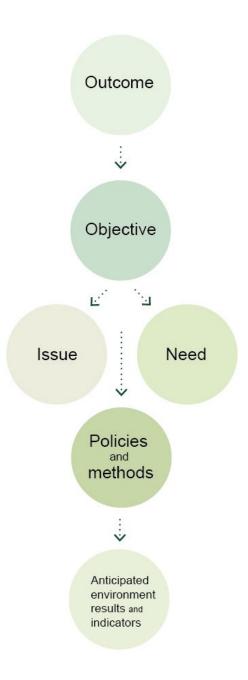
How to read the RPS

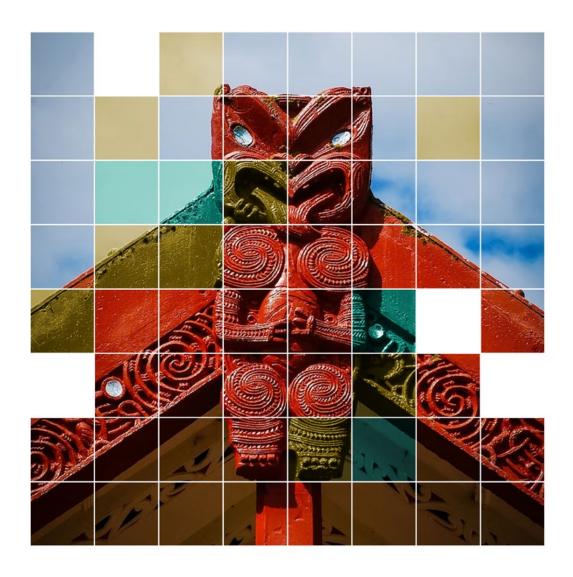
The following wiring diagram details how all the separate elements in this document link together.

Narratives are provided at the beginning of each outcome chapter and at the beginning of each objective. These, along with the 'needs' in the diagram at the beginning of each outcome, are the explanations to the policies, and the principal reasons for adopting the objectives, policies and methods.

Under each policy there is reference to relevant methods. These methods and regional, city and district council roles and responsibilities are detailed in Part C.

The anticipated environmental results and indicators are specified after the methods in Part C. Up to three independent indicators that reflect the state of a resource or the outcome of a socio-economic or cultural objective will be measured.





PART B CHAPTER 1

Kāi Tahu values, rights and interests are recognised and kaitiakitaka is expressed

He taura whiri kotahi mai anō te kopunga tai nō ī te pu au. — From the source to the mouth of the sea, all things are joined together as one.

Te Tiriti o Waitangi establishes a partnership between Kāi Tahu and the Crown. The RMA requires the RPS to take the principles of the Treaty of Waitangi into account. Kāi Tahu themes are integrated throughout this document, and this chapter serves to tie these strands together. It reflects the Kāi Tahu philosophy of holistic resource management, ki uta ki tai – "from the mountains to the sea".

Having good resources enables $K\bar{a}i$ Tahu to engage with the natural environment, and develop and use resources, for their cultural wellbeing and economic benefit. Kaitiakitaka is an expression of mana, and the means by which the life supporting capacity (mauri) 2 of taoka is restored, maintained and enhanced for present and future generations. Traditional and customary practices are gifted by $t\bar{u}puna$, adapted over time, and maintained today. The ongoing ability to keep these practices alive depends on access to healthy functioning environments.

² The term 'life supporting capacity' is used in this RPS. This term, while not replicating the term 'mauri', achieves the essence of this concept.

Chapter overview

Objective 1.1 The principles of Te Tiriti o Waitangi are taken into account in resource management decisions

Issue:

The principles of Te Tiriti o Waitangi are not formally codified and in many cases refer to broad concepts that need further exploration when applied to specific circumstances.

This can make it challenging to effectively incorporate the principles of the Treaty into planning documents, as these principles are not formally codified in any way.

Need:

Te Tiriti o Waitangi creates a special relationship between takata whenua and the Crown. The RMA requires local authorities to take the principles of Te Tiriti o Waitangi into account, and have particular regard to kaitiakitaka.

Local authorities need to find a way to give effect to these principles that ensures they are properly applied, and that accounts for the effects of resource management decisions on Kāi Tahu values, including those described in iwi resource management plans.

Objective 1.2 Kāi Tahu values, rights and customary resources are sustained

Issue:

Historically, decision makers have had difficulty understanding the takata whenua point of view.

Some places, sites and values of cultural, spiritual or historic significance to takata whenua have been destroyed or degraded.

Sometimes, no access is available to important sites.

Sometimes, it has been difficult to use Māori land for the purposes for which it was originally granted.

Need:

The RMA requires local authorities to recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taoka.

In managing our natural resources, local authorities need to recognise Kāi Tahu values and plans more effectively, and enable the exercise of customary rights.

Objective 1.1

The principles of Te Tiriti o Waitangi are taken into account in resource management decisions

The RMA (s8) requires local authorities to take into account the principles of Te Tiriti o Waitangi. It can be challenging to effectively incorporate these principles in resource management decision making, so deliberate measures need to be taken to ensure the principles are properly understood and given effect to. However, as the principles are not codified, an amount of flexibility is also needed.

In particular, exercising kaitiakitaka requires the ability to participate in decision making and implementation.

A partnership approach, which involves Kāi Tahu and elevates their values, rights and interests in decision making processes, enables the principles, including kaitiakitaka, to be given effect in an appropriately flexible way, and recognises the special relationship between Kāi Tahu and the Crown.

AWARENESS	Policy 1.1.1 Promoting awareness of treaty obligations
DECISION MAKING	Policy 1.1.2 Taking the principles of Te Tiriti o Waitangi into account

Policy 1.1.1 Promoting awareness of treaty obligations

Promote awareness and understanding of local authorities' obligations regarding the principles of Te Tiriti o Waitangi, tikaka Māori and kaupapa Māori.

Method 1: Kāi Tahu Relationships
Method 8: Education and Information

Taking the principles of Te Tiriti o Waitangi into account

Ensure that local authorities exercise their functions and powers, to:

- a) Accord Kāi Tahu a status distinct from that of interest groups and members of the public, consistent with their position as a Treaty partner; and,
- b) Involve Kāi Tahu in resource management decision-making processes and implementation; and
- c) Take into account Kāi Tahu views in resource management decision-making processes and implementation, particularly regarding the relationship of their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taoka; and
- d) Ensure Kāi Tahu have the prerogative to:
 - i. Identify their relationship with their ancestral lands, water, sites, wāhi tapu, and other taoka; and
 - ii. Determine how best to express that relationship; and
- e) Ensure Kāi Tahu are able to exercise kaitiakitaka; and
- f) Ensure that district and regional plans:
 - i. Give effect to the Ngāi Tahu Claims Settlement Act 1998; and
 - ii. Recognise and provide for statutory acknowledgement areas, as detailed in Schedule 2; and
 - iii. Provide for other areas in Otago that are recognised as significant to Kāi Tahu in a manner similar to that prescribed for statutory acknowledgement areas.

Method 1: Kāi Tahu Relationships

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 9: Funding

Objective 1.2

Kāi Tahu values, rights and interests and customary resources are sustained

Kāi Tahu's traditions, culture and practices are intricately linked with their ancestral lands, water, sites, wāhi tapu, and other taoka. The RMA requires that these values are recognised and provided for as a matter of national importance.

In addition to the ability to participate in decision making and implementation, the exercise of kaitiakitaka requires a healthy, functioning natural environment, and recognition of values and sites of significance.

MANAGEMENT	Policy 1.2.1 Managing the natural environment to support Kāi Tahu wellbeing
IMPORTANT SITES	Policy 1.2.2 Recognising important sites of cultural significance to Kāi Tahu
	Policy 1.2.3 Protecting important sites and values of cultural significance to Kāi Tahu
	Policy 1.2.4 Enabling Kāi Tahu relationships with wāhi tupūna and associated sites
USE OF NATIVE RESERVES	Policy 1.2.5 Enabling sustainable use of Māori land

Policy 1.2.1

Managing the natural environment to support Kāi Tahu wellbeing

Manage the natural environment to support Kāi Tahu wellbeing by:

- a) Ensuring resources support their customary uses and cultural values (as detailed in Schedules 1A and B); and
- b) Safe-guarding the life-supporting capacity of natural resources.

Method 1: Kāi Tahu Relationships

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans
Method 4: City and District Plans

Policy 1.2.2

Recognising important sites of cultural significance to Kāi Tahu

Recognise wāhi tūpuna, including sites and landscapes of cultural significance to Kāi Tahu such as wāhi tapu and other elements, as detailed in Schedule 1C.

Method 3: Regional Plans
Method 4: City and District Plans

Policy 1.2.3

Protecting important sites and values of cultural significance to Kāi Tahu

Protect important values, as detailed in schedules 1A and B, and sites of cultural significance to Kāi Tahu as detailed in Schedule 1C by:

- a) Avoiding significant adverse effects on those values and sites, as detailed in Schedule 3; and
- b) Avoiding remedying or mitigating other adverse effects on those values and sites; and
- c) Managing those values and sites in a culturally appropriate manner.

Method 1: Kāi Tahu Relationships

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans
Method 4: City and District Plans

Policy 1.2.4

Enabling Kāi Tahu relationships with wāhi tupuna and associated sites

Enable Kāi Tahu relationships with wāhi tupuna and associated sites by:

- a) Facilitating Kāi Tahu access to sites of cultural significance; and
- b) Recognising that relationships between sites of cultural significance are an important element of wāhi tūpuna; and
- c) Recognising traditional place names.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans
Method 11: Advocacy and Facilitation

Policy 1.2.5

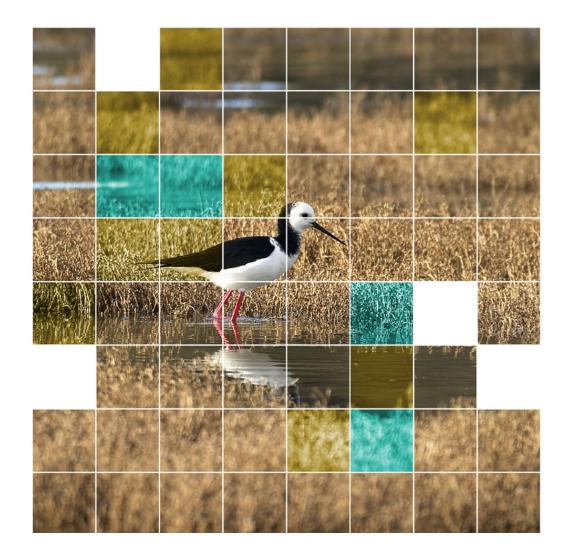
Enabling sustainable use of Māori land

Enable Kāi Tahu to protect, develop and use land within native reserves in a way consistent with their culture and traditions, and economic, cultural and social aspirations, including for papakāika, marae and marae related activities, while:

- a) Avoiding adverse effects on the health and safety of people; and
- b) Avoiding significant adverse effects on matters of national importance; and
- c) Assessing the significance of adverse effects on those matters and values, as detailed in Schedule 3; and,
- d) Remedying or mitigating other adverse effects on other values.

Method 3: Regional Plans

Method 4: City and District Plans



PART B CHAPTER 2

Otago has high quality natural resources and ecosystems

Otago's economy is driven by three sectors: primary production, tourism and education. The future of the first two sectors, and with this the social and economic well-being of Otago's people and communities, strongly relies on the quantity and quality of Otago's natural resources.

Beyond that, our natural resources and our environment have intrinsic values that shape our identity, as individuals and as communities. Some of our natural resources are unique, either to New Zealand or to Otago.

It is critical to recognise the value we place on Otago's natural resources and to manage these resources accordingly. This includes identifying resources which we want to preserve for future generations.

Chapter overview:

Objective 2.1 The values of Otago's natural and physical resources are recognised, maintained and enhanced

Issue:

Degradation of values and natural systems risks loss of complexity, which in turn jeopardises the life sustaining capacity of the environment, and the ecosystem services provided to the community.

Knowledge of these systems and their interdependencies is often imperfect.

Cumulative effects of human activities on the environment may be difficult to pinpoint initially, but over time will cause serious damage.

Need:

We need to know enough about the many values and characteristics of Otago's natural and physical resources, and the ecosystem services they provide for us, to be able to manage the effects of human activities on the environment's life supporting capacity adequately.

Objective 2.2 Otago's significant and highly valued natural resources are identified, and protected or enhanced to maintain their distinctiveness

Issue:

Otago has a distinct range of outstanding natural features, landscapes, seascapes, indigenous biodiversity, water bodies and soil which have intrinsic value and help to create the region's identity and support the region's wellbeing.

These highly valued resources risk becoming degraded if they are not adequately protected.

In turn, resource degradation reduces the attractions Otago can offer to tourists, residents and businesses, and could lead to wider adverse economic impacts.

Need:

It is a matter of national importance to recognise and provide for natural resources systems and processes.

We need to recognise the importance of these matters in sustaining Otago's economic advantage and quality of life.

Objective 2.3 Natural systems and interdependencies are recognised and sustained

Issue:

Natural systems are interconnected, complex and difficult to manage in a consistent and effective way.

Sometimes, the use of one resource adversely affects the value of another.

Sometimes, other relevant legislation results in conflicting management directives.

Sometimes, activities affecting a resource are managed by different authorities.

Need:

The RMA requires that resources are managed in an integrated way.

Integration among interdependent resources, within resources that span management and administrative unit boundaries, and among different decision-makers will reduce the risk of adverse and unintended consequences arising from a proposal.

25

Objective 2.1

The values of Otago's natural and physical resources are recognised, maintained and enhanced

Some of the many values of our natural resources may conflict with each other: for example, we depend on water for food production, yet we want water for healthy rivers. Otago's biodiversity is an example of another resource under pressure, in part from indirect consequences of land use, such as the introduction and spread of pest species. A good quality resource management framework addresses all the values attached to our resources, and identifies those which need protection.

WATER	Policy 2.1.1 Managing for freshwater values
	Policy 2.1.2 Managing for the values of beds of rivers and lakes, wetlands, and their margins
	Policy 2.1.3 Managing for coastal water values
AIR	Policy 2.1.4 Managing for air quality values
SOIL	Policy 2.1.5 Managing for soil values
ECOSYSTEMS AND INDIGENOUS BIODIVERSITY	Policy 2.1.6 Managing for ecosystem and indigenous biodiversity values
GEOMORPHOLOGY AND LANDSCAPE	Policy 2.1.7 Recognising the values of natural features, landscapes and seascapes
NATURAL CHARACTER	Policy 2.1.8 Recognising the values of natural character in the coastal environment

Managing for freshwater values

Recognise freshwater values, and manage freshwater, to:

- Support healthy ecosystems in all Otago aquifers, and rivers, lakes, wetlands, and their margins; and
- b) Retain the range and extent of habitats provided by freshwater; and
- c) Protect outstanding water bodies and wetlands; and
- d) Protect migratory patterns of freshwater species, unless detrimental to indigenous biodiversity; and
- e) Avoid aquifer compaction, and seawater intrusion in aquifers; and
- f) Maintain good water quality, including in the coastal marine area, or enhance it where it has been degraded; and
- g) Maintain or enhance coastal values supported by freshwater values; and
- h) Maintain or enhance the natural functioning of rivers, lakes, and wetlands, their riparian margins, and aquifers; and
- i) Retain the quality and reliability of existing drinking water supplies; and
- j) Protect Kāi Tahu values; and
- k) Provide for other cultural values; and
- 1) Protect important recreation values; and
- m) Maintain the aesthetic and landscape values of rivers, lakes, and wetlands; and
- n) Avoid the adverse effects of pest species, prevent their introduction and reduce their spread; and
- o) Mitigate the adverse effects of natural hazards, including flooding and erosion; and
- p) Maintain the ability of existing infrastructure to operate within their design parameters.

Method 1: Kāi Tahu Relationships

Method 3: Regional Plans

Method 7: Strategies and Plans (non-RMA)

Managing for the values of beds of rivers and lakes, wetlands, and their margins

Recognise the values of beds of rivers and lakes, wetlands, and their margins, and manage them to:

- a) Protect or restore their natural functioning; and
- b) Protect outstanding water bodies and wetlands; and
- c) Maintain good water quality, or enhance it where it has been degraded; and
- d) Maintain ecosystem health and indigenous biodiversity; and
- e) Retain the range and extent of habitats supported; and
- f) Maintain or enhance natural character; and
- g) Protect Kāi Tahu values; and
- h) Provide for other cultural values; and
- i) Maintain their aesthetic and amenity values; and
- Avoid the adverse effects of pest species, prevent their introduction and reduce their spread; and
- Mitigate the adverse effects of natural hazards, including flooding and erosion;
 and
- 1) Maintain bank stability.

Method 1: Kāi Tahu Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Policy 2.1.3

Managing for coastal water values

Recognise coastal water values, and manage coastal water, to:

- a) Support healthy coastal ecosystems; and
- b) Retain the range of habitats provided by the coastal marine area; and
- Protect migratory patterns of coastal water species, unless detrimental to indigenous biodiversity; and
- d) Maintain coastal water quality, or enhance it where it has been degraded; and
- e) Maintain or enhance coastal values; and
- f) Protect Kāi Tahu values; and
- g) Provide for other cultural values; and
- h) Protect important recreation values; and
- i) Avoid the adverse effects of pest species, prevent their introduction and reduce their spread.

Method 1: Kāi Tahu Relationships

Method 3: Regional Plans

Method 7: Strategies and Plans (non-RMA)

Managing for air quality values

Recognise air quality values, and manage air quality, to:

- Maintain good ambient air quality that supports human health, or enhance air quality where it has been degraded; and
- b) Protect Kāi Tahu values; and
- c) Maintain other cultural, aesthetic and amenity values.

Method 1: Kāi Tahu Relationships

Method 1: Kāi Tahu Relationships
Method 3: Regional Plans
Method 4: City and District Plans
Method 7: Strategies and Plans (i

Method 7: Strategies and Plans (non-RMA)

Policy 2.1.5

Managing for soil values

Recognise soil values, and manage soils, to:

- a) Maintain their life supporting capacity; and
- Maintain soil biodiversity; and b)
- Maintain biological activity in soils; and c)
- Maintain soil's function in the storage and cycling of water, nutrients, and other d) elements through the biosphere; and
- Maintain soil's function as a buffer or filter for pollutants resulting from human activities, including aquifers at risk of leachate contamination; and
- Retain soil resources for primary production; and f)
- Protect Kāi Tahu values; and g)
- Provide for other cultural values; and h)
- Maintain the soil mantle where it acts as a repository of heritage objects; and i)
- Maintain highly valued soil resources; and <u>i</u>)
- k) Avoid contamination of soil; and
- Avoid the adverse effects of pest species, prevent their introduction and reduce 1) their spread.

Method 1: Kāi Tahu Relationships
Method 4: City and District Plans
Method 6: Research, Monitoring and Reporting
Method 8: Education and Information Kāi Tahu Relationships Method 1:

Managing for ecosystem and indigenous biodiversity values

Recognise the values of ecosystems and indigenous biodiversity, and manage ecosystems and indigenous biodiversity, to:

- a) Maintain or enhance ecosystem health and indigenous biodiversity; and
- b) Maintain or enhance areas of predominantly indigenous vegetation; and
- c) Buffer or link existing ecosystems; and
- d) Protect important hydrological services, including the services provided by tussock grassland; and
- e) Protect natural resources and processes that support indigenous biodiversity; and
- f) Maintain habitats of indigenous species that are important for recreational, commercial, cultural or customary purposes; and
- g) Protect biodiversity significant to Kāi Tahu; and
- h) Avoid the adverse effects of pest species, prevent their introduction and reduce their spread.

Method 1: Kāi Tahu Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 6: Research, Monitoring and Reporting Method 7: Strategies and Plans (non-RMA)

Method 8: Education and Information Method 11: Advocacy and Facilitation

Policy 2.1.7

Recognising the values of natural features, landscapes, and seascapes

Recognise the values of natural features, landscapes, seascapes and the coastal environment are derived from the following attributes, as detailed in Schedule 4:

- a) Biophysical attributes, including:
 - i. Natural science factors;
 - ii. The presence of water;
 - iii. Vegetation (indigenous and introduced);
 - iv. The natural darkness of the night sky;
- b) Sensory attributes, including:
 - Legibility or expressiveness;
 - ii. Aesthetic values;
 - iii. Transient values, including nature's sounds;
 - iv. Wild or scenic values;
- c) Associative attributes, including:
 - i. Whether the values are shared and recognised;
 - ii. Cultural and spiritual values for Kāi Tahu;
 - iii. Historical and heritage associations.

Method 1: Kāi Tahu Relationa...,
Method 3: Regional Plans
Method 4: City and District Plans
Method 6: Research, Monitoring and Reporting
Education and Information

Policy 2.1.8

Recognising the values of natural character in the coastal environment

Recognise the values of natural character in the coastal environment are derived from the following attributes:

- a) Natural elements, processes and patterns;
- Biophysical, ecological, geological and geomorphological aspects; b)
- Natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, estuaries, reefs, freshwater springs and surf breaks;
- The natural movement of water and sediment; d)
- e) The natural darkness of the night sky;
- Places or areas that are wild or scenic; f)
- A range of natural character from pristine to modified; g)
- Experiential attributes, including the sounds and smell of the sea; and their context h) or setting.

Method 3: Regional Plans

Method 4: City and District Plans

Method 6: Research, Monitoring and Reporting

Otago's significant and highly-valued natural resources are identified, and protected or enhanced

Otago has many unique landscapes, natural features and areas of indigenous biodiversity which are nationally or regionally important. Giving these a higher level of protection ensures they will be retained, while consumptive use of resources will be directed to areas where adverse effects are more acceptable.

SIGNIFICANT INDIGENOUS VEGETATION AND HABITATS OF INDIGENOUS FAUNA	Policy 2.2.1 Identifying areas of significant indigenous vegetation and significant habitats of indigenous fauna
	Policy 2.2.2 Managing significant indigenous vegetation and significant habitats of indigenous fauna
OUTSTANDING NATURAL FEATURES, LANDSCAPES AND SEASCAPES	Policy 2.2.3 Identifying outstanding natural features, landscapes and seascapes
	Policy 2.2.4 Managing outstanding natural features, landscapes and seascapes
SPECIAL AMENITY LANDSCAPES	Policy 2.2.5 Identifying special amenity landscapes and highly valued natural features
	Policy 2.2.6 Managing special amenity landscapes and highly valued natural features

OUTSTANDING AND HIGH NATURAL CHARACTER IN THE COASTAL ENVIRONMENT	Policy 2.2.7 Identifying the landward extent of the coastal environment
	Policy 2.2.8 Identifying areas of high and outstanding natural character in the coastal environment
	Policy 2.2.9 Managing the natural character of the coastal environment
	Policy 2.2.10 Identifying surf breaks of national importance
	Policy 2.2.11 Managing surf breaks of national importance
OUTSTANDING WATER BODIES	Policy 2.2.12 Identifying outstanding water bodies and wetlands
	Policy 2.2.13 Managing outstanding water bodies and wetlands
HIGHLY VALUED SOIL RESOURCES	Policy 2.2.14 Identifying highly valued soil resources
	Policy 2.2.15 Managing highly valued soil resources

Identifying areas of significant indigenous vegetation and significant habitats of indigenous fauna

Identify areas and values of significant indigenous vegetation and significant habitats of indigenous fauna, using the attributes detailed in Schedule 5.

Method 3: Regional Plans
Method 4: City and District Plans

Method 6: Research, Monitoring and Reporting

Managing significant indigenous vegetation and significant habitats of indigenous fauna

Protect and enhance the values of areas of significant indigenous vegetation and significant habitats of indigenous fauna, by:

- Avoiding adverse effects on those values which contribute to the area or habitat being significant; and
- b) Avoiding significant adverse effects on other values of the area or habitat; and
- c) Assessing the significance of adverse effects on those values, as detailed in Schedule 3; and
- d) Remediating, when adverse effects cannot be avoided; and
- e) Mitigating where adverse effects cannot be avoided or remediated; and
- f) Encouraging enhancement of those areas and values.

Method 3: Regional Plans
Method 4: City and District Plans

Method 6: Research, Monitoring and Reporting Method 7: Strategies and Plans (non-RMA)

Policy 2.2.3

Identifying outstanding natural features, landscapes and seascapes

Identify areas and values of outstanding natural features, landscapes and seascapes, using the attributes as detailed in Schedule 4.

Method 1: Kāi Tahu Relationships Method 3: Regional Plans

Method 4: City and District Plans

Method 6: Research, Monitoring and Reporting

Policy 2.2.4

Managing outstanding natural features, landscapes, and seascapes

Protect, enhance and restore the values of outstanding natural features, landscapes and seascapes, by:

- a) Avoiding adverse effects on those values which contribute to the significance of the natural feature, landscape or seascape; and
- b) Avoiding, remedying or mitigating other adverse effects on other values; and
- Assessing the significance of adverse effects on values, as detailed in Schedule 3;
 and
- d) Recognising and providing for positive contributions of existing introduced species to those values; and
- e) Controlling the adverse effects of pest species, preventing their introduction and reducing their spread; and
- f) Encouraging enhancement of those areas and values.

Method 1: Kāi Tahu Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Identifying special amenity landscapes and highly valued natural

Identify areas and values of special amenity landscape or natural features which are highly valued for their contribution to the amenity or quality of the environment, but which are not outstanding, using the attributes detailed in Schedule 4.

Method 1: Method 4: Method 6: Method 1: Kāi Tahu Relationships City and District Plans

Research, Monitoring and Reporting

Policy 2.2.6

Managing special amenity landscapes and highly valued natural features

Protect or enhance the values of special amenity landscapes and highly valued natural features, by:

- Avoiding significant adverse effects on those values which contribute to the a) special amenity of the landscape or high value of the natural feature; and
- Avoiding, remedying or mitigating other adverse effects on other values; and
- Assessing the significance of adverse effects on those values, as detailed in c) Schedule 3; and
- d) Recognising and providing for positive contributions of existing introduced species to those values; and
- e) Controlling the adverse effects of pest species, preventing their introduction and reducing their spread; and
- Encouraging enhancement of those values.

Method 1: Method 4: Method 6: Kāi Tahu Relationships City and District Plans

Research, Monitoring and Reporting

Policy 2.2.7

Identifying the landward extent of the coastal environment

Identify the landward extent of the coastal environment, using the following criteria:

- a) Area or landform dominated by coastal vegetation or habitat of indigenous coastal species; and
- b) Landforms and the margins of landforms where active coastal processes, influences or qualities are significant; and
- Any landscapes or features, including coastal escarpments, which contribute to the natural character, visual quality or amenity values of the coast; and
- d) Any physical resource or built form, including infrastructure, that has modified the coastal environment and retains a connection to or derives character from connection to the coast: and
- e) The relationship of takata whenua with the coastal environment.

Method 1: Kāi Tahu Relationships

Method 2: Regional, City and District Council Relationships

Method 6: Research, Monitoring and Reporting

Identifying areas of high and outstanding natural character in the coastal environment

Identify areas and values of high and outstanding natural character in the coastal environment, using the attributes detailed in Policy 2.1.8.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 6: Research, Monitoring and Reporting

Policy 2.2.9

Managing the natural character of the coastal environment

Preserve or enhance the natural character values of the coastal environment, by:

- a) Avoiding adverse effects on those values which contribute to the outstanding natural character of an area; and
- b) Avoiding significant adverse effects on those values which contribute to the high natural character values of an area; and
- c) Assessing the significance of adverse effects on those values, as detailed in Schedule 3; and
- d) Avoiding, remedying or mitigating other adverse effects on other values; and
- e) Recognising and providing for the contribution of existing introduced species to the natural character of the coastal environment; and
- f) Encouraging enhancement of those values; and
- g) Controlling the adverse effects of pest species, prevent their introduction and reduce their spread.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Method 11: Advocacy and Facilitation

Policy 2.2.10

Identifying surf breaks of national importance

Recognise the surf breaks of national importance at:

- a) Karitane;
- b) Papatowai;
- c) The Spit;
- d) Whareakeake.

Method 3: Regional Plans

Managing surf breaks of national importance

Protect surf breaks of national importance, by:

- Avoiding adverse effects on the natural and physical processes contributing to their existence; and
- b) Avoiding adverse effects of other activities on access to, and use and enjoyment of, those surf breaks.

Method 3: Regional Plans

Method 4: City and District Plans

Strategies and Plans (non-RMA) Method 7:

Policy 2.2.12

Identifying outstanding water bodies and wetlands

Identify outstanding water bodies and wetlands and their values, using the following criteria:

- A high degree of naturalness; a)
- Outstanding aesthetic or landscape values;
- Significant takata whenua cultural values; c)
- d) Significant recreational values;
- Significant ecological values; e)
- Significant hydrological values. f)

Method 3: Regional Plans

Method 6: Research, Monitoring and Reporting

Policy 2.2.13

Managing outstanding water bodies and wetlands

Protect the values of outstanding water bodies and wetlands by:

- Avoiding significant adverse effects, including cumulative effects, on those values which contribute to the water body or wetland being outstanding; and
- b) Avoiding, remedying or mitigating other adverse effects on the water body or wetland's values; and
- c) Assessing the significance of adverse effects on values, as detailed in Schedule 3;
- Controlling the adverse effects of pest species, preventing their introduction and d) reducing their spread; and
- e) Encouraging enhancement of outstanding water bodies and wetlands.

Method 3: Regional Plans

City and District Plans Method 4:

Method 7: Strategies and Plans (non-RMA)

Method 11: Advocacy and Facilitation

37

Identifying highly valued soil resources

Identify areas and values of highly valued soil resources, using the following criteria:

- a) Degree of versatility for primary production;
- b) Significance for providing pollutant buffering or filtering services;
- c) Significance for providing water storage or flow retention services;
- d) Degree of rarity.

Method 2: Regional, City and District Council Relationships

Method 6: Research, Monitoring and Reporting

Policy 2.2.15

Managing highly valued soil resources

Protect the values of areas of highly valued soil resources, by:

- a) Avoiding significant adverse effects on those values which contribute to the soil being highly valued; and
- Avoiding, remedying or mitigating other adverse effects on values of those soils;
 and
- Assessing the significance of adverse effects on values, as detailed in Schedule 3;
 and
- d) Recognising that urban expansion may be appropriate due to location and proximity to existing urban development and infrastructure.

Method 2: Regional, City and District Council Relationships

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Method 8: Education and Information

Natural resource systems and their interdependencies are recognised

Our resources are interconnected, and the use of one can affect the values of another. Those interconnections are complex, and they are not always reflected in the functions of local authorities, or in the regional, district or city boundaries. An example of this issue is Otago's coastal environment, a highly valued resource at the nexus between land and marine environments that may additionally include freshwater systems. These diverse resources contribute to distinct land- and seascapes and support a corresponding range of ecosystems. For management purposes, the coastal environment is often partitioned into separate management units. Moreover, administration of this complex resource is guided by several statutes that are implemented by multiple authorities.

This example illustrates why the management of natural resources needs to be integrated to ensure that resource management decisions are consistent and take account of the linkages between every part of the environment.

INTEGRATION	Policy 2.3.1 Applying an integrated management approach among resources
	Policy 2.3.2 Applying an integrated management approach within a resource
WATER	Policy 2.3.3 Applying an integrated management approach for freshwater catchments
	Policy 2.3.4 Applying an integrated management approach for the coastal environment
AIR	Policy 2.3.5 Applying an integrated management approach for airsheds

Applying an integrated management approach among resources

Apply an integrated approach to the management of Otago's natural and physical resources, to achieve sustainable management, by:

- a) Taking into account the impacts of management of one resource on the values of another, or on the environment in general; and
- b) Recognising that the form and function of a resource may extend beyond the immediate, or directly adjacent, area of interest.

Method 3: Regional Plans
Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Policy 2.3.2

Applying an integrated management approach within a resource

Apply an integrated management approach within a natural and physical resource, to achieve sustainable management, by:

- a) Ensuring that resource objectives are complementary across administrative boundaries; and
- b) Ensuring that effects of activities on the whole of a resource are considered when that resource is managed by sub-units.

Method 3: Regional Plans
Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Policy 2.3.3

Applying an integrated management approach for freshwater catchments

Apply an integrated management approach to activities in freshwater catchments, by:

- a) Using consistent freshwater objectives for interconnected water bodies; and
- b) Recognising the importance of river morphology, catchment hydrology, natural processes and land cover in supporting catchment values; and
- c) Coordinating the management of land use and freshwater, to:
 - i. Maintain or enhance freshwater values; and
 - ii. Maintain or enhance the wetland values; and
 - iii. Maintain or enhance the values of beds of rivers and lakes, wetlands, and their margins; and
 - iv. Reduce the potential for health and nuisance effects.

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Applying an integrated management approach for the coastal environment

Apply an integrated management approach to activities in the coastal environment, by:

- a) Recognising the importance of coastal morphology, coastal processes and land cover in supporting coastal environment values; and
- b) Coordinating the management of land use, freshwater, and coastal water, to:
 - i. Maintain or enhance coastal values; and
 - ii. Reduce the potential for health and nuisance effects.

Method 3: Regional Plans
Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Policy 2.3.5

Applying an integrated management approach for airsheds

Apply an integrated management approach to activities that affect air quality, by:

- a) Setting emission standards for airsheds that take into account foreseeable demographic changes, and their effects on cumulative emissions; and
- b) Co-ordinating the management of land use and air quality, to:
 - i. Maintain or enhance air quality values; and
 - ii. Reduce the potential for adverse health and nuisance effects.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)



PART B CHAPTER 3

Communities in Otago are resilient, safe and healthy

Otago is at risk of a number of expected and unexpected shocks and changes, including from natural hazards, climate change and our reliance on energy, imported goods and fossil fuels. These disruptions have the potential to affect our economic, social, cultural and environmental wellbeing.

Ensuring Otago's communities develop having regard to environmental constraints, the effects of activities on the environment, and are designed in way which helps us to prepare for, respond, recover and adapt to such disruptions, will help make Otago's communities resilient.

Chapter overview:

Objective 3.1 Protection, use and development of natural and physical resources recognises environmental constraints

Issue:

Activities that are undertaken without regard to their local environment are at greater risk of overreaching that environment's ability to sustain the activity.

Need:

We need to manage our activities with regard to constraints to improve our resilience.

Objective 3.2 Risk that natural hazards pose to Otago's communities are minimised

Issue:

Natural hazard events, such as flooding and earthquakes, have the potential to injure people and damage property.

Sometimes, it is difficult and costly for a community to recover from a hazard event.

Need:

While many of these events are beyond our control, we need to reduce their potential impacts on people's safety, health and wellbeing.

Objective 3.3 Otago's communities are prepared for and able to adapt to the effects of climate change

Issue:

Climate change is expected to bring higher sea levels and an increased frequency of climate-related natural hazard events, which will increase the risk that Otago's communities face.

Need:

We need to have consistent guidance on sea level rise, and managing for adverse effects that will occur beyond the life of this RPS.

Objective 3.4 Good quality infrastructure and services meet community needs

Issue:

Aging and sub-standard infrastructure risks creating safety, health and access problems, and as a consequence, threatens community resilience.

Need:

Infrastructure needs to meet community, business, and environmental needs.

We need lifeline utilities and essential and emergency services that are able to operate through disruptive events.

Objective 3.5 Infrastructure of regional and national significance is managed in a sustainable way

Issue:

Infrastructure of regional and national significance may result in local adverse environmental impacts, or adversely affect other nationally important values.

Some infrastructure can only be located in particular areas, and it may not always be possible to avoid significant adverse effects.

Need:

We need infrastructure of regional and national significance that operates efficiently and effectively, and recognises other values, including local impacts.

Objective 3.6 Energy supplies to Otago's communities are secure and sustainable

Issue:

Although Otago is rich in renewable energy sources, it is also an importer of fossil fuels. Any constraints on energy and fuel supply could affect the way we live and are able to respond to disruptive events.

Need:

We need to reduce our dependency on fossil fuels and improve our energy resilience.

Objective 3.7 Urban areas are well designed, sustainable and reflect local character

Issue:

In the past, urban development has not always had regard to the local environment, or considered the mobility needs for different people.

There are high costs to improve buildings and infrastructure to meet modern standards.

Need:

We need communities that are designed to improve our quality of life and resilience and create more attractive opportunities for business investment.

We need infrastructure that meets modern standards, is future-proofed, and is affordable.

Objective 3.8 Urban growth is well designed and integrates effectively with adjoining urban and rural environments

Issue:

Unplanned urban growth risks exceeding the carrying capacity of existing infrastructure and services, adversely affecting community resilience.

Sometimes, unplanned growth places pressure on adjoining productive land, and risks losing connectivity with adjoining urban areas.

Need:

We need well-designed and integrated urban growth, to achieve effective and affordable infrastructure, and improve resilience. We need to make the best use of our natural and physical resources and reduce the effects of unplanned growth.

Objective 3.9 Hazardous substances and waste materials do not harm human health or the quality of the environment in Otago

Issue:

Waste materials risk creating adverse effects on the environment.

Hazardous substances have adverse effects on community health and safety.

Need:

We need to make the best use of our resources and minimise the materials disposed of as waste.

We need to carefully manage waste materials and hazardous substances to avoid creating environmental problems or adversely affecting human health.

Protection, use and development of natural and physical resources recognises environmental constraints

As a community, we are highly dependent on the resources available to us. When undertaking activities it is therefore important to consider the environmental context we operate within and develop accordingly. For example, there should be sufficient water supply available for a proposed activity.

RECOGNITION

Policy 3.1.1

Recognising natural and physical environmental constraints

Policy 3.1.1

Recognising natural and physical environmental constraints

Recognise the natural and physical environmental constraints of an area, the effects of those constraints on activities, and the effects of those activities on those constraints, including:

- a) The availability of natural resources necessary to sustain the activity; and
- b) The ecosystem services the activity is dependent on; and
- c) The sensitivity of the natural and physical resources to adverse effects from the proposed activity/land use; and
- d) Exposure of the activity to natural and technological hazard risks; and
- e) The functional necessity for the activity to be located where there are significant constraints.

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Risk that natural hazards pose to Otago's communities are minimised

Natural hazards can injure or kill people, damage property, create stress and fear, affect the operation of infrastructure and impact on the economy.

Natural hazards can also be exacerbated. For example, an increase in the extent of hard surfaces increases stormwater runoff, which can exacerbate flooding and erosion. Accordingly it is prudent to act now rather than letting risk increase. Natural hazards should be identified and managed appropriately, so that risk of avoidable social and economic harm to communities is reduced as much as possible.

ASSESSMENT	Policy 3.2.1
	Identifying natural hazards
	Policy 3.2.2
	Assessing natural hazard likelihood
	Policy 3.2.3
	Assessing natural hazard
	consequence
MANAGEMENT	Policy 3.2.4
	Managing natural hazard risk
	Policy 3.2.5
	Assessing activities for natural hazard
	risk
	Policy 3.2.6
	Avoiding increased natural hazard
	risk
	Policy 3.2.7
	Reducing existing natural hazard risk
	Policy 3.2.8
	Applying a precautionary approach

MITIGATION

Policy 3.2.9

Protecting features and systems that provide hazard mitigation

Policy 3.2.10

Mitigating natural hazards

Policy 3.2.11

Locating hard mitigation measures

Policy 3.2.1

Identifying natural hazards

Identify natural hazards that may adversely affect Otago's communities, including hazards of low likelihood and high consequence.

Method 2: Regional, City and District Council Relationships

Method 6: Research, Monitoring and Reporting

Policy 3.2.2

Assessing natural hazard likelihood

Assess the likelihood of natural hazard events occurring, having regard to a timeframe of no less than 100 years, including by considering:

- a) Hazard type and characteristics;
- b) Multiple and cascading hazards;
- c) Cumulative effects, including from multiple hazards with different risks;
- d) Effects of climate change;
- e) Using the best available information for calculating likelihood;
- f) Exacerbating factors.

Method 2: Regional, City and District Council Relationships

Method 6: Research, Monitoring and Reporting

Assessing natural hazard consequence

Assess the consequences of natural hazard events, including by considering:

- a) The nature of activities in the area;
- b) Individual and community vulnerability;
- c) Impact on individual and community health and safety;
- d) Impact on social, cultural and economic wellbeing;
- e) Impact on infrastructure and property, including access and services;
- f) Risk reduction and hazard mitigation measures;
- g) Lifeline utilities, essential and emergency services, and their co-dependence;
- h) Implications for civil defence agencies and emergency services;
- i) Cumulative effects;
- j) Factors that may exacerbate a hazard event.

Method 2: Regional, City and District Council Relationships

Method 6: Research, Monitoring and Reporting

Policy 3.2.4

Managing natural hazard risk

Manage natural hazard risk, including with regard to:

- a) The risk they pose, considering the likelihood and consequences of natural hazard events; and
- b) The implications of residual risk, including the risk remaining after implementing or undertaking risk reduction and hazard mitigation measures; and
- c) The community's tolerance of that risk, now and in the future, including the community's ability and willingness to prepare for and adapt to that risk, and respond to an event; and
- d) The changing nature of tolerability and risk; and
- e) Sensitivity of activities to risk.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)
Method 8: Education and Information

Method 11: Advocacy and Facilitation

Assessing activities for natural hazard risk

Assess activities for natural hazard risk, by considering:

- a) The natural hazard risk identified, including residual risk; and
- b) Any measures to avoid, remedy or mitigate those risks, including relocation and recovery methods; and
- c) The long term viability and affordability of those measures; and
- d) Flow-on effects of the risk to other activities, individuals and communities; and
- e) The availability of, and ability to provide, lifeline utilities, and essential and emergency services, during and after a natural hazard event.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Policy 3.2.6

Avoiding increased natural hazard risk

Avoid increasing natural hazard risk, including by:

- a) Avoiding activities that significantly increase risk, including displacement of risk off-site; and
- b) Encouraging design that facilitates:
 - i. Recovery from natural hazard events; or
 - ii. Relocation to areas of lower risk.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)
Method 8: Education and Information

Method 11: Advocacy and Facilitation

51

Reducing existing natural hazard risk

Reduce existing natural hazard risk, including by:

- a) Encouraging activities that:
 - i. Reduce risk; or
 - ii. Reduce community vulnerability; and
- b) Discouraging activities that:
 - i. Increase risk; or
 - ii. Increase community vulnerability; and
- c) Considering the use of exit strategies for areas of significant risk; and
- d) Encouraging design that facilitates:
 - i. Recovery from natural hazard events or
 - ii. Relocation to areas of lower risk; and
- e) Relocating lifeline utilities, and facilities for essential and emergency service, to areas of reduced risk, where appropriate and practicable; and
- f) Enabling development, upgrade, maintenance and operation of lifeline utilities and facilities for essential and emergency services; and
- g) Re-assessing natural hazard risk, and community tolerance of that risk, following significant natural hazard events.

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)
Method 8: Education and Information
Method 11: Advocacy and Facilitation

Policy 3.2.8

Applying a precautionary approach

Where natural hazard risk is uncertain or unknown, but potentially significant or irreversible, apply a precautionary approach to identifying, assessing and managing that risk.

Method 3: Regional Plans
Method 4: City and District Plans

Policy 3.2.9

Protecting features and systems that provide hazard mitigation

Protect, restore, enhance and promote the use of natural or modified features and systems, which contribute to mitigating the effects of both natural hazards and climate change.

Method 3: Regional Plans
Method 4: City and District Plans

Mitigating natural hazards

Give preference to risk management approaches that reduce the need for hard mitigation measures or similar engineering interventions, and provide for hard mitigation measures only when:

- a) Those measures are essential to reduce risk to a level the community is able to tolerate; and
- b) There are no reasonable alternatives; and
- c) It would not result in an increase in risk, including displacement of risk off-site; and
- d) The adverse effects can be adequately managed; and
- e) The mitigation is viable in the reasonably foreseeable long term.

Method 3: Regional Plans
Method 4: City and District Plans
Method 8: Education and Information
Method 10: Service provision

Policy 3.2.11

Locating hard mitigation measures

Enable the location of hard mitigation measures or similar engineering interventions on public land only when:

- a) There is significant public or environmental benefit in doing so; or
- b) The work relates to the functioning ability of a lifeline utility, or facility for essential or emergency services.

Method 3: Regional Plans
Method 4: City and District Plans
Method 8: Education and Information

Otago's communities are prepared for and able to adapt to the effects of climate change

In Otago, climate change will bring higher sea levels and may increase the frequency and severity of climate related natural hazards. Stormwater systems may not be able to cope with heavier rainfall. Other effects of climate change include changing distributions of plants and animals, and consequential effects, such as the risk of saltwater intrusion into groundwater as a result of rising sea levels.

On the other hand there may be benefits from higher temperatures such as opportunities for growing different crops and reduced demand for heating in winter.

The effects of climate change on Otago will result in social, environmental and economic costs, and benefits in some circumstances. Therefore it is prudent that they be considered and planned for now, so that those impacts can be reduced and benefits enhanced.

ADAPTATION	Policy 3.3.1 Adapting to, or mitigating the effects of, sea level rise
	Policy 3.3.2 Adapting to, or mitigating the effects of, climate change

Policy 3.3.1

Adapting to, or mitigating the effects of, sea level rise

Ensure Otago's people and communities are able to adapt to, or mitigate the effects of sea level rise, over no less than 100 years, by using:

- A sea level rise of at least 1 metre by 2115, relative to 1990 mean sea level (Otago Metric Datum); and
- b) Adding an additional 10mm per year beyond 2115.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Adapting to, or mitigating the effects of, climate change

Ensure Otago's people and communities are able to adapt to, or mitigate the effects of climate change, over no less than 100 years, by:

- Taking into account the effects of climate change, including by using the best relevant climate change data; and
- Applying a precautionary approach to assessing the effects of climate change, where there is scientific uncertainty and potentially significant or irreversible effects; and
- Encouraging activities that assist to reduce or mitigate the effects of climate change.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

City and District Plans

Method 3: Method 4: Method 6: Method 7: Method 11: Research, Monitoring and Reporting Strategies and Plans (non-RMA)

Advocacy and Facilitation

Good quality infrastructure and services meet community needs

It is essential for Otago's economy and the wellbeing and health and safety of its communities, that the people of Otago are serviced by the right infrastructure at the right time. Some infrastructure is provided by local authorities (such as water supply, waste water and stormwater), while others are managed by private companies.

Local authorities have a role to play, to ensure that the local and regional infrastructure needs are being met.

INTEGRATION	Policy 3.4.1 Integrating infrastructure with land use
MANAGEMENT	Policy 3.4.2 Managing infrastructure activities
LIFELINES	Policy 3.4.3 Designing lifeline utilities and facilities for essential or emergency services
	Policy 3.4.4 Managing hazard mitigation measures, lifeline utilities, and essential and emergency services

Policy 3.4.1 Integrating infrastructure with land use

Achieve the strategic integration of infrastructure with land use, by:

- a) Recognising functional needs of infrastructure of regional or national importance; and
- b) Designing infrastructure to take into account:
 - i. Actual and reasonably foreseeable land use change; and
 - ii. The current population and projected demographic changes; and
 - iii. Actual and reasonably foreseeable change in supply of, and demand for, infrastructure services; and
 - iv. Natural and physical resource constraints; and
 - v. Effects on the values of natural and physical resources; and
 - vi. Co-dependence with other infrastructural services; and
 - vii. The effects of climate change on the long term viability of that infrastructure; and

- c) Managing urban growth:
 - i. Within areas that have sufficient infrastructure capacity; or
 - ii. Where infrastructure services can be upgraded or extended efficiently and effectively; and
- d) Co-ordinating the design and development of infrastructure with the staging of land use change, including with:
 - i. Structural design and release of land for new urban development; or
 - ii. Structural redesign and redevelopment within existing urban areas.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Method 8: Education and Information Method 10: Service Provision

Method 11: Advocacy and Facilitation

Policy 3.4.2

Managing infrastructure activities

Manage infrastructure activities, to:

- a) Maintain or enhance the health and safety of the community; and
- b) Reduce adverse effects of those activities, including cumulative adverse effects on natural and physical resources; and
- c) Support economic, social and community activities; and
- d) Improve efficiency of use of natural resources; and
- e) Protect infrastructure corridors for infrastructure needs, now and for the future; and
- f) Increase the ability of communities to respond and adapt to emergencies, and disruptive or natural hazard events; and
- g) Protect the functioning of lifeline utilities and essential or emergency services.

Method 3: Regional Plans

Method 4: City and District Plans Method 10: Service provision

Policy 3 4 3

Designing lifeline utilities and facilities for essential or emergency services

Design lifeline utilities, and facilities for essential or emergency services, to:

- a) Maintain their ability to function to the fullest extent possible, during and after natural hazard events; and
- b) Take into account their operational co-dependence with other lifeline utilities and essential services to ensure their effective operation.

Method 10: Service provision

Method 11: Advocacy and Facilitation

Managing hazard mitigation measures, lifeline utilities, and essential and emergency services

Protect the functioning of hazard mitigation measures, lifeline utilities, and essential or emergency services, including by:

- a) Restricting the establishment of those activities that may result in reverse sensitivity effects; and
- b) Avoiding significant adverse effects on those measures, utilities or services; and
- c) Avoiding, remedying or mitigating other adverse effects on those measures, utilities or services; and
- d) Assessing the significance of adverse effects on those measures, utilities or services, as detailed in Schedule 3; and
- e) Maintaining access to those measures, utilities or services for maintenance and operational purposes; and
- f) Managing other activities in a way that does not foreclose the ability of those mitigation measures, utilities or services to continue functioning.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Method 10: Service provision

Method 11: Advocacy and Facilitation

Infrastructure of national and regional significance is managed in a sustainable way

Infrastructure of national and regional significance, including roads, rail, electricity generation and transmission, and telecommunication, are part of a national network, and contribute to the economic and social wellbeing of the nation.

It is important to recognise the benefits of this infrastructure, such as to the economy and to achieving community resilience, as well as managing any adverse effects on Otago's natural resources.

RECOGNITION	Policy 3.5.1 Recognising national and regional significance of infrastructure
MANAGEMENT	Policy 3.5.2 Managing adverse effects of infrastructure that has national or regional significance
	Policy 3.5.3 Protecting infrastructure of national or regional significance

Policy 3.5.1

Recognising national and regional significance of infrastructure

Recognise the national and regional significance of the following infrastructure:

- a) Renewable electricity generation facilities, where they supply the national electricity grid and local distribution network; and
- b) Electricity transmission infrastructure; and
- c) Telecommunication and radio communication facilities; and
- d) Roads classified as being of national or regional importance; and
- e) Ports and airports; and
- f) Structures for transport by rail.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans
Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Managing adverse effects of infrastructure that has national or regional significance

Minimise adverse effects from infrastructure that has national or regional significance, by:

- a) Giving preference to avoiding their location in:
 - i. Areas of significant indigenous vegetation and significant habitats of indigenous fauna; and
 - ii. Outstanding natural features, landscapes and seascapes; and
 - iii. Areas of outstanding natural character; and
 - iv. Outstanding water bodies or wetlands; and
- b) Where it is not possible to avoid locating in the areas listed in a) above, avoiding significant adverse effects on those values that contribute to the significant or outstanding nature of those areas; and
- c) Avoiding, remedying or mitigating other adverse effects on values; and
- d) Assessing the significance of adverse effects on those values, as detailed in Schedule 3; and
- e) Considering the use of offsetting, or other compensatory measures, for residual adverse effects on indigenous biodiversity.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)
Method 8: Education and Information
Method 11: Advocacy and Facilitation

Policy 3.5.3

Protecting infrastructure of national or regional significance

Protect infrastructure of national or regional significance, by:

- a) Restricting the establishment of activities that may result in reverse sensitivity effects; and
- Avoiding significant adverse effects on the functional needs of such infrastructure;
 and
- Avoiding, remedying or mitigating other adverse effects on the functional needs of such infrastructure; and
- d) Assessing the significance of adverse effects on those needs, as detailed in Schedule 3; and
- e) Protecting infrastructure corridors for infrastructure needs, now and for the future.

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Energy supplies to Otago's communities are secure and sustainable

The social and economic well-being of Otago's people, and their health and safety, is dependent on their energy needs being met by a reliable and secure supply of energy. More efficient energy uses, and a greater diversity of energy sources has the potential to increase community resilience, while increasing our ability to sustain economic growth.

In particular, Otago's reliance on fossil-based transport fuels could be reduced in the medium to long term through more efficient or alternative transport fuels.

SUPPLY	Policy 3.6.1 Using existing renewable electricity generation structures and facilities
PROMOTION	Policy 3.6.2 Promoting small scale renewable electricity generation
EFFICIENCY	Policy 3.6.3 Protecting the generation capacity of renewable electricity generation activities
	Policy 3.6.4 Enabling more efficient transport of electricity
	Policy 3.6.5 Protecting electricity distribution infrastructure
	Policy 3.6.6 Reducing long term demand for fossil fuels

Policy 3.6.1

Using existing renewable electricity generation structures and facilities

Give preference to the use of existing structures or facilities to increase the region's renewable electricity generation capacity over developing new structures in new locations.

Method 3: Regional Plans
Method 4: City and District Plans
Method 11: Advocacy and Facilitation

Promoting small scale renewable electricity generation

Promote small scale renewable electricity generation activities that:

- a) Increase the local community's resilience and security of energy supply; and
- b) Avoid, remedy or mitigate adverse effects from that activity.

Method 11: Advocacy and Facilitation

Policy 3.6.3

Protecting the generation capacity of renewable electricity generation activities

Protect the generation capacity of nationally or regionally significant renewable electricity generation activities, by:

- a) Recognising the functional needs of renewable electricity generation activities, including physical resource supply needs; and
- b) Restricting the establishment of those activities that may result in reverse sensitivity effects; and
- c) Avoiding, remedying or mitigating adverse effects from other activities on the functional needs of that infrastructure; and
- d) Assessing the significance of adverse effects on those needs, as detailed in Schedule 3.

Method 3: Regional Plans
Method 4: City and District Plans

Policy 3.6.4

Enabling more efficient transport of electricity

Enable electricity transmission and distribution infrastructure activities that:

- a) Maintain or improve the security of supply of electricity; or
- b) Enhance the efficiency of transporting electricity; and
- c) Avoid, remedy or mitigate adverse effects from that activity.

Method 3: Regional Plans
Method 4: City and District Plans

Policy 3.6.5

Protecting electricity distribution infrastructure

Protect electricity distribution infrastructure, by:

- a) Recognising the functional needs of electricity distribution activities; and
- b) Restricting the establishment of those activities that may result in reverse sensitivity effects; and
- c) Avoiding, remedying or mitigating adverse effects from other activities on the functional needs of that infrastructure; and
- d) Assessing the significance of adverse effects on those needs, as detailed in Schedule 3; and
- e) Protecting existing distribution corridors for infrastructure needs, now and for the future.

Method 3: Regional Plans
Method 4: City and District Plans
Method 11: Advocacy and Facilitation

Reducing long term demand for fossil fuels

Reduce the long term demand for fossil fuels from Otago's communities, by:

- a) Encouraging the development of compact and well integrated urban areas, to reduce travel needs within those areas; and
- b) Ensuring that transport infrastructure in urban areas has good connectivity, both within new urban areas and between new and existing urban areas, by:
 - i. Placing a high priority on walking, cycling, and public transport, where appropriate; and
 - ii. Maximising pedestrian and cycling networks connectivity, and integration with public transport; and
 - iii. Having high design standards for pedestrian and cyclist safety and amenity;
- c) Enabling the development or upgrade of transport infrastructure and associated facilities that:
 - i. Increase freight efficiency; or
 - ii. Foster the uptake of new technologies for more efficient energy uses, or renewable or lower emission transport fuels.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)
Method 8: Education and Information

Method 11: Advocacy and Facilitation

Urban areas are well designed, sustainable and reflect local character

The quality of our urban environment can affect quality of life and community viability. We need built environments that relate well to their surroundings, have easy connectivity and access to key services, and reflect the distinctive character of their locality. Poor quality or badly co-ordinated development presents risks socially, environmentally, and economically.

Integrating the natural environment into our urban areas has been shown to achieve multiple benefits. Ideally, urban environments are permeable for environmental systems – blue and green corridors and urban design choices can allow natural processes to continue through and around our everyday activities with minimal adverse impact to either.

Policy 3.7.1
Using the principles of good urban
design
Policy 3.7.2
•
Encouraging use of low impact
design techniques
Policy 3.7.3
Designing for warmer buildings
Policy 3.7.4
Designing for good access in public
spaces

Using the principles of good urban design

Encourage the use of good urban design principles in subdivision and development in urban areas, as detailed in Schedule 6, to:

- a) Provide a resilient, safe and healthy community, including through use of crime prevention through environmental design principles; and
- b) Ensure that the built form relates well to its natural environment, including by:
 - i. Reflecting natural features such as rivers, lakes, wetlands and topography; and
 - ii. Providing for ecological corridors in urban areas; and
 - iii. Protecting areas of indigenous biodiversity and habitat for indigenous fauna; and
 - iv. Encouraging use of low impact design techniques; and
 - v. Encouraging construction of warmer buildings; and
- Reduce risk from natural hazards, including by avoiding areas of significant risk;
 and
- d) Ensure good access and connectivity within and between communities; and
- e) Create a sense of identity, including by recognising features of heritage and cultural importance; and
- f) Create areas where people can live, work and play, including by:
 - i. Enabling a diverse range of housing, commercial, industrial and service activities; and
 - ii. Enabling a diverse range of social and cultural opportunities.

Method 2: Regional, City and District Council Relationships

Method 4: City and District Plans
Method 5: Regional Policy Statement

Method 7: Strategies and Plans (non-RMA)
Method 8: Education and Information

Method 11: Advocacy and Facilitation

Policy 3.7.2

Encouraging use of low impact design techniques

Encourage the use of low impact design techniques in subdivision and development, to:

- Reduce potential adverse environmental effects, including on water and air quality; or
- b) Mitigate the effects of natural hazards and climate change; or
- c) Enhance amenity; or
- d) Enhance habitat for indigenous species and biodiversity values.

Method 4: City and District Plans
Method 8: Education and Information
Method 11: Advocacy and Facilitation

65

Designing for warmer buildings

Encourage the design of subdivision and development to reduce the adverse effects of Otago's colder climate, and higher demand and costs for energy, including by:

- a) Maximising passive solar gain; and
- b) Insulating to warmer standards than those set under building legislation.

Method 4: City and District Plans
Method 8: Education and Information
Method 11: Advocacy and Facilitation

Policy 3.7.4

Designing for good access in public spaces

Design public spaces, including streets and open spaces, to meet the reasonable access and mobility needs of all sectors within the community, including the young and those with mobility impairments.

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)
Method 8: Education and Information
Method 11: Advocacy and Facilitation

Objective 3.8

Urban growth is well designed and integrates effectively with adjoining urban and rural environments

Well planned urban growth can achieve multiple benefits, including economic, social and environmental benefits. Concentrating activities in urban areas creates economies of scale for the development and maintenance of community infrastructure and supports social infrastructure such as health care and educational facilities. This can also reduce pressure on the surrounding productive and natural environment.

MANAGING GROWTH	Policy 3.8.1 Managing for urban growth
	Policy 3.8.2
	Controlling growth where there are
	identified urban growth boundaries or future urban development areas
	Policy 3.8.3
	Managing fragmentation of rural land

Policy 3.8.1 Managing for urban growth

Manage urban growth and creation of new urban land in a strategic and co-ordinated way, by:

- a) Ensuring there is sufficient residential, commercial and industrial land capacity, to cater for demand for such land, projected over at least the next 10 years; and
- b) Co-ordinating urban growth and extension of urban areas with relevant infrastructure development programmes, to:
 - i. Provide infrastructure in an efficient and effective way; and
 - ii. Avoid additional costs that arise from unplanned infrastructure expansion; and
- c) Identifying future growth areas that:
 - Minimise adverse effects on rural productivity, including loss of highly valued soils or creating competing urban demand for water and other resources; and
 - ii. Maintain or enhance significant biodiversity, landscape or natural character values; and
 - iii. Maintain important cultural or heritage values; and
 - iv. Avoid land with significant risk from natural hazards; and

- d) Considering the need for urban growth boundaries to control urban expansion; and
- Ensuring efficient use of land; and e)
- f) Requiring the use of low or no-emission heating systems in buildings, when ambient air quality in or near the growth area is:
 - Below standards for human health; or
 - Vulnerable to degradation given the local climatic and geographical context; ii.
- Giving effect to the principles of good urban design, as detailed in Schedule 6; and g)
- Giving effect to the principles of crime prevention through environmental design.
 - Method 2: Regional, City and District Council Relationships
 - Method 4: City and District Plans Method 5: Regional Policy Statement
 - Research, Monitoring and Reporting Method 6: Strategies and Plans (non-RMA) Method 7:

Policy 3.8.2

Controlling growth where there are identified urban growth boundaries or future urban development areas

Where urban growth boundaries, as detailed in Schedule 8, or future urban development areas, are needed to control urban expansion, control the release of land within those boundaries or areas, by:

- Staging development, using identified triggers to release new stages for development; or
- Releasing land in a way that ensures a logical spatial development, and efficient use of existing land and infrastructure before new land is released; and
- Avoiding urban development beyond the urban growth boundary or future urban development area.
 - Method 2: Regional, City and District Council Relationships
 - Method 4: City and District Plans Method 5: Regional Policy Statement

 - Method 7: Strategies and Plans (non-RMA)

Policy 3.8.3

Managing fragmentation of rural land

Manage subdivision, use and development of rural land, to:

- a) Avoid development or fragmentation of land which undermines or forecloses the potential of rural land:
 - i. For primary production; or
 - ii. In areas identified for future urban uses; or
 - iii. In areas having the potential for future comprehensive residential development; and
- b) Have particular regard to whether the proposal will result in a loss of the productive potential of highly versatile soil, unless:
 - i. The land adjoins an existing urban area and there is no other land suitable for urban expansion; and
 - ii. There highly versatile soils are needed for urban expansion, any change of land use from rural activities achieves an appropriate and highly efficient form of urban development; and
 - iii. reverse sensitivity effects on rural productive activities can be avoided; and
- c) Avoid unplanned demand for provision of infrastructure, including domestic water supply and waste disposal; and
- d) Avoid creating competing demand for water or other resources.

Method 2: Regional, City and District Council Relationships

Method 4: City and District Plans Method 5: Regional Policy Statement

69

Objective 3.9

Hazardous substances and waste materials do not harm human health or the quality of the environment in Otago

Waste materials are an end product of resource use and must be carefully managed to avoid creating environmental problems. Hazardous substances are dangerous but essential components of some activities. Hazardous substances and their waste should also be managed to avoid creating environmental problems or adversely affecting human health.

INTEGRATION	Policy 3.9.1 Integrating management of hazardous substances and waste
HAZARDOUS SUBSTANCES	Policy 3.9.2 Managing the use, storage and disposal of hazardous substances, and the storage and disposal of waste materials
CONTAMINATED LAND	Policy 3.9.3 Identifying contaminated land
	Policy 3.9.4 Managing the use of contaminated land
	Policy 3.9.5 Avoiding the creation of new contaminated land
ENCOURAGEMENT	Policy 3.9.6 Encouraging use of best management practices for hazardous substance use
	Policy 3.9.7 Encouraging services for hazardous substance collection, recycling and disposal

Policy 3.9.1

Integrating management of hazardous substances and waste

Promote an integrated approach to the management of hazardous substances and waste in Otago.

Strategies and Plans (non-RMA) Method 7: Method 11: Advocacy and Facilitation

Policy 3.9.2

Managing the use, storage and disposal of hazardous substances, and the storage and disposal of waste materials

Manage the use, storage and disposal of hazardous substances, and the storage and disposal of waste materials, to avoid accidental spillage or release of those substances and materials, by:

- Providing secure containment of those substances in case of accidental spillage;
- Minimising risk associated with natural hazard events; and b)
- Avoiding adverse effects of those substances and materials on the health and safety of people, and on other values; and
- Providing for the development of facilities to safely store, transfer, process, handle and dispose of hazardous waste and waste materials; and
- e) Ensuring hazardous substances are treated or disposed at authorised facilities, in accordance with the relevant disposal instructions; and
- Restricting the location of activities that may result in reverse sensitivity effects near:
 - i. Authorised facilities for hazardous substance treatment or disposal; or
 - Waste transfer or disposal facilities.

Regional, City and District Council Relationships Method 2:

Regional Plans Method 3:

Method 4: City and District Plans

Method 4: Method 7: Method 8: Strategies and Plans (non-RMA)

Education and Information

Method 10: Service provision

Method 11: Advocacy and Facilitation

Policy 3.9.3

Identifying contaminated land

Identify sites of known or potentially contaminated land in Otago.

Research, Monitoring and Reporting Method 6:

Method 8: **Education and Information**

Policy 3.9.4

Managing the use of contaminated land

Manage the use of contaminated land, to protect people and the environment from adverse effects, by:

- a) Prior to subdivision or development of potentially contaminated land, requiring a site investigation is undertaken to determine the nature or extent of any contamination; and
- b) Where there is contamination:
 - i. Requiring an assessment of associated environmental risks; and
 - ii. Remediating land; and
- Considering the need for ongoing monitoring of contaminant levels and associated risks.

Method 2: Regional, City and District Council Relationships

Method 4: City and District Plans

Policy 3.9.5

Avoiding the creation of new contaminated land

Avoid the creation of new contaminated land.

Method 3: Regional Plans
Method 4: City and District Plans

Policy 3.9.6

Encouraging use of best management practices for hazardous substance use

Encourage the use of best management practices to prevent or mitigate adverse effects of the use of hazardous substances on the environment, including reducing their use.

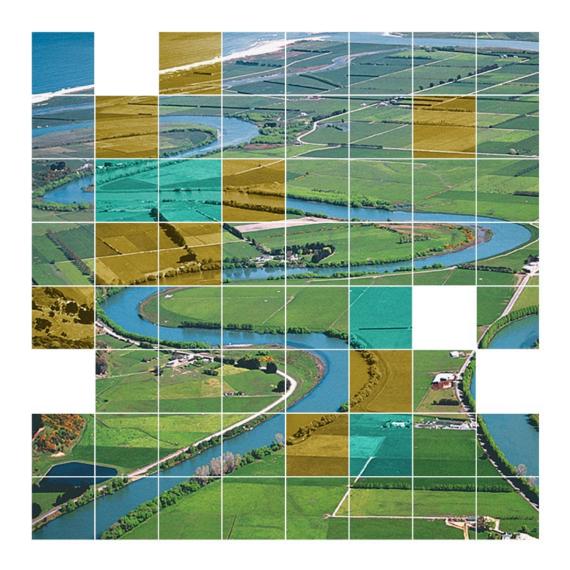
Method 11: Advocacy and Facilitation

Policy 3.9.7

Encouraging services for hazardous substance collection, recycling and disposal

Encourage the establishment of hazardous substance collection, disposal and recycling services across the region.

Method 10: Service provision



PART B CHAPTER 4

People are able to use and enjoy Otago's natural and built environment

The use of natural and physical resources underpins economic and community activity in Otago. However due to the dynamic and highly interconnected nature of the environment the sustainable management of our resources requires consideration of the adverse effects of resource use on the environment and on other resource users.

Chapter overview:

Objective 4.1 Public access to areas of value to the community is maintained or enhanced

Issue:

Sometimes, public access to areas of value to the community is limited or inappropriate.

Need:

Access to the natural environment and areas of cultural and historic significance is highly valued by residents and visitors.

We need to use the opportunities subdivision and development create, to improve access to Otago's natural environment, or to limit access to more sensitive places.

Objective 4.2 Historic heritage resources are recognised and contribute to the region's character and sense of identity

Issue:

Sometimes, subdivision, use, and development risk damage to Otago's rich historic heritage.

Need:

Protection of historic heritage from inappropriate activities is required under the RMA as a matter of national importance.

Objective 4.3 Sufficient land is managed and protected for economic production

Issue:

Sometimes, existing businesses may be placed at risk by pressure to change land use to activities that may compete or conflict, creating reverse sensitivities.

Need:

We need some degree of spatial separation of incompatible activities and control over land use change to ensure efficient use of land and continuing economic vitality.

Objective 4.4 Otago's communities can make the most of the natural and built resources available for use

Issue:

Many natural and physical resources we rely on for economic activity and wellbeing are finite and under pressure from different uses and users.

Need:

We need efficient allocation and use of these resources to maximise socio-economic and cultural benefits, as well as sustain environmental wellbeing.

Objective 4.5 Adverse effects of using and enjoying Otago's natural and built environment are minimised

Issue:

Resource use can create adverse effects on other resources, their values and for other resource users and the wider community.

Otago's significant areas of biodiversity and outstanding landscapes, for example, are under pressure from the direct effects of human activities, as well as indirect effects, including the spread of multiple pest species.

Need:

It is important to avoid effects that, individually or cumulatively, degrade Otago's natural and built environment, where possible.

Objective 4.1

Public access to areas of value to the community is maintained or enhanced

Our ability to access the natural environment and areas of cultural and historic significance is highly valued by the community and contributes significantly to our tourism economy. The RMA identifies the maintenance or enhancement of public access to and along the coastal marine area, lakes, and rivers as a matter of national importance.

Improving access to the natural environment or sites of cultural and historic significance can contribute to recreational, cultural, spiritual and economic wellbeing and should be maintained or enhanced unless it would be detrimental to the protection of the values of these areas, or the health and safety of the community.

ACCESS

Policy 4.1.1

Maintaining and enhancing public access

Policy 4.1.1

Maintaining and enhancing public access

Maintain and, where possible, enhance public access to the natural environment, including to the coast, lakes, rivers and their margins, and areas of cultural or historic significance, unless restricting access is necessary to:

- a) Protect public health and safety; or
- b) Protect the natural heritage and ecosystem values of sensitive natural areas or habitats; or
- c) Protect identified sites and values associated with historic heritage or cultural significance to takata whenua.

Method 1: Kāi Tahu Relationships

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 9: Funding

Method 10: Service provision

Objective 4.2

Historic heritage resources are recognised and contribute to the region's character and sense of identity

Otago is a province rich in historic heritage and includes heritage places and areas that are recognised as nationally, regionally and locally important. Our historic heritage resources make significant contributions to our regional identity and tourism economy.

Identification of these resources is a prerequisite to affording them a level of protection commensurate with their significance and providing for their continued role in our daily lives. The use of common criteria identifying historic heritage provides a more efficient and consistent approach across the region, while allowing local variation.

RECOGNITION	Policy 4.2.1 Recognising heritage themes
	Policy 4.2.2 Identifying historic heritage
MANAGEMENT	Policy 4.2.3 Managing historic heritage values

Policy 4.2.1 Recognising heritage themes

Recognise the following elements as characteristic or important to Otago's historic heritage:

- a) Residential and commercial buildings;
- b) Māori cultural and heritage values;
- c) 19th and early 20th century pastoral sites;
- d) Early surveying, communications and transport, including roads, bridges and routes;
- e) Early industrial heritage, including mills and brickworks;
- f) Gold mining systems and settlements;
- g) Dredge and ship wrecks;
- Coastal heritage, particularly takata whenua occupation sites and those associated with early European activity such as whaling;
- i) Memorials.

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Policy 4.2.2

Identifying historic heritage

Identify historic heritage places and areas of regional or national significance and their values, using the following attributes, detailed in Schedule 7:

- a) Physical values, including:
 - i. Archaeological information;
 - ii. Architecture;
 - iii. Technology;
 - iv. Scientific;
 - v. Rarity;
 - vi. Representativeness;
 - vii. Integrity;
 - viii. Vulnerability;
 - ix. Context or group;
- b) Historic values, including:
 - i. People;
 - ii. Events;
 - iii. Patterns;
- c) Cultural values, including:
 - i. Identity;
 - ii. Public esteem;
 - iii. Commemorative;
 - iv. Education;
 - v. Takata whenua;
 - vi. Statutory recognition.

Method 3: Regional Plans

Method 4: City and District Plans

Method 6: Research, Monitoring and Reporting

Managing historic heritage values

Protect and enhance the values of places and areas of historic heritage, by:

- Recognising that some places or areas are known or strongly suspected of containing archaeological sites, wāhi tapu or wāhi taoka which could be of significant historic or cultural value; and
- b) Applying these provisions immediately upon discovery of such hitherto unidentified archaeological sites or areas, wāhi tapu or wāhi taoka; and
- c) Avoiding adverse effects on those values which contribute to the area or place being of regional or national significance; and
- Avoiding significant adverse effects on other values of areas and places of historic heritage; and
- e) Assessing the significance of adverse effects on those values, as detailed in Schedule 3; and
- f) Remediating, when adverse effects on other values cannot be avoided; and
- g) Mitigating when adverse effects on other values cannot be avoided or remediated; and
- h) Encouraging the integration of historic heritage values into new activities; and
- i) Enabling adaptive reuse or upgrade of historic heritage places and areas where heritage values can be maintained.

Method 1: Kāi Tahu Relationships

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans
Method 8: Education and Information

Method 9: Funding

Objective 4.3

Sufficient land is managed and protected for economic production

The use of land for productive activity underpins the economy of the region. We want to provide ongoing opportunities for economic growth and development by recognising and providing for the effects of activities. Managing the efficient use of land may also require the management of other land use activities where significant historical investment or future productive potential may be adversely affected by competing or conflicting activities.

RURAL	Policy 4.3.1 Managing for rural activities	
	Policy 4.3.2 Managing land use change in dry catchments	
URBAN	Policy 4.3.3 Recognising the values of Otago's central business districts	
COMMERCIAL	Policy 4.3.4 Managing the distribution of commercial activities in larger urban areas	
INDUSTRIAL	Policy 4.3.5 Managing for industrial land uses	
MINERALS AND GAS	Policy 4.3.6 Managing locational needs for mineral and gas exploration, extraction and processing	

Policy 4.3.1

Managing for rural activities

Manage activities in rural areas, to support the region's economy and communities, by:

- a) Enabling farming and other rural activities that support the rural economy; and
- b) Minimising the loss of soils highly valued for their versatility for primary production; and
- Restricting the establishment of activities in rural areas that may lead to reverse sensitivity effects; and
- d) Minimising the subdivision of productive rural land into smaller lots that may result in rural residential activities; and

e) Providing for other activities that have a functional need to locate in rural areas, including tourism and recreational activities that are of a nature and scale compatible with rural activities.

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Policy 4.3.2

Managing land use change in dry catchments

Manage land use change in dry catchments, to avoid any significant reduction in water yield, by:

- Restricting any extension of forestry activities within those catchments that would result in a significant reduction in water yield, including cumulative reductions; and
- b) Minimising the conversion of tussock grasslands to species which are less able to capture and hold precipitation.

Method 2: Regional, City and District Council Relationships

Method 4: City and District Plans

Method 6: Research, Monitoring and Reporting

Policy 4.3.3

Recognising the values of Otago's central business districts

Recognise the values of Otago's central business districts, including as the primary focal point for social, cultural and economic activities within a community.

Method 4: City and District Plans

Policy 4.3.4

Managing the distribution of commercial activities in larger urban areas

Manage the distribution of commercial activities in larger urban areas, to maintain the vibrancy of the central business district and support local commercial needs, by:

- a) Enabling a wide variety of commercial, social and cultural activities in the central business district; and
- b) Encouraging the adaptive re-use of existing buildings in ways that complement commercial functions; and
- Avoiding unplanned extension of commercial activities that has significant adverse effects on the central business district, including on the efficient use of infrastructure, employment and services; and
- d) Enabling smaller centres to service local community needs.

Method 4: City and District Plans
Method 11: Advocacy and Facilitation

Managing for industrial land uses

Manage the finite nature of land suitable and available for industrial activities, by:

- a) Providing specific areas to accommodate the effects of industrial activities; and
- Providing a range of land suitable for different industrial activities, including landextensive activities; and
- c) Restricting the establishment of activities in industrial areas that may result in:
 - i. Reverse sensitivity effects; or
 - ii. Inefficient use of industrial land or infrastructure.

Method 4: City and District Plans
Method 11: Advocacy and Facilitation

Policy 4.3.6

Managing locational needs for mineral and gas exploration, extraction and processing

Recognise the needs of mineral exploration, extraction and processing activities to locate where the resource exists, and manage them by:

- a) Giving preference to avoiding their location in:
 - i. Areas of significant indigenous vegetation and significant habitats of indigenous fauna; or
 - ii. Outstanding natural features, landscapes and seascapes; or
 - iii. Areas of outstanding natural character; or
 - iv. Outstanding water bodies; or
 - v. Areas subject to significant natural hazard risk; and
- b) Restricting the establishment of those activities in areas used for mineral and gas exploration, extraction and processing that may result in reverse sensitivity effects.

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Objective 4.4

Otago's communities can make the most of the natural and built resources available for use

Many of the resources we rely on for wellbeing and economic activity are finite and under pressure from different uses. It is therefore important to use these resources efficiently, and to maximise any beneficial effects for environmental well-being as well as the socioeconomic and cultural well-beings of resource use.

WATER	Policy 4.4.1 Ensuring efficient water allocation and use
WASTE	Policy 4.4.2 Encouraging waste minimisation
ENHANCEMENT	Policy 4.4.3 Encouraging environmental enhancement

Policy 4.4.1

Ensuring efficient water allocation and use

Ensure an efficient allocation and use of water by:

- a) Requiring that the volume of water allocated does not exceed what is necessary for the purpose of use; and
- b) Requiring the development or upgrade of infrastructure that increases use efficiency; and
- Encouraging collective coordination and rationing of take and use of water when river flows or aquifer levels are lowering, to avoid breaching any minimum flow or aquifer level restriction; and
- d) Enabling water harvesting and storage, to reduce pressure on water bodies during periods of low flows.

Method 3: Regional Plans

Method 7: Strategies and Plans (non-RMA)

Method 10: Service provision

Encouraging waste minimisation

Encourage activities to give effect to the waste minimisation hierarchy of responses, by:

- a) Giving preference to reducing waste generated; then
- b) Reusing waste; then
- c) Recycling waste; then
- d) Recovering resources from waste; then
- e) Disposing residual waste to authorised landfill.

Method 7: Strategies and Plans (non-RMA)

Method 10: Service provision

Method 11: Advocacy and Facilitation

Policy 4.4.3

Encouraging environmental enhancement

Encourage activities which contribute to enhancing the natural environment, including to:

- a) Improve water quality; or
- b) Protect or restore habitat for indigenous species; or
- c) Regenerate indigenous species; or
- d) Mitigate natural hazards; or
- e) Restore the natural character of wetlands; or
- f) Improve the health and resilience of:
 - i. Ecosystems supporting indigenous biodiversity; or
 - ii. Important ecosystem services, including pollination; or
- g) Improve access to rivers, lakes, wetlands and their margins; or
- h) Buffer or link ecosystems, habitats and areas of significance that contribute to ecological corridors; or
- i) Control pest species.

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Method 9: Funding

Objective 4.5

Adverse effects of using and enjoying Otago's natural and built environment are minimised

Any use of natural or physical resources has the potential to generate adverse effects. It is important to manage activities to avoid, individually or cumulatively, degrading the quality of Otago's natural environment. This requires the proactive management of natural resources, and can only be achieved through the integrated management of Otago's natural resources, and by giving due consideration to both managing adverse effects and maintaining and enhancing environmental values. Resource use can also have adverse effects on other uses or prevent the normal operation of existing uses.

Resource management decisions are often about arbitrating between conflicting values or uses. For example, Section 2.3 of this document identifies resources which are so significant that adverse effects on their values should be avoided. Some activities, such as mineral extraction or infrastructure development, may have to locate in areas containing significant values. If we are to provide for those activities, it is important to outline how their adverse effects should be managed.

Lastly, it is important to recognise that community values have regard to the quality of the environment, but also to the activities which are allowed and the management of their adverse effects. For instance, the preservation of the life supporting capacity of water is important to Kāi Tahu, as is the avoidance of human waste discharges to water, or close to mahika kai sites.

MANAGEMENT	Policy 4.5.1 Avoiding objectionable discharges
	Policy 4.5.2 Applying an adaptive management approach
AIR	Policy 4.5.3 Applying emission standards on domestic fuel burners
SOIL	Policy 4.5.4 Minimising soil erosion

PESTS	Policy 4.5.5 Controlling the introduction and spread of pest plants and animals
MINERALS, GAS AND FOSSIL FUELS	Policy 4.5.6 Managing adverse effects from mineral and gas exploration, extraction and processing
OFFSETTING	Policy 4.5.7 Enabling offsetting of indigenous biodiversity
	Policy 4.5.8 Offsetting for indigenous biodiversity
	Policy 4.5.9 Offsetting for air quality

Avoiding objectionable discharges

Avoid discharges that are objectionable or offensive to takata whenua and the wider community, including:

- a) Discharges of human or animal waste:
 - i. Directly to water; or
 - ii. In close proximity to water; or
 - iii. In close proximity to mahika kai sites; or
- Discharges of hazardous or noxious substances close to sensitive activities, including:
 - i. Residential activities; or
 - ii. Schools and other educational activities; or
 - iii. Places of public access to the natural environment; or
 - iv. In close proximity to mahika kai sites; or
- Odorous or conspicuous discharges.

Method 3: Regional Plans

Policy 4.5.2

Applying an adaptive management approach

Apply an adaptive management approach, to address adverse effects that might arise and that can be remedied before they become irreversible, by:

- a) Setting appropriate indicators for effective monitoring of those adverse effects; and
- b) Setting thresholds to trigger remedial action before the effects result in irreversible damage.

Method 3: Regional Plans
Method 4: City and District Plans

Applying emission standards on domestic fuel burners

Apply emission standards to domestic heating appliances, to achieve ambient air quality that supports good human health while ensuring homes in Otago have adequate heating.

Method 3: Regional Plans

Policy 4.5.4

Minimising soil erosion

Minimise soil erosion resulting from activities, by:

- a) Using appropriate erosion controls; and
- b) Maintaining vegetative cover on erosion prone land; and
- c) Remediating land where significant soil erosion has occurred; and
- d) Encouraging activities that enhance soil retention.

Method 4: City and District Plans

Method 6: Research, Monitoring and Reporting

Method 8: Education and Information

Policy 4.5.5

Controlling the introduction and spread of pest plants and animals

Control the adverse effects of pest species, prevent their introduction and reduce their spread, to safeguard:

- a) The viability of indigenous species and habitats for indigenous species; or
- b) Ecosystem services that support economic activities; or
- c) Water quality; or
- d) Soil quality; or
- e) Human and animal health; or
- f) Recreation values; or
- g) Takata whenua values.

Method 1: Kāi Tahu Relationships

Method 2: Regional, City and District Council Relationships

Method 3: Regional Plans

Method 4: City and District Plans

Method 7: Strategies and Plans (non-RMA)

Method 9: Funding

Managing adverse effects from mineral and gas exploration, extraction and processing

Minimise adverse effects from the exploration, extraction and processing of minerals, by:

- a) Giving preference to avoiding their location in:
 - i. Areas of significant indigenous vegetation and significant habitats of indigenous fauna; and
 - ii. Outstanding natural features, landscapes and seascapes; and
 - iii. Areas of outstanding natural character; and
 - iv. Outstanding water bodies; and
 - v. Areas subject to significant natural hazard risk;
- b) Where it is not possible to avoid locating in the areas listed in a) above, avoiding significant adverse effects of the activity on those values that contribute to the significant or outstanding nature of those areas; and
- c) Avoiding adverse effects on the health and safety of the community; and
- d) Remedying or mitigating adverse effects on other values; and
- e) Assessing the significance of adverse effects on those values, as detailed in Schedule 3; and,
- f) Reducing unavoidable adverse effects by
 - i. Staging development for longer term activities; and
 - ii. Progressively rehabilitating the site, where possible.
- g) Considering the use of offsetting, or compensatory measures, for residual adverse effects; and
- h) Applying a precautionary approach to assessing the effects of the activity, where there is scientific uncertainty, and potentially significant or irreversible adverse effects.

Method 3: Regional Plans
Method 4: City and District Plans
Method 11: Advocacy and Facilitation

Policy 4.5.7

Enabling offsetting of indigenous biodiversity

Enable offsetting of adverse effects on indigenous biodiversity values, only when:

- The activities causing those effects have a functional necessity to locate in significant or outstanding areas; and
- b) Those effects cannot be avoided, remedied or mitigated; and
- c) Those effects do not result in the loss of irreplaceable or vulnerable biodiversity.

Method 3: Regional Plans
Method 4: City and District Plans

Offsetting for indigenous biodiversity

Provide for offsetting for indigenous biodiversity, when it is enabled, by ensuring that:

- a) The offset achieves no net loss and preferably a net gain in indigenous biodiversity values; and
- b) The offset is undertaken close to the location of development, where this will result in the best ecological outcome; and
- The ecological values being achieved are the same or similar to those being lost;
 and
- d) The positive ecological outcomes of the offset last at least as long as the impact of the activity, if practicable.

Method 3: Regional Plans

Method 4: City and District Plans

Method 6: Research, Monitoring and Reporting

Policy 4.5.9

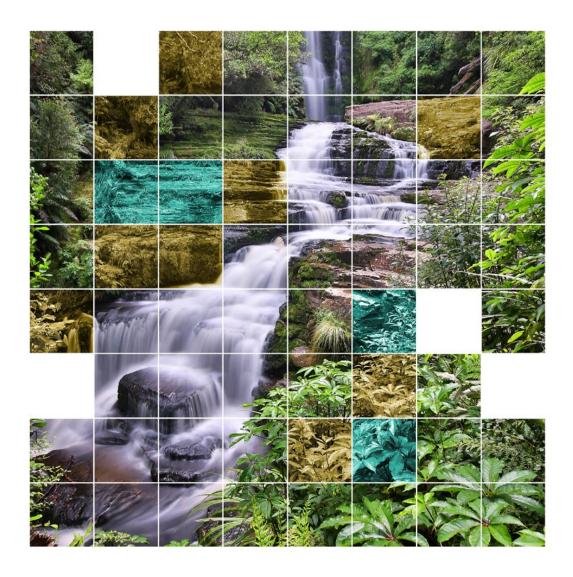
Offsetting for air quality

Provide for offsetting of adverse effects of discharges to air on ambient air quality, only when:

- a) The ambient air quality of the relevant airshed breaches air quality standards for human health; and
- b) Offsetting will reduce the cumulative effect of discharges to air in the relevant airshed by the same, or greater amount, than the proposed discharge; and
- c) Offsetting improves access to reliable and affordable domestic heating in the relevant airshed.

Method 3: Regional Plans

Method 7: Strategies and Plans (non-RMA)



Roles and Responsibilities

The following section sets out the respective roles and responsibilities of regional, city and district councils in the specific areas where the RMA creates a degree of overlap in their functions, recognising requirements of RMA Sections 62(1)(h) and (i). These roles and responsibilities are relevant for giving effect to the policies and methods.

Regional council will:

Specify objectives, policies and methods for the control of the use of land for:

- a) The management of natural hazards in the beds of rivers, lakes and wetlands, or the coastal marine area;
- b) The management of hazardous substances to:
 - i. prevent or mitigate the actual or potential adverse effects of discharges of hazardous substances to land or air;
 - ii. control the use, storage, disposal or transportation of hazardous substances in the beds of rivers, lakes and wetlands or the coastal marine area;
- c) The maintenance of indigenous biological diversity in the coastal marine area, in beds of rivers and lakes, and wetlands.

City and district councils will:

Specify objectives, policies and methods for the control of the use of land for:

- a) The management of natural hazards outside of the beds of rivers, lakes and wetlands or the coastal marine area;
- b) The prevention or mitigation of the adverse effects of the storage, use, transport or disposal of hazardous substances on the environment outside of the beds of rivers, lakes and wetlands or the coastal marine area;
- c) The maintenance of indigenous biological diversity on all land outside of the coastal marine area and the beds of rivers and lakes.

Regional, city and district councils will:

Share joint responsibility for specifying objectives, policies and methods for the purpose of the maintenance of indigenous biological diversity through the management of the margins of the coastal marine area, beds of rivers and lakes, and wetlands.

Methods

Method 1: Kāi Tahu Relationships

- 1.1 Regional, city and district councils will develop processes to:
 - 1.1.1 Establish and maintain effective resource management relationships with Kāi Tahu;
 - 1.1.2 Have regard to Iwi Management Plans;
 - 1.1.3 Consult Kāi Tahu in resource management decision-making and implementation.
- 1.2 Regional, city and district councils will collaborate with Kāi Tahu to:
 - 1.2.1 Identify and protect places, areas or landscapes of cultural, spiritual or traditional significance to them;
 - 1.2.2 Identify and protect the values that contribute to their significance;
 - 1.2.3 Identify areas or values that may contribute to the importance of outstanding; natural features and landscapes, and special amenity landscapes to Kāi Tahu;
 - 1.2.4 Determine appropriate naming for places of significance in Otago.
- 1.3 Regional, city and district councils will:
 - 1.3.1 Seek opportunities to assess and improve knowledge of tikaka and the principles of Te Tiriti o Waitangi among staff and stakeholders.
- 1.4 Regional, city and district councils may:
 - 1.4.1 Delegate and transfer RMA plan administration functions to an iwi authority, where this provides an efficient and effective service.

Method 2: Regional, City and District Council Relationships

- 2.1 Regional, city and district councils together will:
 - 2.1.1 Share information on matters of common interest;
 - 2.1.2 Work together to ensure RMA plan provisions are complementary for overlapping or abutting responsibilities.
- 2.2 Regional, city and district councils may:
 - 2.2.1 Establish joint processes for working together on common resource management matters or cross boundary issues, such as:
 - a) Joint committees;
 - b) Joint working groups;
 - c) Joint project management;
 - d) Joint or combined hearings;
 - 2.2.2 Prepare combined regional and district documents;
 - 2.2.3 Delegate or transfer RMA functions, where this provides an efficient and effective service, from:
 - a) One local authority to another;
 - b) A local authority to an iwi authority;

- 2.2.4 Establish joint management agreements with another statutory body (such as Te Rūnanga o Ngāi Tahu or the Crown);
- 2.2.5 Establish protocols and processes for resolving cross boundary issues through the triennial agreement under the Local Government Act 2002.
- 2.3 Regional council may, at the request of city or district councils:
 - 2.3.1 Make a regional rule for the purpose of extinguishing existing use rights under Section 10 of the RMA to address specific natural hazard risk;
 - 2.3.2 Delegate the administration of that regional rule to the city or district council.

Method 3: Regional Plans

3.1 Regional Plans will set objectives, policies and methods to implement policies in the RPS as they relate to Regional Council areas of responsibility.

More specific direction is provided in the following areas:

- 3.1.1 Regional Plans will set objectives, policies and methods to implement Policy 1.2.3 by providing for the management of culturally sensitive information and the protection of culturally sensitive areas through the use of silent files and heritage alert layers by local authorities;
- 3.1.2 Regional Plans will set objectives, policies and methods to implement Policy 1.2.5 by promoting or restricting access to historic heritage places or areas to ensure the values Kāi Tahu associate with these places may be upheld in accordance with tikaka Māori;
- 3.1.3 Regional Plans will set objectives, policies and methods to implement Policy 1.1.2 by having regard to the Te Rūnunga o Ngāi Tahu, Hazardous Substances and New Organisms Policy Statement, 2008 when developing objectives, policies and methods for the management of hazardous substances and new organisms;
- 3.1.4 Regional Plans will set objectives, policies and methods to implement policies 2.1.1 6, 2.2.4, 3.9.4, 4.2.3, and 4.5.1, by including provisions to:
 - a) Manage land uses and vegetation removal within the beds of lakes and rivers and the coastal environment;
 - b) Manage change in river morphology;
 - c) Encourage restoration of water margins;
 - Apply emission standards to domestic fuel burners, that support good human health while ensuring homes in Otago have adequate heating;
 - e) Managing noise in the coastal marine area;
 - f) Identifying and protecting historic heritage places, areas or landscapes located in the beds of rivers, lakes and wetlands or the coastal marine area;
 - g) Manage the effects of the use of contaminated land on:
 - i) The quality of air, water or land;

- ii) In the coastal marine area, and the beds of rivers, lakes and other waterbodies;
- h) Require solid waste facilities to monitor, record and report on the type and amount of material entering the waste stream and solid waste deposited to landfill;
- i) Implement policy 3.2.2 and 3.2.3 by using the criteria when undertaking natural hazard assessments;
- 3.1.5 Regional Plan will set objectives, policies and methods to implement policy 2.1.2 and 2.3.3 by developing river management strategies, including recommendations on:
 - a) The management of riparian margins along rivers and lakes;
 - b) The management of bed alterations.
- 3.2 Implementing Regional Plans:
 - 3.2.1 Regional council will implement Policies 3.2.2 and 3.2.3 when undertaking natural hazard assessments;
 - 3.2.2 Regional council will implement Policy 3.9.3 by investigating land for the purpose of identifying contaminated or potentially contaminated sites.
- 3.3 Monitoring and reviewing Regional Plans:
 - 3.3.1 Regional Council will monitor and review regional plans to give effect to its responsibilities under the RMA.

Method 4: City and District Plans

4.1 City and district plans will set objectives, policies and methods to implement policies in the RPS as they relate to the City or District Council areas of responsibility.

More specific direction is provided in the following areas:

- 4.1.1 City or district plans will implement Policies 3.2.1 to 3.2.11 by determining the appropriate level of regulatory response to natural hazard risk by:
 - a) Identifying areas subject to natural hazards in plans and/or natural hazard registers and databases;
 - b) Applying the plan principles to the management of recently identified natural hazards;
 - c) Considering the use of adaptive management techniques;
- 4.1.2 City or district plans will implement Policy 3.8.1 by putting conditions on development and subdivisions consents, and in district plans, on the type of heating systems allowed, consistent with ORC's discharge rules;
- 4.1.3 City or district plans will implement Policy 4.5.1 by including provisions to manage the discharge of dust associated with earthworks and land use;
- 4.1.4 City or district plans will implement Policy 4.3.2 by including provisions managing land use in dry catchments where this will impact on water yield:
- 4.1.5 Include subdivision and infrastructure design standards to recognise

- the access needs of different sections of the community, including the mobility impaired, the elderly and children;
- 4.1.6 City or district plans will implement Policy 2.2.11 by maintaining and where possible enhance access to surf breaks of national importance;
- 4.1.7 City or district plans will implement Policy 3.9.2 including by managing the actual or potential adverse effects of the use or storage of hazardous substances, including on:
 - a) Other land use activities;
 - b) The health and safety of the community;
 - c) Groundwater protection, or community water supplies;
 - d) Amenity values, and community and takata whenua resources, cultural and spiritual values;
 - e) Other activities or environmental values as a result of location in hazard prone areas;
- 4.1.8 City or district plans will implement Policy 3.5.2 by providing for and managing the land use effects associated with the establishment of waste management activities and facilities;
- 4.1.9 City or district plans will implement Policy 4.3.2 by:
 - a) Including accidental discovery protocols as conditions on consent for earthworks or other activities that may unearth archaeological features providing for activities which contribute to the retention of historic heritage places, areas or landscapes, including maintenance and seismic strengthening;
 - b) Providing for the recording of culturally sensitive information and the protection of culturally sensitive areas through the use of silent files, heritage alert layers or other methods satisfactory to Kāi Tahu;
- 4.1.10 City or district plans will implement Policy 1.2.5 by making allowance for native reserves to be used in the manner intended by the Crown at the time of their establishment, including Papakāika and marae related activities:
- 4.1.11 City or district plans will implement Policy 1.2.3 and 1.2.4 by promoting or restricting access, as required by circumstances, to historic heritage places and areas and identified sites in accordance with tikaka Māori;
- 4.1.12 City or district plans may implement Policy 3.8.2 by:
 - a) Establishing urban growth boundaries where required to manage pressure for urban development;
 - b) Ensuring urban growth boundaries contain sufficient capacity, when measured district wide, to accommodate 10 years urban growth based on demographic growth projections;
 - c) Requesting the ORC to include urban growth boundaries in the RPS.

4.2 Implementing district plans

- 4.2.1 City or district councils will implement Policies 3.2.2 and 3.2.3 when undertaking natural hazard assessments;
- 4.2.2 City or district councils will implement Policies 2.2.1, 2.2.3, 2.2.5 and 2.2.8 to assess the values of places of potential significance to inform the decision making process;
- 4.2.3 City or district councils will implement Policy 4.2.3 by including accidental discovery protocols as conditions on consent for earthworks or other activities that may unearth archaeological features;
- 4.2.4 City or district councils will implement Policies 4.3.1, 4.3.2, 3.8.1 and 3.8.2 by preparing structure plans for large scale land use changes;
- 4.2.5 City or district councils will implement Policy 4.2.3 by ensuring methods for protecting culturally important sites are culturally appropriate;
- 4.2.6 City or district councils may implement Policies 3.2.2 and 3.2.3 by:
 - Requiring site specific investigation where there is limited information available on natural hazard or climate change risk or effects;
 - b) Requesting the regional council develop a regional rule for the purpose of extinguishing existing use rights under Section 10 of the RMA to address specific natural hazard risk;
- 4.2.7 City or district councils may implement Policy 1.2.4 and 4.1.1 by including conditions to maintain or enhance access to the natural environment or sites of cultural significance.
- 4.3 Monitoring and reviewing city and district plans:
 - 4.3.1 City and district councils will monitor and review regional plans to give effect to its responsibilities under the RMA.

Method 5: Regional Policy Statement

- 5.1 Regional Policy Statement
 - 5.1.1 City or district councils may:
 - a) Implement Policy 3.8.2 by requesting the regional council include urban growth boundaries in the Regional Policy Statement;
 - 5.1.2 The regional council may:
 - a) At the request of city or district councils, include urban growth boundaries, future urban development areas or their equivalent in the RPS, where:
 - i) Those urban growth boundaries are necessary to sustainably manage urban growth within the district;
 - ii) The boundaries are robust in terms of providing sufficient capacity for 10 years urban growth;
 - iii) Those urban growth boundaries are consistent with the policy direction of the RPS in terms of priorities for the management of environment and natural hazards;
 - b) Administer a change to the RPS where the relevant city or

district council identifies a need to modify existing urban growth boundaries to maintain a minimum of 10 years capacity for urban growth.

Method 6: Research, Monitoring and Reporting

- 6.1 Identification of important resources
 - 6.1.1 Regional, city and district councils will:
 - a) Work collaboratively to identify the landward extent of the coastal environment;
 - 6.1.2 Regional, city and district councils, in their areas of responsibility, will identify:
 - a) Significant indigenous vegetation and significant habitat of indigenous fauna;
 - b) Areas of outstanding natural character in the coastal environment;
 - Outstanding natural features, and outstanding natural landscapes and seascapes;
 - d) Special amenity landscapes;
 - e) Outstanding water bodies;
 - f) The values of water margins critical to threatened or rare indigenous flora and fauna;
 - 6.1.3 Regional council will:
 - a) Identify airsheds based on geographical and physical boundaries, for the management of air quality;
 - b) Identify dry catchments and areas of tussock grasslands where rules are required by TAs to manage water quantity;
 - c) Identify highly valued soil resources;
 - 6.1.4 Regional council will engage with Kāi Tahu to:
 - a) Identify the cultural values of resources and requirements for customary uses;
 - b) Identify wāhi tupuna and the values that contribute to their significance, including sites and landscapes of cultural significance to Kāi Tahu such as wāhi tapu and other elements identified in schedule 1C.

6.2 Research

- 6.2.1 The regional council will:
 - a) Undertake investigation for the identification of catchment values, and the resources and processes those values depend on, with a particular focus on:
 - i) The interconnections between water bodies, including coastal water;
 - ii) The role of river and catchment morphology and natural functioning in supporting those values;
 - iii) The maintenance and enhancement of indigenous biodiversity and ecosystem health;
 - iv) Erosion risk mitigation;

- v) Providing for the natural functioning of rivers and lakes;
- b) Identify the values of Otago's coast, and the processes and resources those values are dependent on;
- c) Identify airsheds based on geographical and physical boundaries, for the management of air quality;
- d) Investigate and provide guidance on:
 - i) The inventory and mapping of Otago's soil resources;
 - ii) The location and extent of high class and versatile soil in Otago;
 - iii) Identification of threats to the life-supporting capacity of Otago's soil resources;
- e) Develop and maintain a register of sites of known or potentially contaminated land in Otago. Share information regarding Otago's soil resources and contaminated land with city and district councils;
- f) Provide city and district councils with regional data on the quantity and composition of waste entering the waste stream and being disposed for strategic forecasting and planning;
- g) Undertake research, in collaboration with local authorities and other stakeholders as appropriate, into natural hazards and climate change in Otago;
- h) Support city and district councils with information on natural hazards for:
 - i) The preparation of district plan reviews or changes;
 - ii) Inclusion in Land and Project Information Memoranda;
- i) Collect, centralise and share information on erosion-prone land in Otago;
- j) Collect, centralise, and make available any information on the expected effects of climate change in Otago.
- 6.2.2 Regional, city and district councils will:
 - a) Research and share information relevant to the effects of land use on water, including:
 - i) The values supported by the catchment;
 - ii) Riparian vegetation cover or any land cover which contributes to supporting freshwater values, such as tussock grasslands;
 - iii) Land use changes which might have significant effects on freshwater values;
 - iv) Areas particularly sensitive to land use changes, such as sensitive aquifers and water-short catchments;
 - v) The effects of land use on erosion;
 - b) Research and share information relevant to the effects of land use on coastal values and coastal network infrastructure with city and district councils, including:
 - i) Coastal values;
 - ii) Coastal hazards;
 - iii) Riparian vegetation cover or any land cover which contributes

- to supporting coastal values, or mitigating coastal hazards;
- iv) Land use changes which might have significant effects on coastal values or the consequences of coastal hazards;
- v) Areas particularly sensitive to land use changes.
- 6.2.3 City and district councils will:
 - a) Research demographic changes within the district, including the relationship between housing demand and population growth, and residential capacity within existing urban areas.
 - b) Share information with other local authorities on relevant regional rules, when approving a land use, development or subdivision by consent, including:
 - i) Rules on discharges to water, or to land in circumstances which may result in contaminant entering water;
 - ii) Rules on discharges to air;
 - iii) Rules on discharges to land;
 - iv) Provide information to the regional council, on any land use, development or subdivision approved by consent, which have the potential to adversely affect air quality and breach regional rules.
- 6.3 State of Environment reporting
 - 6.3.1 Regional, city and district councils will:
 - a) Carry out state of the environment reporting.
- 6.4 RMA plan effectiveness reporting
 - 6.4.1 Regional, city and district councils will:
 - a) Include indicators for determining plan effectiveness in all plans developed under the RMA, including the RPS;
 - b) Report on the efficiency and effectiveness of plans based on those indicators.
- 6.5 Plan implementation reporting
 - 6.5.1 Regional council will:
 - a) Monitor and report publicly on the achievement of regional and district plan objectives, policies and methods.
 - 6.5.2 City and district councils will:
 - a) Monitor and report publicly on the achievement of regional and district plan objectives, policies and methods.

Method 7: Strategies and Plans (non-RMA)

- 7.1 Natural hazard strategies
 - 7.1.1 Regional, city and district councils may:
 - a) Prepare strategies or other similar documents to assist in the:
 - i) Management and reduction of natural hazard risk;
 - ii) Adaptation to, and mitigation of, climate change;
 - b) Develop community relevant responses to the impacts of natural hazards and climate change in Otago, in collaboration with the relevant local authority, key stakeholders and affected community.

7.2 Air strategy

- 7.2.1 Regional, city and district councils may:
 - a) Jointly develop and implement, in collaboration with other key stakeholders, a strategy for:
 - i) The upgrading of housing stock and their thermal envelopment;
 - ii) The reduction of domestic emissions to air.
- 7.3 Regional Plan Land Transport will set objectives, policies and methods to implement policy 3.4.1 -2, 3.5.1, 3.7.1 and 3.7.4 with a particular focus on:
 - 7.3.1 Enhancing road safety;
 - 7.3.2 Ensuring travel needs in Otago are met;
 - 7.3.3 Enabling increased freight efficiency;
 - 7.3.4 Managing Otago's public transport services.
- 7.4 Pest management strategy
 - 7.4.1 The regional council will:
 - a) Develop and implement a pest management strategy, for the control of pest species, including those which:
 - i) Have adverse effects on the natural character of the coastal environment;
 - ii) Have adverse effects on significant indigenous biodiversity;
 - iii) Have significant adverse effects on indigenous biodiversity;
 - b) Have regard to indigenous biodiversity values when preparing any Regional Pest Management Strategy and prioritising pest management activities, including:
 - i) Any areas of significant indigenous vegetation and significant habitats of indigenous fauna;
 - ii) Any local indigenous biodiversity strategies.
- 7.5 Pan-regional pest management strategy
 - 7.5.1 The regional council may:
 - a) Develop a joint pest management strategy with neighbouring regions.

7.6 Urban stream plans

- 7.6.1 District and city councils may:
 - a) Develop and implement urban stream restoration plans, for the restoration of the natural character and natural functioning of urban streams.

Method 8: Education and Information

- 8.1 Providing public information
 - 8.1.1 Regional, district and city councils may:
 - a) Provide information and education about the maintenance, restoration and enhancement of indigenous ecosystems and habitats;
 - b) Provide guidance on:
 - i) Natural hazard risk responses;
 - ii) Ways to adapt to, and mitigate the effects of, climate change;
 - iii) The benefits of natural features and systems in mitigating natural hazards.
 - 8.1.2 Regional council will:
 - a) Educate and provide available information on:
 - i) Natural hazards;
 - ii) Rainfall and river flow;
 - iii) Climate change.
 - b) Provide guidance on:
 - i) Measures to mitigate erosion risks resulting from land uses;
 - ii) Riparian margin management, especially on flooding and erosion risks;
 - iii) Measures to maintain or enhance soil quality;
 - iv) Discharge management, including on reducing domestic discharges to air;
 - v) The management of diffuse discharges to water;
 - vi) Waste management.
 - c) Provide information material on:
 - i) The ecosystem services derived from indigenous biodiversity;
 - ii) On the benefits of riparian margin management, especially on flooding and erosion risks;
 - 8.1.3 City and district councils will:
 - a) Collate and make available any information on the projected demographic changes to local communities;
 - b) Provide available natural hazard information through the Land (LIM) and Project Information Memorandum (PIM) process;
 - c) Provide available information on known or potentially contaminated sites through the Land (LIM) and Project Information Memorandum (PIM) process;

- 8.1.4 City and district councils may:
 - a) Provide information and guidance on crime prevention through environmental design and urban design principles to inform local development proposals;
 - b) Provide information and guidance on urban design techniques to respond to the different access requirements or needs of the community;
 - c) Provide information and guidance on design techniques to enable adaptive reuse of buildings;
 - d) Provide guidance material for water conservation and the efficient domestic use of water:
 - e) Provide guidance on measures for increased energy efficiency and energy conservation;
 - f) Provide guidance on opportunities for the development of small-scale renewable electricity generation.

Method 9: Funding

- 9.1 Providing financial support
 - 9.1.1 Regional, city and district councils may:
 - a) Establish and administer funds to provide public access or services to sites of significance on privately owned land;
 - b) Fund community groups and projects with aims that complement RPS objectives and policies.

Method 10: Service Provision

- 10.1 Public services
 - 10.1.1 Regional, city and district councils will provide public services according to their functions, roles and responsibilities.

Method 11: Advocacy and Facilitation

11.1 Promotion

- 11.1.1 Regional, city and district councils will work with stakeholders, including central government agencies and other interested parties, on resource management matters;
- 11.1.2 Regional, city and district councils may:
 - a) Advocate for:
 - i) Initiatives and proposals which support or complement the goals of the RMA, RPS and supporting documents;
 - Subdivision and building design that increases passive solar gain and uses higher levels of insulation in buildings to improve energy efficiency;
 - iii) The implementation of the waste hierarchy throughout the region;
 - iv) National guidance on managing natural hazards, and mitigating and adapting to climate change;

- V) Legislative change to improve resilience and reduce the risk of natural hazards and climate change to individuals and communities;
- b) Enhance individual and community resilience by encouraging activities and actions that:
 - i) Promote interactions and partnerships within and between communities, businesses and organisations;
 - ii) Support self-sufficiency;
 - iii) Improve disaster readiness, response and recovery;
 - iv) Enable opportunities for improvements to be made following a disaster event:
 - v) Contribute to the retention of historic heritage places, areas or landscapes, including maintenance and seismic strengthening;
- c) Encourage an approach to resource management that assists in reducing individual and community natural hazard risk and in reducing the effects of climate change.

11.1.3 Regional, city and district councils may:

- Advocate for the development, upgrade or maintenance of infrastructure, when it will enhance Otago's communities' wellbeing or health and safety;
- b) Promote subdivision and urban development that responds to and anticipates the changing demographic needs of the local community;
- c) Advocate for the development of infrastructure and services to provide for hazardous substance collection, disposal and recycling services across the region;
- d) Promote the development and adoption of best practice guidelines for the use and management of hazardous substances, and a reduction in hazardous substance use.

11.1.4 City and district councils will:

- a) Promote the integration of new development with existing areas through the use of elements that reflect local character;
- b) Encourage building design in commercial areas to be designed to facilitate adaptive reuse over time;
- c) Ensure consideration of orientation and design for solar gain in subdivision and building design;
- d) Advocate for the establishment of solid waste management and disposal facilities.

11.2 Facilitation

- 11.2.1 Regional, city and district councils will:
 - a) Facilitate the restoration of natural wetlands or construction of artificial wetlands, particularly when it contributes to the:
 - i) Management of diffuse discharges to water;
 - ii) Protection or restoration of indigenous species;
 - iii) Mitigation of natural hazards;
 - iv) Restoration of the natural character of wetlands;

- b) Facilitate the restoration or enhancement of riparian margins, particularly when they:
 - i) Improve the health and resilience of ecosystems supporting indigenous biodiversity;
 - ii) Restore or rehabilitate indigenous biodiversity and natural character;
 - iii) Contribute to a safe network of active transport infrastructure;
 - iv) Improve access to rivers, lakes, wetlands and their margins;
 - v) Mitigate risks of erosion;
- c) Facilitate initiatives that support:
 - i) The conservation of indigenous vegetation;
 - ii) Conservation of biodiversity values;
 - iii) Maintenance or enhancement of coastal values, including restoration or rehabilitation of the natural character;
 - iv) The protection or restoration of the significant values of wetlands;
 - v) Co-ordination of the services provided by operators of lifeline utilities, essential and emergency services across and beyond Otago;
 - vi) Energy conservation and efficiency, at a community or individual scale;
 - vii) Small scale renewable electricity generation;
- d) Facilitate coordination between lifeline utilities for emergency management, including by:
 - i) Recognising the interconnections between lifeline utilities;
 - ii) Encouraging any development or upgrade of infrastructure which would resolve potential weaknesses in emergency management.

11.2.2 Regional council will:

- a) Facilitate the restoration, rehabilitation or creation of freshwater and coastal habitats, particularly when it:
 - i) Encourages the natural regeneration of indigenous species;
 - ii) Buffers or links ecosystems, habitats and areas of significance that contribute to ecological corridors;
 - iii) Maintains or enhances the provision of indigenous ecosystem services;
- b) Facilitate the control of pest species, including wilding pines, particularly when it contributes to the protection or restoration of:
 - i) Outstanding or amenity landscapes;
 - ii) Indigenous species;
- c) Facilitate the establishment of:
 - i) Water management groups that co-ordinate the exercise of water-related consents;
 - ii) Water allocation committees for the management of water allocation in case of drought.

- 11.2.3 Regional, city and district councils may:
 - a) Facilitate the planning for community infrastructure, when it would increase the efficiency of water use;
 - b) Facilitate negotiations with landowners for public or Kāi Tahu access to sites of significance that do not have suitable access.

Anticipated Environmental Results and Monitoring Programme

The following section identifies environmental results anticipated from implementing the policies and methods of the RPS. These AERs will be measured and reported on using the procedures set out in Method 6 Research, Monitoring and Reporting.

1. Kāi Tahu values, rights and interests are recognised and kaitiakitaka is expressed

AER 1.1 Te Tiriti o Waitangi principles are adhered to in Otago

Indicators:	How indicators can be
	measured:

Kāi Tahu are satisfied that the RMA relevant principles of Te Tiriti o Waitangi are adhered to in Otago

Evaluation reports demonstrate that decisions makers have considered relevant Kāi Tahu resource management plans and have consulted with Kāi Tahu on relevant planning decisions under the RMA

Kāi Tahu are informed of consent applications

Survey of Kāi Tahu satisfaction with consenting processes

AER 1.2 Kāi Tahu values and culture are respected and able to be expressed

Indicators: How indicators can be measured:

Kāi Tahu archaeological sites are recognised and protected In-situ and remote sensing techniques (including satellite photos) and Kāi Tahu satisfaction

Kāi Tahu place names are used in official documents and correspondence

The quality of natural resources and resource systems meet cultural health indicator targets

Cultural health indicators for resources of importance to Kāi Tahu cultural well-being

Planning processes permit Kāi Tahu to develop their ancestral lands in keeping with their tikaka Consenting records and Kāi Tahu satisfaction with planning processes

2. Otago has high quality natural resources and ecosystems

AER 2.1 The extent of, and values of, significant and highly valued natural resources and heritage in Otago are protected or enhanced

Indicators: How indicators can be measured:

There is a shared public understanding of the values and spatial extent of Otago's outstanding and highly valued resources

There are public inventory/ maps of all outstanding and highly significant natural and physical resources in Otago

No net loss in the extent of, or the value of, outstanding and highly significant natural resources

Regular monitoring of the state (extent and quality) of outstanding and highly significant resources

AER 2.2 Otago's water bodies support healthy ecosystems, are safe for swimming, and maintain their natural form and character

Indicators: How indicators can be

Water quality in lakes, rivers, and groundwater supports healthy ecosystems

Regular monitoring of water quality indicator values

measured:

River flow and lake levels support in-stream values

Regular monitoring of river flows and lake levels, including during extreme weather events

Rivers maintain natural character and form

Regular monitoring of natural character and river form indicator values

The number, extent, and health of Otago's wetlands is maintained or enhanced

A public inventory of Otago's wetlands exists and is maintained and updated

AER 2.3 The quality of Otago's coastal environment is maintained or enhanced

Indicators: How indicators can be measured:

The extent of Otago's coastal environment is defined

A public map identifies the extent of Otago's coastal environment

The natural character of Otago's coastal environment is not degraded

Regular monitoring of natural character indicator values for Otago's coastal environment

Otago's beaches are safe for swimming

Regular monitoring of public health indicator values on Otago's beaches

The extent and health of Otago's estuaries is maintained or enhanced

Sedimentation (Sediment grain size, sedimentation rate, area of soft mud), nutrient enrichment (nuisance macroalgae, sediment nutrient concentrations, depth of sediment oxygen levels)

AER 2.4 The quality of Otago's soils is maintained or enhanced

Indicators: How indicators can be measured:

There is a shared public understanding of the extent and values of Otago's soils

There is a public inventory of Otago's highly valued soils at a scale that can inform consent decision-making

The health and quantity of Otago's highly valued soils are maintained or enhanced

Regular monitoring of soil health indicators and erosion measures

The number and location of contaminated soil sites in Otago are known and sites are being managed

An integrated contaminated sites register exists and is updated regularly

AER 2.5 The health and diversity of Otago's ecosystems is maintained or enhanced

Indicators:

How indicators can be measured:

The cover area, connectivity, and health of indigenous vegetation and fauna in Otago is maintained or enhanced

Regular monitoring of the state (distribution, abundance, health) of indigenous biodiversity, ecosystems and Significant Natural Areas in Otago

Pests and introduced species that represent a threat to the health of indigenous biodiversity and ecosystems are controlled Regular monitoring of the distribution and abundance, and control of harmful pest species in Otago

The distribution and abundance of national indicator species resident in Otago is maintained or enhanced

Regular monitoring of the distribution and abundance of national indicator species in Otago

AER 2.6 Ambient air quality in Otago is maintained or enhanced

Indicators: How indicators can be measured:

Ambient air particulate matter levels in Otago are maintained

Particulate matter concentration is measured in known and at-risk areas of air pollution

The proportion of homes using wood and coal fires in Otago is reduced

Statistics NZ or Environmental health Indicators NZ reports and consenting records for new developments

The (estimated) number of hospital admissions and deaths related to respiratory illness is reduced

Hospital admission records for respiratory illnesses

AER 2.7 Otago's natural resources are managed in an integrated way

Indicators:

How indicators can be measured:

Plans and consenting decisions reflect the fact that multiple and diverse resources may be connected

Evaluation reports demonstrate that the impact of human activities has been considered across diverse resources and beyond the spatial area of immediate interest

The values of widespread resources, and resources that cross administrative boundaries, are consistent

Regular monitoring and comparative analysis of the state (extent and quality) of widespread and crossboundary resources in Otago

There are no unexpected adverse effects on a resource as a consequence of management decisions on another resource, or as a consequence of dividing the resource into management sub-units

State of the environment reports and analyses

3. Communities in Otago are resilient, safe and healthy

AER 3.1 The location and design of new developments and natural resource uses in Otago reduce community exposure to the adverse effects of multiple, large, and diverse shock events and processes

Indicators:

How indicators can be measured:

Otago's communities have defined their tolerance of risks from natural hazards and climate change

No new dwelling consents are granted in areas of significant natural hazard risk

New developments and activities require no financial assistance from the community to persist through natural hazards and climate change Information on hazards and community risk tolerance is reflected in planning documents

Evaluation and consenting records show that no new dwellings were granted in areas of significant natural hazard risk

Evaluation reports show new developments and activities can withstand the effects of natural hazards and climate change

AER 3.2 The impact on life, property, lifeline utilities, and essential services from climate change is reduced in Otago

Indicators:

How indicators can be measured:

Subdivision and development consents granted in areas predicted to be affected by a sea level rise of 1 metre

Evaluation reports show how many new developments were granted in areas predicted to be affected by a sea level rise of 1 metre

New use and development is adapted to the predicted effects of climate change Evaluation reports show new developments and uses can withstand the effects of natural hazards and climate change

AER 3.3 Otago's infrastructure is safe, efficient and continues to operate through disruptive events

Indicators:

How indicators can be measured:

The vulnerability of Otago's existing lifeline and essential service utilities has been assessed and minimised

Risk assessment reports on infrastructure show the risk assessment and reduction measures

New infrastructure and lifeline utilities location takes into account the predicted effects of climate change Infrastructure and utilities delivery plans demonstrate that they are informed by the predicted effects of climate change

Infrastructure plans include targets and funds for regular upgrades

AER 3.4

Adverse effects on Otago's outstanding and highly-valued natural and physical resource values from nationally and regionally significant infrastructure are avoided or mitigated

Indicators:

How indicators can be measured:

There is no net loss to the values of Otago's outstanding, significant, or highly valued natural and physical resources resulting from nationally and regionally significant infrastructure

State of the environment monitoring, evaluation reports

AER 3.5 The use of local renewable energy sources in Otago increases and reliance on fossil fuels decreases

How indicators can Indicators: be measured:

The proportion of houses using coal and gas fires in Otago decreases

Statistics NZ, Building Research Association NZ and independent surveys that measure the proportion of houses using fossil fuels in Otago is reduced

The quality of Otago's housing stock increases

Building Research Association NZ surveys, independent

surveys or

research papers that measure housing quality indicator values

Fuel efficient transport modes are available for freight and personal transport, and their use in Otago has increased

New motor vehicle registrations, current motor vehicle licences (Statistics NZ), in-situ measurements, estimates or models

AER 3.6 Otago's urban areas are compact and maximise the use of existing services and infrastructure

How indicators can Indicators:

New urban developments are well connected to existing urban areas, services, and infrastructure

Surveys, peer reviews, evaluation reports

be measured:

New urban developments and infrastructure are energy efficient and create or integrate natural features

Surveys, peer reviews, evaluation reports

Urban infrastructure and services supply and capacity are not stretched or exceeded by growth

Surveys, peer reviews, evaluation reports

115

AER 3.7

Otago's urban areas are able to adapt to evolving standards and to the changing requirements of its inhabitants and surrounding natural and physical environment

Indicators:	How indicators can be measured:
Increases in Otago's residential and commercial property values are not driven by lack of supply	Quotable Value and real estate reports and other surveys assess property values and the drivers leading to their change
Traffic safety in Otago improves	New Zealand Transport Agency statistics and models
The quality of Otago's housing stock increases	Building Research Association NZ surveys, independent surveys or research papers

4. People are able to use and enjoy Otago's natural and built environment

AER 4.1 Otago's coast, lakes and rivers can be accessed by the public

Indicators:

How indicators can be measured:

There are no complaints about lack of access to Otago's coast, lakes, and rivers

Guest night records in areas of high value, complaints records

Consents for subdivision and private use of resources require a mechanism for enhanced or continued public access to areas of value

Consenting decisions, evaluation reports

The number and extent of esplanades and similar areas providing access to Otago's water bodies and coastal environment is maintained or enhanced

Remote sensing and in-situ measurements of access strips, esplanade strips and areas in Otago

AER 4.2 Otago's significant historic heritage is identified, protected, and integrated into current and future uses

Indicators:

How indicators can be measured:

The number of reused heritage buildings in Otago has increased

The number of building consents for heritage building upgrades and adaptive use changes

The number of registered heritage buildings that meet contemporary health and safety standards has increased Standards required in building consents for heritage building upgrades and adaptive use changes

AER 4.3 The effects of current land management do not preclude future economic uses of land

> Indicators: How indicators can be measured:

No irreversible damage to soils or

land

Measures to avoid land contamination are promoted, number of entries in the contaminated soil register is reduced, erosion is reduced

No fragmentation of productive

land

Subdivision evaluation

reports

AER 4.4 Use of Otago's natural resources continues to become more efficient, and there are fewer conflicts between resource uses and users

> Indicators: How indicators can be

measured:

The number of use and user conflict cases going to the **Environment Court or higher** instances is reduced and the number of conflict resolutions through mediation is increased Court records

The number of community management groups has increased Local authority records

AER 4.5 The number and severity of environmental issues in Otago is reduced

> Indicators: How indicators can be measured:

Decrease in the number of newspaper articles about environmental and nuisance issues in Otago

Local authority records

Decrease in the number of call outs for environmental and

nuisance issues

Local authority records

There are no unexpected adverse effects on valued natural resources as a consequence of cumulative minor adverse effects from

State of the environment reports and analyses



Takata whenua values and interests

The following takata whenua values and interests must be considered in planning and consenting decisions. Some interests are specific to particular papatipu rūnaka, and others are more generally applicable.

Schedule 1A Kāi Tahu values

Kāi Tahu do not see their existence as separate from Te Ao Tūroa (the natural world), but as an integral part of it. Through whakapapa (genealogy), all people and life forms descend from a common source. Whakapapa binds Kāi Tahu to the mountains, forests and waters and the life supported by them, and this is reflected in traditional attitudes towards the natural world and resource management.

Whakawhanaukataka (the process of maintaining relationships) embraces whakapapa, through the relationship between people, and between people and the environment. The nature of these relationships defined people's rights and responsibilities in relation to the use and management of resources in in-land Otago.

All things have the qualities of wairua (spiritual dimension) and mauri (life force or life supporting capacity), and have a genealogical relationship with each other.

Mauri provides the common centre between the natural resources (taoka), the people or guardians who care for the taoka (the kaitiaki), and the management framework (tikaka) of how taoka are to be managed by the kaitiaki. It is through kawa (protocol) that the relationship between taoka, tikaka and kaitiakitaka is realised.

Each papatipu rūnaka has its own takiwā determined by natural boundaries such as headlands, mountain ranges and rivers (as detailed in Schedule 1B). This political and operational authority over an area is undertaken by takata whenua and encompasses kaitiakitaka and rakatirataka. An integral element of the concepts of kaitiakitaka and rakatirataka is the recognition that Kāi Tahu have their own traditional means of managing and maintaining resources and the environment. This system of rights and responsibilities is inherited from previous generations and has evolved over time.

The resources in any given area are a point of prestige for the people who reside there and are a statement of identity. Traditionally, the abundance or lack of resources directly determines the welfare of every tribal group, and so affects their mana.

Ki Uta Ki Tai

Ki uta ki tai is a Kāi Tahu term that has become synonymous with the way Kāi Tahu think about natural resource management. Ki uta ki tai is the concept used to describe holistic natural resource management from the mountains to the sea.

Ki uta ki tai is the Kāi Tahu way of understanding the natural environment, including how it functions, how people relate to it and how it can be looked after appropriately.

Rakatirataka

Rakatirataka is about having the mana or authority to give effect to Kāi Tahu culture and traditions in the management of the natural world. Recognition of the relationship of Kāi Tahu and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taoka are embedded in the RMA and the Treaty.

The Kāi Tahu ki Otago and Ngāi Tahu ki Murihiku Natural Resource and Iwi Management Plans are an expression of rakatirataka. The active involvement of Kāi Tahu in resource management decision-making processes is a practical means of giving effect to rakatirataka.

Kaitiakitaka

Kaitiakitaka means the exercise of guardianship by the takata whenua of an area in accordance with tikaka Māori in relation to natural and physical resources and includes the ethic of stewardship. This statutory definition of kaitiakitaka is, however, a starting point only for Kāi Tahu, as kaitiakitaka is a much wider cultural concept than guardianship. Kaitiakitaka entails the active protection and responsibility for natural and physical resources by takata whenua.

Kaitiakitaka is fundamental to the relationship between Kāi Tahu and the environment. The objectives of kaitiakitaka are to protect the life supporting capacity of the environment and to pass the environment on to future generations in an enhanced state. For Kāi Tahu, kaitiakitaka is not passive custodianship, nor is it simply the exercise of traditional property rights, but it entails an active exercise of responsibility in a manner beneficial to the resource.

Tikaka

Tikaka Māori encompasses the beliefs, values, practices and procedures that guide appropriate codes of conduct, or ways of behaving. In the context of natural resource management, observing tikaka is part of the ethic and exercise of kaitiakitaka. It is underpinned by a body of Mātauraka Māori (Māori knowledge), and is based on a general understanding that people belong to the land and have a responsibility to care for and manage the land. It incorporates forms of social control to manage the relationship of people and the environment, including concepts such as tapu, noa and rāhui.

Tikaka is based on traditional practices, but is dynamic and continues to evolve in response to different situations.

Taoka

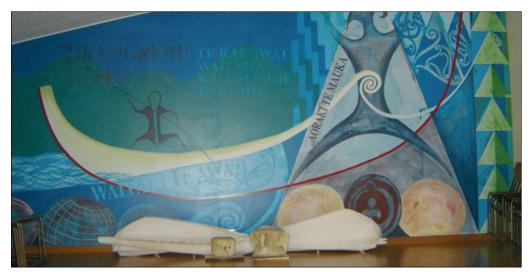
All natural resources, air, land, water, and indigenous biodiversity, are taoka. Taoka are treasured resources that are highly valued by Kāi Tahu, derived from the atua (gods) and left by the tūpuna (ancestors) to provide and sustain life. In the management of natural resources, it is important that the habitats and wider needs of taoka species are sustainably managed and enhanced.

Mahika Kai

Mahika kai is one of the cornerstones of Kāi Tahu cultural identity. Mahika kai is a term that literally means "food workings" and refers to the customary gathering of food and natural materials and the places where those resources are gathered or produced. The term also embodies the traditions, customs and collection methods, and the gathering of natural resources for cultural use, including raraka (weaving) and rokoā (traditional medicines). Maintaining mahika kai sites, gathering resources, and continuing to practice the tikaka that governs each resource, is an important means of passing on cultural values and mātauraka Māori (traditional knowledge) to the next generation.

Schedule 1B Interests specific to particular papatipu rūnaka

Te Rūnanga o Moeraki Marae, Moeraki



Te Rūnanga o Moeraki

The takiwā of Te Rūnanga o Moeraki is centred on Moeraki and extends from the Waitaki River to the Waihemo (Shag) River and inland to the Main Divide. The coastal interests of Te Rūnanga o Moeraki are concentrated in the Moeraki Peninsula area and surrounds, including Te Raka-a-Hine-atea Pā, Koekohe (Hampden Beach), and Te Kai Hinaki (the Boulders Beach) with its boulders.

Kāti Huirapa Rūnaka Marae, Puketeraki



Kāti Huirapa Rūnaka ki Puketeraki

The takiwā of Kāti Huirapa Rūnaka ki Puketeraki centres on Karitāne and extends from the Waihemo (Shag) River to Purehurehu (Heywards Point) and includes an interest in Ōtepoti and the greater harbour of Ōtākou. The takiwā extends inland to the Main Divide sharing an interest in the lakes and mountains to Wakatipu Waitai with rūnaka to the south. The kaimoana resources of the coast from Karitāne to Okahau/Blueskin Bay and Pūrākaunui, and the kai awa of the Waikouaiti River are treasured and well-utilised mahika kai for Kāti Huirapa Rūnaka ki Puketeraki.



Ōtākou Marae, Otago Peninsula

Te Rūnanga o Ōtākou

The takiwā (area of customary and contemporary interest and authority) of Te Rūnanga o Ōtākou centres on Muaūpoko/Otago Peninsula and extends from Purehurehu (Heyward Point) to Te Mata-Au (Clutha River) and inland, sharing an interest in the lakes and mountains to the western coast with rūnaka to the north and south. The Otago Harbour has a pivotal role in the wellbeing of Ōtākou people.

The harbour is a source of identity, a bountiful provider of kaimoana, and it is the pathway to the fishing grounds beyond. Traditionally it was the mode for other hapū to visit, and in today's world it is the lifeline to the international trade that benefits the region. The ebb and flow of the harbour tides is a valued certainty in a world of change, a taoka to be treasured and protected for the benefit of current and future generations.



Hokonui Marae

Hokonui Rūnaka

The takiwā of Hokonui Rūnaka centres on the Hokonui region and includes a shared interest in the lakes and mountains between Whakatipu-Waitai and Tawhitarere with other Murihiku Runanga and those located from Waihemo southwards. Although Te Rūnaka o Hokonui are based in Gore, their interests in the Otago area, especially South Otago, are significant. They hold this in common with other Otago Rūnaka through whakapapa, history and tradition.

Whānau Rōpū

Moturata Taieri Whānau and Waikoau Ngāi Tahu Rūnaka (South Otago) are whānau rōpū that have an interest in the coastal area from the Catlins south to Bruces Rocks.

Whānau rōpū are located in areas that hold a strong tradition of Kāi Tahu presence close to the Papatipu lands reserved from the 1840s land sales. The whānau rōpū are associated with the Papatipu Rūnaka.

Schedule 1C Wāhi Tūpuna

Kāi Tahu use the term 'wāhi tūpuna' to describe landscapes that embody the customary and contemporary relationship of Kāi Tahu and their culture and traditions with Otago. It is important to understand this concept in the context of the distinctive seasonal lifestyle that Kāi Tahu evolved in the south.

The sites and resources used by Kāi Tahu are spread throughout Otago. These places did not function in isolation from one another but were part of a wider cultural setting and pattern of seasonal resource use. These sites of significance include:

SITE OF SIGNIFICANCE	EXPLANATION
Ara Tawhito	Ancient trails. A network of trails crossed the region linking the permanent villages with seasonal inland campsites and along the coast, providing access to a range of mahika kai resources and inland stone resources, including pounamu and silcrete.
Kāika	Permanent settlements or occupation sites. These occurred throughout Otago, particularly in coastal areas.
Nohoaka	These were a network of seasonal settlements. Kāi Tahu were based largely on the coast in permanent settlements, and ranged inland on a seasonal basis. Iwi history shows, through place names and whakapapa, continuous occupation of a network of seasonal settlements, which were distributed along the main river systems from the source lakes to the sea.
Wāhi Mahika kai	The places where the customary gathering of food or natural materials occurs. Mahika kai is one of the cornerstones of Kāi Tahu culture.
Mauka	Important mountains. Mountains are of great cultural importance to Kāi Tahu. Many are places of spiritual presence, and prominent peaks in the district are linked to Kāi Tahu creation stories, identity and mana.
Marae	The marae atea and the buildings around it, including the wharenui, wharekai, church and urupā. The sheltering havens of Kāi Tahu cultural expression, a place to gather, kōrero and to welcome visitors. Marae are expressions of Kāi Tahu past and present.
Repo raupo	Wetlands or swamps. These provide valued habitat for taoka species and mahika kai resources.
Tauraka waka	Canoe mooring sites. These were important for transport and gathering kai.
Tūāhu	Places of importance to Māori identity. These are generally sacred ground and marked by an object, or a place used for purposes of divination.

Taumanu	Fishing sites. These are traditional fishing easements which have been gazetted by the South Island Māori Land Court.
Umu, Umu-tī	Earth ovens. Used for cooking tī-kōuka (cabbage tree), are found in a diversity of areas, including old stream banks and ancient river terraces, on low spurs or ridges, and in association with other features, such as kāika nohoaka.
Urupā	Human burial sites. These include historic burial sites associated with kāika, and contemporary sites, such as the urupā at Ōtākou and Puketeraki marae.
Wāhi kohātu	Rock outcrops. Rocky outcrops provided excellent shelters and were intensively occupied by Māori from the moa-hunter period into early European settlement during seasonal hikoi. Tuhituhi neherā (rock art) may be present due to the occupation of such places by the tūpuna.
Wāhi pakaka	Battle sites. Historic battle sites occur throughout Otago, such as that at Ohinepouwera (Waikouaiti sandspit) where Taoka's warriors camped for six months while they laid siege on Te Wera on the Huriawa Peninsula.
Wāhi paripari	Cliff areas.
Wāhi taoka	Resources, places and sites treasured by manawhenua. These valued places reflect the long history and association of Kāi Tahu with Otago.
Wāhi tapu	Places sacred to the takata whenua. These occur throughout Otago and include urupā (human burial sites).
Wāhi tohu	Features used as location markers within the landscape. Prominent landforms formed part of the network of trails along the coast and inland. These acted as fixed point locators in the landscape for travellers and are imbued with history.
Wāi māori	Freshwater areas important to Māori, including wai puna (springs), roto (lakes) and awa (rivers).

Schedule 1D Maori land reserves

A Native Reserve is any property or site that is a:

- Native Reserve excluded from the Ōtākou Land Purchases (1848)
- Native Reserve excluded from the Kemps Land Purchases (1848)
- Reserve granted by the Native Land Court (1868)
- Half Caste Reserve (1881)
- Landless Native Reserve (1896)
- Other reserve (1890 and 1900)

A number of Māori reserves exist in Otago that were excluded from the land sales of the 1840s. These reserves are steeped in history and association and are places of belonging. Remaining reserves are located at Moeraki, Waikouaiti, Ōtākou, Onumia (Taieri Mouth) and Te Karoro (Kaka Point). Other categories of Māori land exist at Koputai (Port Chalmers) and Ōtepoti (Dunedin) where tauraka waka (landing sites) were recognised. In addition, land was held at Manuhaea (Lake Hawea), Aramoana, Clarendon (Taieri Mouth) Tautuku-Waikawa and Glenomaru amongst others. Landing reserves were allocated at Matainaka (Waikouaiti) and the former Lake Tatawai on the Taieri Plains.

The following table lists the reserves in Otago. Many of the sections within these Native Reserves now have the status of general land. While some of this general land is still in Māori ownership, many of the general titled sections have been sold to non-Māori or taken under various pieces of legislation such as the Public Works Act. Although these sections are no longer in whānau ownership, descendants of the original owners retain an ancestral relationship with these lands.

Native Reserves located within the Otago region

LOCATION	COMMENTS	RESERVE TYPE
Tautuku	Southern block of Tautuku sections	South Island Landless Native Act
	Northern sections are Reserved lands	Native Reserve
Glenomaru	Located south of Kaka Point	South Island Landless Native Act
Maranuku	Granted in 1844 as part of the Otakou Purchase. Originally called Te Karoro, split into two reserves	Native Reserve
Clarendon	Located inland from Taieri Mouth	Clarendon Half Caste Reserve
Taieri	Granted in 1844 as part of the Otakou Purchase Deed. Split into three reserves; A, B and C	Native Reserve

LOCATION	COMMENTS	RESERVE TYPE
Lake Tatawai	Located on the Taieri Plain, south of the Dunedin City Airport	Native Reserve
Lake Tatawai	Lake that is now drained	Native Reserve
Otago Heads Native Reserve	Granted in 1844 as part of the Otakou Purchase Deed. Split into four reserves	Native Reserve
Port Chalmers	Granted in 1848 as part of the Otakou Purchase Deed. A further grant adjacent to the Reserve was made in approximately 1888	Native Reserve
Aramoana	This reserve resulted from the Purakaunui Half Caste grant	Half Caste Reserve
Purakaunui	Granted in 1848 as part of Kemp's Purchase Deed. Further allocations were made in 1868 at Wharauwerawera	Native Reserve
Brinns Point	Granted in the latter part of the nineteenth century	Half Caste Reserve
Karitane (Waikouaiti Native Reserve)	Granted in 1848 as part of Kemp's Purchase Deed	Native Reserve
Matainaka and Hawksbury Fishing Easement	Two fishing easements fall under this reserve, Matainaka, located at Hawksbury Lagoon at Waikouaiti and the Forks Reserve located inland from Karitane. The legal description for the latter reserve is Section 1N Town of Hawksbury	Fishing Easement
Hawksbury	Located north of Waikouaiti, in the vicinity of Goodwood	Hawksbury Half Caste Reserve
Moeraki	Granted in 1848 as part of Kemp's Purchase Deed. Further awards were made in 1868	Native Reserve
Kuri Bush	10 acre reserve of timber	Native Reserve

LOCATION	COMMENTS	RESERVE TYPE
Kakanui	Granted in 1848 as part of Kemp's Purchase Deed. By 1853, this Reserve was noted as being abandoned and the 75 acre allocation was added to the southern edge of the Moeraki Native Reserve	Native Reserve
Korotuaheka	Located south of the Waitaki River mouth. Now Reserved as an urupa. It appears this originated as an occupational reserve and Fishing Easement	Partitioned in 1895. Possibly awarded as part of the 1868 awards.
Punaomaru	376 acre reserve located approximately 14 miles from the Waitaki River mouth on the south bank of the river	Native Reserve
Lake Hawea	Reserve of 100 acres situated in the western extremity of the middle arm of Lake Hawea near a Lagoon. Part of the Reserve was taken for power development in 1962 and the balance of the land was alienated by the Māori Trustee in 1970	Fishing Easement

Native reserves in Otago



Applicable legislation:

In 2015, all Māori land is governed by Te Ture Whenua Māori Act 1993. Some lands, those at Port Chalmers also fall under the Māori Reserve Land Act 1955.

Explanatory notes:

Since approximately the mid 1990's, ancillary claim blocks have been awarded for various reasons. Ancillary claim blocks are Māori freehold land and there are a number located throughout Otago. The ownership lists for these blocks are incomplete and information for these blocks is not readily available. As ancillary claim blocks do not form part of the original reservations, they are not included in this report. We have not included Māori Reservations that have been created in recent times and fall outside the boundaries of the Native Reserves, such as land at Arai te Uru Marae in Shetland Street, Wakari, Dunedin and Whare Koa, located in Oamaru.

Statutory acknowledgement areas

Statutory acknowledgements are recorded in the Ngāi Tahu Claims Settlement Act 1998 (the NTCSA) for several water bodies, mountains and coastal features in the Otago Region.

These acknowledgements comprise a statement made by Te Runanga o Ngāi Tahu of the particular cultural, spiritual, historic and traditional association of Ngāi Tahu (Kāi Tahu) with these areas.

Part 12 of the NTCSA provides details of statutory acknowledgements, and the responsibilities relating to them. Section 208 of the NTSCA requires that local authorities have regard to these statutory acknowledgements in resource consent processing under Sections 93 to 94(C) of the RMA (Notification of resource consents), in deciding whether Te Runanga o Ngāi Tahu is a person who may be adversely affected by the granting of a resource consent for activities within, adjacent to or impacting directly on the statutory area.

The statutory acknowledgements provide a prototype for the approach to mapping wāhi tupuna.

Statutory Acknowledgement areas	NTCSA Schedule
Ka Moana Haehae (Lake Roxburgh)	22
Kakaunui River	23
Kuramea (Lake Catlins)	28
Lake Hawea	30
Lake Wanaka	36
Mata-Au (Clutha River)	40
Matakaea (Shag Point)	41
Pikirakatahi (Mount Earnslaw)	51
Pomahaka River	52
Te Tauraka Poti (Merton Tidal Arm)	60
Te Wairere (Lake Dunstan)	61
Tititea (Mount Aspiring)	62
Tokata (The Nuggets)	64
Waihola/Waipori Wetland	70
Whakatipu Wai Māori (Lake Wakatipu)	75
Te Tai O Arai Te Uru (Otago Coastal Marine Area)	103

Significance threshold

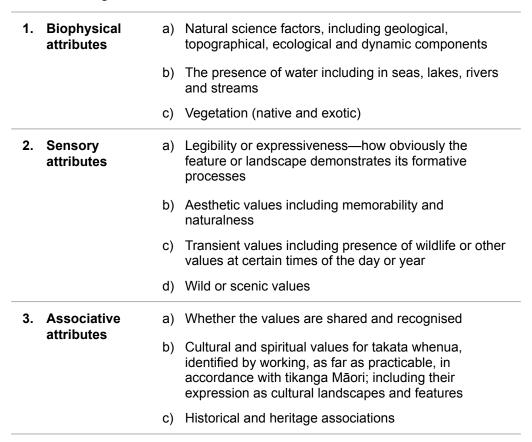
When determining whether adverse effects are 'significant', consider matters including:

1.	Nature of the effect	A detailed description of the effect that is occurring, or might occur. This forms the basis for accurate assessment of significance.
2.	Status of resources	The importance of the resource—locally, regionally or nationally (Effects on rare or limited resources are usually considered more significant than impacts on common or abundant resources).
3.	Proportion of resource affected / area of influence	The size of the area affected by the activity will often influence the degree of impact (i.e. affecting a large area will generally be significant). Affecting a large proportion of a limited area or resource will tend to be significant.
4.	Persistence of effect	The duration and frequency of effect. (For example, long-term or recurring effects as permanent or long-term changes are usually more significant than temporary ones. The ability of the resource to recover after the activities are complete is related to this effect).
5.	Sensitivity of resources	The effect on the area and its sensitivity to change (The sensitivity and vulnerability of the resource and its capacity to accommodate change without compromising the values of the feature or area. Impacts to sensitive resources are usually more significant than impacts to those that are relatively resilient to impacts).
6.	Reversibility or irreversibility	Whether the effect is reversible or irreversible. Irreversibility will generally be more significant (depending also on nature and scale), and reversibility the converse.
7.	Probability of effect	The likelihood of an adverse effect resulting from the activity. Unforeseen effects can be more significant than anticipated effects. (Adopting a precautionary approach may reduce the likelihood of adverse effects occurring).
8.	Cumulative effects	The accumulation of impacts over time and space resulting from the combination of effects from one activity/development or the combination of effects from a number of activities. Cumulative effects can be greater in significance than any individual effect from an activity (for example, loss of multiple important indigenous sites).

Degree of change The character and degree of modification, damage, loss or destruction that will result from the activity. Activities that result in a high degree of change are generally more significant. Magnitude of effect The scale and extent of possible effects caused by an activity (for example on the number of sites affected, on spatial distribution etc.). Activities that have a large magnitude of effect are generally more significant.

Criteria for the identification of natural features and landscapes

The identification of natural features and landscapes will be based on, but not limited to, the following factors:



Criteria for the assessment of the significance of indigenous vegetation and habitat of indigenous fauna

The significance of areas of indigenous vegetation and habitat of indigenous fauna are assessed against all of the following criteria. Areas will be considered significant where they meet one or more of the following criteria.

1. Representativeness

An area that is an example of an indigenous vegetation type or habitat that is representative of that which formerly covered the Ecological District.

2. Rarity

An area that supports:

- a) An indigenous species that is threatened, at risk, or uncommon, nationally or within an ecological district;
- b) Indigenous vegetation or habitat of indigenous fauna that has been reduced to less than 20% of its former extent nationally, regionally or within a relevant land environment, ecological district, or freshwater environment including wetlands;
- c) Indigenous vegetation and habitats within originally rare ecosystems.

3. Diversity

An area that supports a highly diverse assemblage of flora or fauna or consists of a diverse range of vegetation and habitat types. The degree of diversity should be referenced to specific communities i.e. levels of diversity varying significantly between communities and habitat types.

4. Distinctiveness

An area that supports or provides habitat for:

- a) Indigenous species at their distributional limit within Otago or nationally;
- b) Indigenous species that are endemic to the Otago
- c) Indigenous vegetation or an association of indigenous species that is distinctive, of restricted occurrence, or has developed as a result of an unusual environmental factor or combinations of factors.

5. Ecological Context

The relationship of the area with its surroundings, including:

- a) An area that has important connectivity value allowing dispersal of indigenous fauna between different areas;
- b) An important buffering function that helps to protect the values of an adjacent area or feature;
- c) An area that is important for indigenous fauna during some part of their life cycle, either regularly or on an irregular basis, e.g. for feeding, nesting, breeding, or refuges from predation.

Note that ORC holds additional information to inform decision making on these criteria including the rationale for criteria and examples of areas representing these criteria in Otago.

Urban form and design

Good quality urban design offers a safe and enjoyable setting for people to work, live and play in, and fosters a positive relationship between the community and its natural environment. It caters to the needs of all, offers many lifestyle choices, and supports a healthy community. It also contributes to the community's identity and cohesion, and reflects the community values.

1. A safe and enjoyable environment

- a) Provides lively and pleasant places for people to enjoy
- b) Reflects the importance of community spaces
- Protects public open space, and improves the quality, quantity and distribution of local open space over the longterm
- d) Creates transport networks that are safer
- e) Creates safe, attractive and secure pathways and links between centres and landmarks and neighbourhoods
- f) Provides a comfortable and safe urban environment
- g) Considers the impact of design on people's health
- h) Avoids or mitigates the effects of natural and man-made hazards

2. A positive relationship between the community and its natural environment

- a) Has regard to the suitability of development in regard to the viability of required resources such as water
- b) Provides a positive contribution to the environmental health of urban streams, and the coastal environment
- Manages the use of resources carefully, through environmentally responsive and sustainable design solutions
- d) Minimises the effects of increased impervious surfaces and manages contamination
- e) Promotes the maintenance, enhancement or protection of natural resources
- Recognises features or values which warrant protection or preservation
- g) Utilises green technologies in the design and construction of buildings and infrastructure
- h) Facilitates green networks that link public and private open space
- Promotes innovation and resource use efficiency
- j) Promotes energy efficiency in transport and urban form, including site layout and building design
- Incorporates renewable energy sources and passive solar gain

3. Supports a healthy community, and offers many choices and opportunities

- a) Ensures urban environments provide opportunities for all, especially the disadvantaged
- b) Supports design which are flexible and adaptable and which will remain useful over the long term
- c) Facilitates access to services and efficient movement of goods and people
- d) Promotes transport networks that are safe, legible, attractive and well connected
- e) Provides for public transport, roading, cycling and walking networks that are integrated with each other and the land uses they serve
- Places a high priority on walking, cycling and public transport
- g) Provides environments that encourage people to become more physically active
- h) Maximises pedestrian connectivity
- Results in buildings that are adapted to local climatic conditions
- Acknowledges the need for a diverse range of housing and creates a range of housing opportunities and choices
- k) Ensures public spaces are accessible by everybody, including people with disabilities
- 4. Contributes to the community's identity and cohesion, and reflects community values
- a) Builds upon physical and cultural identity
- b) Celebrates cultural identity and recognises the heritage values of a place
- c) Provides formal and informal opportunities for social and cultural interaction

139

SCHEDULE 7

Matters for the identification of historic heritage values

Items, places and areas of historic heritage value are assessed against the following matters:

PHYSICAL VALUES

	Does the place or area have the potential to contribute information about the human history of the region, or to current archaeological research questions, through investigation using archaeological methods?
chitecture	Is the place significant because of its design, form, scale, materials, ornamentation, style, period, craftsmanship or other architectural element?
chnology	Does the place demonstrate innovative or important methods of construction or design, does it contain unusual construction materials, is it an early example of the use of a particular construction technique or does it have the potential to contribute information about technological history?
ientific	Does the area or place have the potential to provide scientific information about the history of the region?
rity	Is the place or area, or are features within it, unique, unusual, uncommon or rare at a district, regional or national level or in relation to particular historical themes?
-	Is the place or area a good example of its class, for example, in terms of design, type, features, use, technology or time period?
egrity	Does the place have integrity, retaining significant features from its time of construction, or later periods when important modifications or additions were carried out?
Inerability	Is the place vulnerable to deterioration or destruction or is threatened by land use activities?
ntext or Group	Is the place or area part of a group of heritage places, a landscape, a townscape or setting which when considered as a whole amplify the heritage values of the place and group/ landscape or extend its significance?
	chaeological formation chitecture chnology ientific crity presentative- ss egrity Inerability ontext or Group

HISTORIC VALUES

10. People	Is the place associated with the life or works of a well-known or important individual, group or organisation?
11. Events	Is the place associated with an important event in local, regional or national history?
12. Patterns	Is the place associated with important aspects, processes, themes or patterns of local, regional or national history?

CULTURAL VALUES

13. Identity	Is the place or area a focus of community, regional or national identity or sense of place, and does it provide evidence of cultural or historical continuity?
14. Public esteem	Is the place held in high public esteem for its heritage or aesthetic values or as a focus of spiritual, political, national or other cultural sentiment?
15. Commemorative	Does the place have symbolic or commemorative significance to people who use or have used it, or to the descendants of such people, as a result of its special interest, character, landmark, amenity or visual appeal?
16. Education	Could the place contribute, through public education, to people's awareness, understanding and appreciation of New Zealand's history and cultures?
17. Takata whenua	Is the place important to takata whenua for traditional, spiritual, cultural or historical reasons?
18. Statutory recognition	Does the place or area have recognition in New Zealand legislation or international law including: World Heritage Listing under the World Heritage Convention 1972; registration under the Heritage New Zealand Pouhere Taonga Act 2014; is it an archaeological site as defined by the Heritage New Zealand Pouhere Taonga Act 2014; is it a statutory acknowledgement under claim settlement legislation; or is it recognised by special legislation?

SCHEDULE 8 Urban growth boundaries

[This schedule is not populated]

APPENDIX 1

Statutory Framework

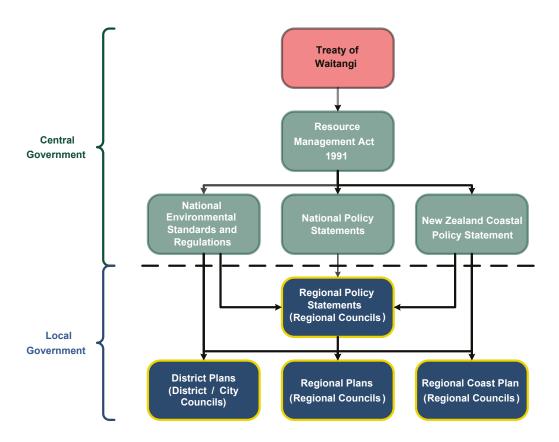
The purpose of the Resource Management Act 1991 is to promote the sustainable management of natural and physical resources (section 5, RMA). Regional, city and district councils are responsible for achieving sustainable resource management within their area of authority. Under sections 59 to 62 of the RMA, regional councils must always have a regional policy statement to achieve the purpose of the RMA, by providing an overview of:

- The resource management issues of the region; and
- Policies and methods to achieve integrated management of the natural and physical resources of the whole region.

Regional policy statements operate within a wider legislative and policy framework. A regional policy statement must give effect to national policy statements, and not be inconsistent with any water conservation order. It must also take into account any planning document. For Otago, these are:

- Kāi Tahu ki Otago Natural Resource Management Plans 2005 and 1995; and
- Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008.

Regional and district plans must give effect to a regional policy statement. Regional and local government, in implementing the RPS and any regional and district plans, must comply with the requirements of other legislation, notably the Local Government Act 2002.



APPENDIX 2

Te Tiriti o Waitangi

Two versions of Te Tiriti o Waitangi (the Treaty of Waitangi) exist, an English version and a version in Te Reo. Under international law, where there is a conflict between the versions, the Te Reo version should be given precedence.

The Te Reo version was signed by 512 Chiefs and the English text version was signed by 30 Chiefs. Both were signed on behalf of the Crown by William Hobson, Consul and Lieutenant Governor.

Te Reo version of the Treaty

Ko te tuatahi

Ko nga Rangatira o te Wakaminenga me nga Rangatira katoa hoki ki hai i uru ki taua Wakaminenga ka tuku rawa atu ki te Kuini o Ingarani ake tonu atu te Kawanatanga katoa o o ratou wenua.

Ko te tuarua

Ko te Kuini o Ingarani ka wakarite ka wakaae ki nga Rangatira ki nga Hapu ki nga tangata katoa o Nui Tirani te tino rangatiratanga o o ratou wenua o ratou kainga me o ratou taonga katoa. Otiia ko nga Rangatira o te Wakaminenga me nga Rangatira katoa atu ka tuku ki te Kuini te hokonga o era waahi wenua e pai ai te tangata nona te wenua ki te ritenga o te utu e wakaritea ai e ratou ko te kai hoko e meatia nei e te Kuini hei kai hoko mona.

Ko te tuatoru

Hei wakaritenga mai hoki tenei mo te wakaaetanga ki te Kawanatanga o te Kuini. Ka tiakina e te Kuini o Ingarani nga tangata māori katoa o Nui Tirani ka tukua ki a ratou nga tikanga katoa rite tahi ki ana mea ki nga tangata o Ingarani.

A Literal English Translation of the Māori Text

(NZ Court of Appeal, 29 June 1987, credited to Professor I H Kawharu)

The First

The Chiefs of the Confederation and all the chiefs who have not joined that Confederation give absolutely to the Queen of England for ever the complete government over their land.

The Second

The Queen of England agrees to protect the chiefs, subtribes and all the people of New Zealand in the unqualified exercise of their chieftainship over their lands, villages and all their treasures. But on the other hand the Chiefs of the Confederation and all the chiefs will sell land to the Queen at a price agreed to by the person owning it and by the person buying it (the latter being) appointed by the Queen as her purchase agent.

The Third

For this agreed arrangement therefore concerning the Government of the Queen, the Queen of England will protect all the ordinary people of New Zealand and will give them the same rights and duties of citizenship as the people of England.

English version

Article The First

The chiefs of the Confederation of the United Tribes of New Zealand and the separate and independent Chiefs who have not become members of the Confederation cede to Her Majesty the Queen of England absolutely and without reservation all the rights and powers of Sovereignty which the said Confederation or Individual Chiefs respectively exercise or possess or may be supposed to exercise or to possess over their respective Territories as the sole sovereigns thereof.

Article The Second

Her Majesty the Queen of England confirms and guarantees to the Chiefs and Tribes of New Zealand and to the respective families and individuals thereof the full exclusive and undisturbed possession of their Lands and Estates Forests Fisheries and other properties which they may collectively or individually possess so long as it is their wish and desire to retain the same in their possession: but the Chiefs of the United Tribes and the individual Chiefs yield to her Majesty the exclusive right of Pre-emption over such lands as the proprietors thereof may be disposed to alienate at such prices as may be agreed upon between the respective Proprietors and persons appointed by Her Majesty to treat with them in that behalf.

Article The Third

In consideration thereof Her Majesty the Queen of England extends to the Natives of New Zealand Her Royal protection and imparts to them all the rights and Privileges of British Subjects.

Glossary

1990 mean sea level (Otago Datum)

The fixed level for basing subsequent level measurements on, in this case Otago Metric Datum is the Dunedin Vertical Datum (DVD 1958) plus 100 metres.

Cascading hazards

Where the occurrence of one natural hazard is likely to trigger another natural hazard event e.g. an earthquake triggering a landslide which dams a river causing flooding.

Climate change

A change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods.

Crime prevention through environmental design (CPTED)

CPTED is a set of principles that can be applied to the design and development of buildings and other public areas. It seeks to use effective design to reduce the incidence and fear of crime.

Cumulative effects

In regard to assessing natural hazard consequence, cumulative effects include:

- The repeat of the same type of event, or different types of events, on the same area and/or people;
 and
- The effects of an event on many areas and/or people.

Customary

In accordance with custom or habitual practice; usual; habitual. Customs, or customary uses, may include those involving uninterrupted use and occupation. Note that the word 'customary' in this plan is used in accordance with its dictionary definition, and is not limited to its legal definition.

Ecosystem

A system of interacting terrestrial or aquatic living organisms within their natural and physical environment.

Ecosystem services

Are the resources and processes the environment provides that people benefit from (for example purification of water and air, pollination of plants and decomposition of waste).

Emergency services

Has the meaning set out in section 4 of the Civil Defence Emergency Management Act 2002.

Endemic

Species that are naturally restricted to within a certain area.

Essential services

Include hospitals and health services, schools, public transport and essential commercial activities for civil defence purposes.

Exit strategy

A means of leaving a current situation that is likely to become difficult, e.g. as a result of natural hazards or climate change. Means of leaving may include approaches such as managed retreat or relocating dwellings.

Future urban development areas

Land mapped in district plans to provide direction on the location of greenfield urban expansion.

Hazardous substance

Has the meaning set out in section 2 of the Hazardous Substances and New Organisms Act 1996, but including non-toxic environmentally damaging substances, medicines in dosage form, hazardous biological substances and radioactive substances.

Hazardous waste

Hazardous wastes are wastes that exhibit properties such as corrosiveness, explosiveness, flammability, capacity to oxidise, toxicity or ecotoxicity, and have the potential to adversely affect human, animal or other species and natural resources.

Highly valued soils

Soils valued for their significance, including:

- Versatility for primary production, such as highly versatile soils;
- b) Pollutant buffering or filtering services;
- c) Providing water storage or flow retention services;
- d) Rarity.

Highly versatile soils

Land classified as Land Use Capability I or II in the New Zealand Land Resource Inventory.

Indigenous species

In relation to a species of flora or fauna, means a species or genetic variant found naturally in New Zealand, including migrant species visiting New Zealand on a regular or irregular basis.

Infrastructure

- a) Pipelines that distribute or transmit natural or manufactured gas, petroleum, biofuel, or geothermal energy;
- A network for the purpose of telecommunication as defined in section 5 of the Telecommunications Act 2001;
- A network for the purpose of radiocommunication as defined in section 2(1) of the Radiocommunications Act 1989;
- d) Facilities for the generation of electricity, lines used or intended to be used to convey electricity, and support structures for lines used or intended to be used to convey electricity, excluding facilities, lines, and support structures if a person—
 - Uses them in connection with the generation of electricity for the person's use; and
 - ii) Does not use them to generate any electricity for supply to any other person;
- e) A water supply distribution system, including a system for irrigation;
- f) A drainage or sewerage system;
- g) Structures for transport on land by cycleways, rail, roads, walkways, or any other means;
- Facilities for the loading or unloading of cargo or passengers transported on land by any means;
- i) An airport as defined in section 2 of the Airport Authorities Act 1966;
- j) A navigation installation as defined in section 2 of the Civil Aviation Act 1990;
- k) Facilities for the loading or unloading of cargo or passengers carried by sea, including a port related commercial undertaking as defined in section 2(1) of the Port Companies Act 1988;
- Anything described as a network utility operation in regulations made for the purposes of the definition of "network utility operator" in section 166 of the Resource Management Act 1991.

Iwi authority

The authority which represents an iwi and which is recognised by that iwi as having the authority to do so. Te Rūnanga o Ngāi Tahu is the iwi authority in Otago.

Lifeline utilities

Has the meaning set out in section 4 of the Civil Defence Emergency Management Act 2002.

Marae related activity

Māori cultural activities and provision of services primarily aimed at the health and wellbeing of the Māori population, by or for takata whenua, undertaken on a marae that has the approval of rūnaka, including:

- a) Hui;
- b) Wānaka;
- c) Tangi;
- d) Overnight accommodation for visitors;
- e) Events and gatherings;
- f) Health services; and
- g) Cultural tourism.

Multiple hazards

Where two or more unrelated natural hazard events may occur.

Native Reserve

Any property or site that is a: Native Reserve excluded from the Ōtākou Land purchases (1848), Native Reserves excluded from the Kemps Land Purchases (1848), Reserves granted by the Native Land Court (1868), Half Caste Reserves (1881), Landless Native Reserve (1896), Other reserves (1890 and 1900).

Natural hazard

Includes any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, drought, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.

Originally rare

In relation to terrestrial ecosystems, "originally" means the ecosystem type was present when Māori arrived, and still exists today. "Rare" means the total extent of each originally rare ecosystem type is less than 0.5 percent of New Zealand's total area – that is, less than 134,000 hectares. A published list of originally rare terrestrial ecosystem types has been compiled by Landcare Research and is available from that organisation.

Renewable electricity generation

The generation of electricity from solar, wind, hydro electricity, geothermal, biomass, tidal, wave, or ocean current energy sources.

Residual risk

The risk remaining after the implementation or undertaking of risk management measures.

Resilient / Resilience

The capacity and ability to withstand or recover quickly from difficult conditions.

Reverse sensitivity

Arises where an established activity is causing adverse environmental impact to nearby land, and an activity susceptible to those impacts is proposed for that land. The sensitivity is created by the likelihood that if the new use is permitted, the established activity may be required to restrict its operations or mitigate its effects to avoid adversely affecting the new activity.

Risk

In the context of natural hazards means a combination of the likelihood of occurrence and consequences of a natural hazard event, and incorporates the concept of probabilities and impacts included in the definition of "effect" in Section 3 of the RMA.

Special Amenity Landscape

Special amenity landscapes are those landscapes which have natural values that are of significance under Sections 6(a), 6(c), 6(e), 7(c) and 7(f), but do not meet the exceptional quality test to qualify them as 'outstanding natural landscapes' under Section 6(b) of the RMA. Different labels have been applied to these landscapes, such as Visual Amenity Landscapes, Rural Amenity Landscapes, and Significant Amenity Landscapes.

Statutory acknowledgement

An acknowledgement by the Crown of Ngāi Tahu's special relationship with identifiable areas, namely Ngāi Tahu's particular cultural, spiritual, historical, and traditional association with those areas (known as statutory areas).

Urban growth boundary

Boundary mapped in district plans to identify areas of existing urban development and where further urban development can take place over the next 10 years and beyond.

Waste

Has the meaning set out in section 5 of the Waste Minimisation Act 2008.

151

Glossary of Te Reo Terms

Ahi kā Continued occupation according to traditional law of

Māori tenure ("keeping the fires burning").

Ara Tawhito Ancient Trails.

Atua God, supernatural being.

Hapū Sub-tribe, extended whanau.

Iwi Tribe.

Kāi Tahu The collective of individuals who descend from Kāi

Tahu, Kāti Māmoe and Waitaha, and who have mana

whenua in Otago.

Kāi Tahu ki The four Papatipu Rūnaka and associated whānau

and ropū of the Otago Region.

Kāika Settlement.

Otago

Nohoanga

Nohoaka/ Seasonal settlements.

Kaimoana Food obtained from the sea.

Kaitiaki Guardian.

Kaitiakitaka The exercise of customary custodianship, in a manner

that incorporates spiritual matters, by takata whenua who hold Manawhenua status for particular area or

resource.

Ki Uta Ki Tai Mountains to the sea.

Mahika Kai The customary gathering of food and natural materials

and the places where those resources are gathered.

Mana Whenua Customary authority or rakatirataka exercised by an

iwi or hapū within this rohe.

Manawhenua Those who exercise customary authority or

rakatirataka within this rohe.

Marae atea Courtyard or meeting place in front of the wharenui.

Marae The marae atea and the complex of buildings around

it, including the wharenui, wharekai, church and urupa.

Mauri Life supporting capacity. This definition, while not

replicating the term 'Mauri', achieves the essence of

this concept.

Mauka Mountain.

Papakāika Traditional settlement or settlement on traditional land.

Papatipu Local manawhenua representative group or Rūnaka/Rūnanga community system of representation.

Pounamu Nephrite, greenstone, jade.

> Rāhui Restriction on access to a specific resource for a

> > particular time.

Rakātira Chief.

Rakātirataka Chieftainship, decision-making rights.

> Rohe Boundary.

Rōpū Group.

Takata whenua The iwi or hapū that holds mana whenua in a particular

area.

Takiwā Area, region, district.

Te Ao Tūroa The natural environment.

Otago Coastal Marine Area. Te Tai o Arai Te

Uru

Te Wai Pounamu The South Island.

> Tikaka Lore and custom, customary values and practices.

Tino

Full chiefly authority. Rangatirataka

> Tōpuni Named for the Topuni cloak worn by Ngāi Tahu

> > rangatira, Tōpuni in this sense provides a public symbol of Ngāi Tahu manawhenua and rangatiratanga over some of the most prominent landscape features and conservation areas in Te Wai Pounamu. Under the Ngāi Tahu Claims Settlement Act 1998 Topuni has been laid over 14 areas of public conservation land of

significance to Ngāi Tahu.

Tuhituhi neherā Rock art.

Tūpuna/tīpuna Ancestor.

> Umu-tī Earth oven used for cooking ti.

Urupā Burial place.

Wāhi Taoka Resources, places and sites treasured by takata

whenua.

Wāhi Tapu Places sacred to takata whenua. Wāhi Tūpuna Landscapes and places that embody the relationship

of manawhenua and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other

taoka.

Wairua Life principle, spirit.

Waka Canoe.

Wānaka/ Wānanga Customary learning method.

Whakapapa Genealogy.

Whānau Family.

Whānau Rōpū Whānau grouping.

Whare Kai Dining hall.

Wharenui Ancestral meeting house.

Whenua Land.

