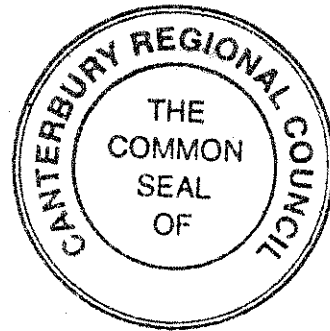


CANTERBURY REGIONAL COUNCIL

CANTERBURY REGIONAL POLICY STATEMENT

I hereby certify that this is a correct copy of the Canterbury Regional Policy Statement approved by the Council on 5 June 1998, pursuant to First Schedule, Clause 17 of the Resource Management Act 1991, to be operative 26 June 1998.



The Common Seal of the Canterbury Regional Council was affixed in the presence of:

Ian A Cumming
CHIEF EXECUTIVE

Report No 98/4

ISBN 1-86937-337-5

58 Kilmore Street
PO Box 345
Christchurch
Phone (03) 365 3828
Fax (03) 365 3194



75 Church Street
PO Box 550
Timaru
Phone (03) 688 9069
Fax (03) 688 9067

Table of Contents

Part I Background Information

1. Introduction..... 1
2. Framework for Resource Management..... 5
3. Canterbury's Natural and Physical Resource Relationships..... 15

Part II Issue Resolution Introduction

4. Summary of Significant Resource Management Issues of the Region..... 27
5. Matters of Resource Management Significance to Tangata Whenua..... 37
6. Provision for the Relationship of Tangata Whenua with Resources..... 63
7. Soils and Land use..... 75
8. Landscape, Ecology and Heritage..... 99
9. Water..... 121
10. Beds of Rivers and Lakes and their Margins..... 147
11. The Coastal Environment..... 169
12. Settlement and the Built Environment..... 185
13. Air..... 207
14. Energy..... 221
15. Transport..... 231
16. Natural Hazards..... 243
17. Hazardous Substances..... 259
18. Solid and Hazardous Waste Management..... 271
19. Summary of Environmental Results..... 281

Part III Processes

20. Integration of Resource Management Processes..... 285

Part IV Monitoring

21. Monitoring and Review..... 291

Appendices

- Appendix 1 - Glossary of Terms..... 297
 - Appendix 2 - Other Legislation..... 309
 - Appendix 3 - Quick Reference User Guide..... 313
-

List of Figures

Figure 1 Planning Framework under the RM Act.....	2
Figure 2 National and International Context.....	4
Figure 3 Map of Canterbury Region.....	17
Figure 4 Land Use Capability Classes in the Canterbury Region..	18
Figure 5 Procedure for Resolving Resource Management Issue...	26
Figure 6 Resource Mangement Planning Framework Desired by Tangata Whenua.....	57

List of Tables

Table 1 Population Distribution in the Canterbury Region.....	23
Table 2 Reference Guide to Matters of Resource Management Significance to Tangata Whenua	58

Part I

Background Information

1. Introduction

This Regional Policy Statement has been prepared to meet the requirements of the Resource Management Act 1991 (“RM Act”). The over-riding purpose of the RM Act is promotion of sustainable management of natural and physical resources. These include land, water, air, soil, minerals, energy, all plants and animals, and all structures.

The Regional Policy Statement provides an overview of the resource management issues of the region. It sets out how natural and physical resources are to be managed in an integrated way to promote sustainable management.

Sustainable management involves managing the resources of the Canterbury Region in ways which provide for the needs of current and future generations. In achieving the objectives of the Regional Policy Statement, the Canterbury Regional Council (“the Regional Council”) is looking to improve environmental quality in Canterbury.

Integrated management involves taking an holistic approach to the management of natural and physical resources. Such an approach acknowledges the links between the resources and recognises that decisions on any particular resource may have effects on other resources. It also recognises that our understanding of these resource inter-relationships, including ecosystem functioning, varies and that different policy approaches are necessary, for example: a precautionary approach will be reflected where understanding is limited.

Integrated management also recognises that the decisions of resource management agencies such as regional councils and territorial authorities need to be co-ordinated. Their functions and powers overlap, particularly in respect of land related matters. District plans cannot be inconsistent with the Regional Policy Statement or with regional plans and many policies at both levels will need the co-operation of territorial authorities for effective implementation via their district plans. Figure 1 illustrates the relationship between the different types of policy documents.

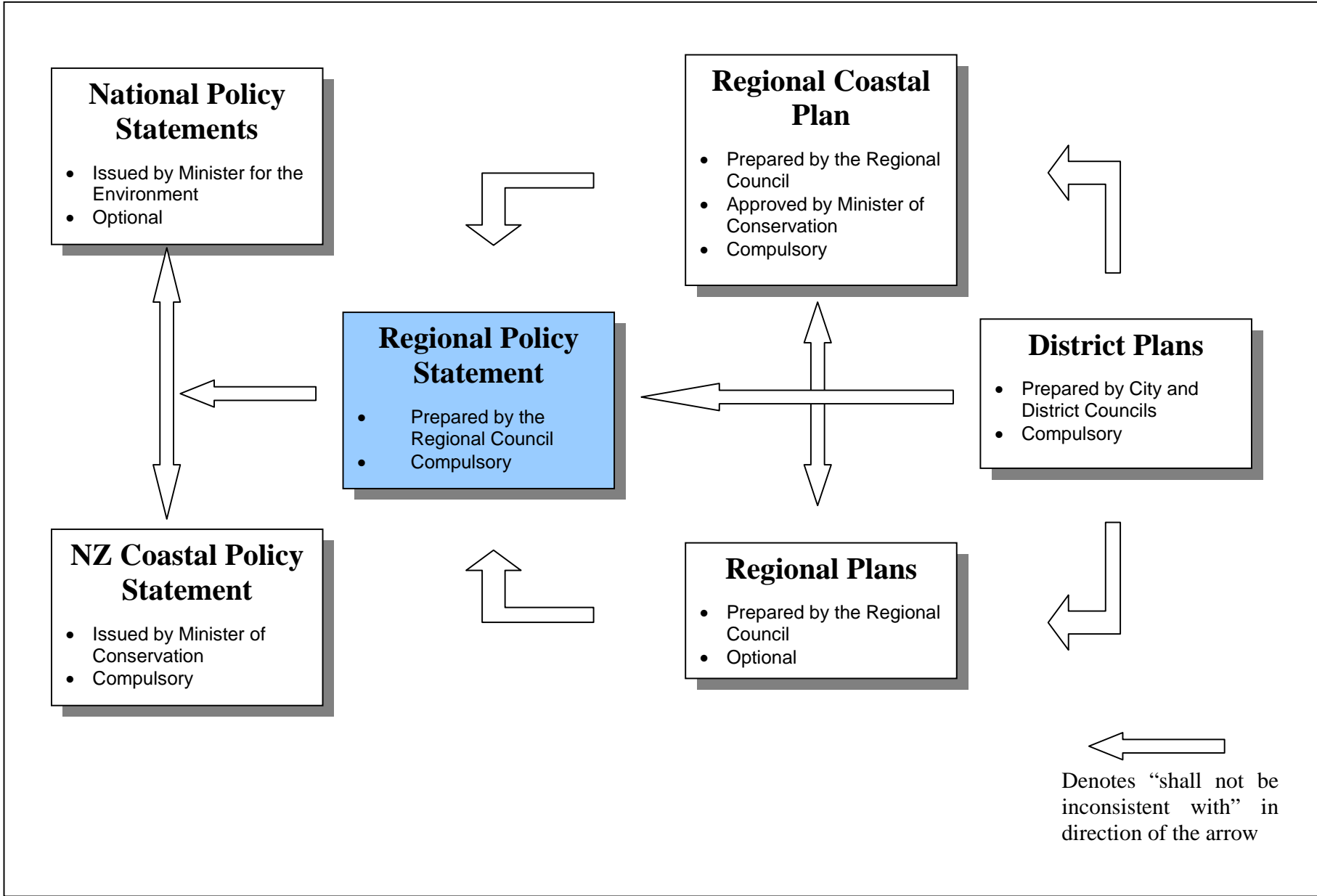


Figure 1: Planning Framework under the RM Act

The Regional Policy Statement has four major parts:

PART I provides background information on the content, scope and structure of the Regional Policy Statement. It outlines the context within which resource management is developing in New Zealand, including international influences and the Treaty of Waitangi. Key sections of the RM Act are stated, in particular sections 5-8 dealing with Purpose and Principles and those sections which prescribe what the purpose of regional policy statements is and what they must contain. The role of the Regional Council's annual plan in providing resources to give effect to the Regional Policy Statement is outlined. Part I concludes with a description of the Region's natural and physical resources and of the regional community.

PART II identifies issues and how they are to be solved. It closely follows the structure of section 62 of the RM Act. It commences with a description of the significant resource management issues of the region and is followed by a chapter prepared by Tangata Whenua which sets out matters of resource management significance to them. The rest of Part II focuses on developing the objectives, policies and methods needed to resolve the resource management issues. A thematic approach has been adopted to issue resolution because the Regional Policy Statement is intended to provide an overview of the natural and physical resources of the region and because its policies generally apply region-wide. Although a bio-geographic approach could provide more area-specific recognition of issues and the inter-relationship between resources, it would also lead to repetition of policies where the same issues occur in each bio-geographic area addressed. The thematic approach allows the management of resources to be approached in a region-wide context, and in distinct and manageable parts. Links between thematic chapters are achieved by extensive cross-referencing, in recognition of the integrated nature of resource management.

Each chapter concludes with a statement of environmental results anticipated from the implementation of the policies and methods, and monitoring to be undertaken.

PART III identifies processes needed for achieving a co-ordinated and integrated approach to resource management by regional and district councils sharing a boundary with Canterbury, and by district and city councils within the region.

PART IV describes the procedures to be followed in monitoring the effectiveness of the policies and methods in achieving the environmental results anticipated in this Regional Policy Statement. Feedback from this will contribute to the ongoing review of the Regional Policy Statement. Procedures for doing so are detailed.

Nationally, the RM Act was developed from the Resource Management and Local Government law reform process with their emphasis on better environmental outcomes, greater recognition of communities and more transparent and accountable decision making. The Treaty of Waitangi had a major influence on the development of the RM Act.



The RM Act exists within an international context and reflects greater global awareness of issues such as the greenhouse effect, management of waste and hazardous substances and the need for a sustainable future. International conventions from the Stockholm Conference on the Human Environment to the Earth Summit in Rio de Janeiro [UNCED] have reflected these trends. Concern for the integration of environment and development forms the international context for sustainable resource management in New Zealand.

Figure 2: National and International Context

2. Framework for Resource Management

2.1 National and International Context

As Figure 2 illustrates, policy development in New Zealand does not occur in isolation from the rest of the world. Increasingly we are becoming part of the global community and party to international treaties and agreements. National policies and laws give effect to New Zealand's obligations or responsibilities under these treaties and agreements. The maxim of "Think globally, act locally" is pertinent as by giving effect to the RM Act within the Canterbury Region, we are making a contribution to improved global sustainability. However, there are some matters of a resource management nature which have their own Acts of Parliament, independent of the RM Act, and which lie outside the ambit of direct regional council influence. The Regional Council believes the nuclear free issue is a national one which has been resolved at central government level by an Act of Parliament. However, in recognising the importance of this issue the Regional Council has passed a resolution:

"That this Council expresses its strongest support for the terms of the New Zealand Nuclear Free Zone, Disarmament and Arms Control Act 1987."

2.2 Treaty of Waitangi

The Treaty of Waitangi (Te Tiriti O Waitangi) has been introduced into resource management through section 8 of the RM Act. The Treaty is of particular relevance to resource management because it refers to the rights of governorship (kawanatanga) and rangatiratanga (chieftainship) and the relationship of Maori with natural and physical resources.

Kawanatanga is commonly understood to be the Crown's right to govern and make laws, such as the RM Act, through which it devolves powers to agencies such as the Regional Council. Tino rangatiratanga has been variously interpreted but is generally held to denote some form of authority over resources. The Waitangi Tribunal, in its report on the Ngai Tahu Claim¹, said

"...Tino rangatiratanga therefore refers not to a separate sovereignty but to tribal self-management on lines similar to what we understand as local government."

Article 2 of the Treaty refers to:

¹ p.233 Vol. 2, Ngai Tahu Report 1991; Waitangi Tribunal Report: ¾ WTR

“... unqualified exercise of their chieftainship over their lands, villages and all their treasures.” [Maori Language Version]

and

“... the full exclusive and undisturbed possession of their Lands and Estate Forests, Fisheries and other properties ...” [English Language Version]

both of which are very relevant to resource management.

(a) Partnership

Tangata Whenua are a Treaty partner with the Crown under the Treaty of Waitangi, a partnership that is particularly relevant to natural and physical resource management because of Article 2 of the Treaty of Waitangi.

The partnership with Tangata Whenua is recognised in three sections of the RM Act. These sections require those exercising functions or powers under the RM Act to:

“... recognise and provide for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu and other taonga” (section 6(e), RM Act);

“... to have particular regard to kaitiakitanga” (section 7(a), RM Act); and to

“... take into account the principles of the Treaty of Waitangi (Te Tiriti O Waitangi)” (section 8, RM Act).

The meaning of sections 6(e), 7(a) and 8 has been further clarified by the Parliamentary Commissioner for the Environment² as:

“... a strong signal to decision-makers that Tangata Whenua have a special status and are not to be considered as just another interest group.”

As part of the Purpose and Principles of the RM Act the Regional Council recognises that it must give effect to sections 6(e), 7(a) and 8 through the objectives, policies and methods of the Regional Policy Statement.

(b) Relationship

The Regional Council has a relationship with Tangata Whenua in the region which has been developed jointly with Nga Upoko and runanga of the Canterbury region.

(c) The Principles of the Treaty of Waitangi

In 1987, the Court of Appeal³ identified three major Treaty principles:

- (1) the principle of partnership
- (2) the principle of active protection of Maori people in the use of their ancestral lands and water, to the fullest extent practicable

² “Proposed Guidelines for Local Authority Consultation with Tangata Whenua”. Office of the Parliamentary Commissioner for the Environment, 1992.

³ New Zealand Maori Council v. Attorney General, Court of Appeal 54/87.

- (3) the principle of utmost good faith in the dealing of one Treaty partner with the other. The Waitangi Tribunal, the Crown and iwi authorities have also defined principles of the Treaty that may be relevant in different circumstances.

As understanding of the Treaty is an ongoing process, understanding of its principles is also ongoing and dynamic. These principles therefore are not definitive but the basis for developing an ongoing relationship with Tangata Whenua. Consultation is an important part of partnership and ongoing communication.

The Court of Appeal⁴ recently found that essential elements of consultation should include:

- (1) **sufficient information** provided to the consulted party, so that they can make intelligent and informed decisions
- (2) **sufficient time** for both the participation of the consulted party and the consideration of the advice given
- (3) **genuine consideration** of that advice, including an open mind and a willingness to change.

Consultation cannot be equated with negotiation as the latter requires agreement.

Tangata Whenua and the Regional Council have agreed on a process of consultation that seeks to reflect these principles. In relation to the Regional Policy Statement, consultation particularly relates to the process for identifying the matters of resource management significance to iwi, the recognition of those concerns and provision for them in objectives, policies and methods.

(d) Treaty Documents

Two versions of the Treaty of Waitangi exist, the English version that is commonly thought to be the only version, and the Maori version.

i) Maori 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 au ka tuku ki te Kuini te hokonga o era wahi 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 wakaatanga ki te Kawaanatanga o te Kuini. Ka tiakina e te Kuini o Ingarani nga tangata maori katoa o Nui Tirani ka tukua ki a ratou nga tikanga katoa rite tahi ki ana mea ki nga tangata o Ingarani.

⁴ Air New Zealand v. Wellington International Airport Ltd, Court of Appeal, 1[NZLR] 671, 1993.

ii) A Literal English Translation of the Maori 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 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.

Maori Text version signed by 512 Chiefs and by William Hobson, Consul and Lieutenant Governor.

iii) English Version of the Treaty

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 Preemption 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.

English Text version signed by 30 Chiefs and by William Hobson, Consul and Lieutenant Governor.

2.3 Resource Management Act

The RM Act is the principal statute for the management of natural and physical resources and the environment. In preparing the Regional Policy Statement the Regional Council has had to have particular regard to the following sections of the RM Act.

- (1) Part II - sections 5-8 Purpose and Principles.
- (2) Section 30 -Functions of regional councils under the RM Act.
- (3) Section 32 - Duties to consider alternatives, assess benefits and costs, etc.
- (4) Section 59 - Purpose of regional policy statements.
- (5) Section 61 - Matters to be considered by regional council.
- (6) Section 62 - Contents of regional policy statements.
- (7) First Schedule - Preparation, change, and review of policy statements and plans.
- (8) Second Schedule - Matters that may be provided for in policy statements and plans (Part I).

Part II - sections 5-8 set out the purpose and principles of the RM Act while section 30 details the functions of regional councils. Sections 59, 61 and 62 identify the scope and content of the Regional Policy Statement. These sections are repeated below.

Section 5. Purpose -

- (1) *The purpose of this Act is to promote the sustainable management of natural and physical resources.*
- (2) *In this Act, “sustainable management” means: managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while-*
 - (a) *Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
 - (b) *Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
 - (c) *Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

In sections 6, 7 and 8, the RM Act sets out certain ‘principles’ that are to be either recognised and provided for, had particular regard to, or taken into account by those exercising functions and powers under it. These sections provide important components of the resource management framework for Canterbury and are as follows:

Section 6. Matters of national importance -

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

- (a) *The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*

- (b) *The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*
- (c) *The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
- (d) *The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*
- (e) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.*

Section 7. Other matters -

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to -

- (a) *Kaitiakitanga:*
- (b) *The efficient use and development of natural and physical resources:*
- (c) *The maintenance and enhancement of amenity values:*
- (d) *Intrinsic values of ecosystems:*
- (e) *Recognition and protection of the heritage values of sites, buildings, places, or areas:*
- (f) *Maintenance and enhancement of the quality of the environment:*
- (g) *Any finite characteristics of natural and physical resources:*
- (h) *The protection of the habitat of trout and salmon.*

Section 8. Treaty of Waitangi -

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

Section 30. Functions of regional councils under this Act -

- (1) *Every regional council shall have the following functions for the purpose of giving effect to this Act in its region:*
 - (a) *The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region:*
 - (b) *The preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance:*
 - (c) *The control of the use of land for the purpose of -*
 - (i) *Soil conservation:*
 - (ii) *The maintenance and enhancement of the quality of water in water bodies and coastal water:*
 - (iii) *The maintenance of the quantity of water in water bodies and coastal water:*
 - (iv) *The avoidance or mitigation of natural hazards:*

- (v) *The prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances:*
- (d) *In respect of any coastal marine area in the region, the control (in conjunction with the Minister of Conservation) of -*
 - (i) *Land and associated natural and physical resources:*
 - (ii) *The occupation of space on land of the Crown or land vested in the regional council, that is foreshore or seabed, and the extraction of sand, shingle, shell, or other natural material from that land:*
 - (iii) *The taking, use, damming, and diversion of water:*
 - (iv) *Discharges of contaminants into or onto land, air, or water and discharges of water into water:*
 - (v) *Any actual or potential effects of the use, development, or protection of land, including the avoidance or mitigation of natural hazards and the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances:*
 - (vi) *The emission of noise and the mitigation of the effects of noise:*
 - (vii) *Activities in relation to the surface of water:*
- (e) *The control of the taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body, including -*
 - (i) *The setting of any maximum or minimum levels or flows of water:*
 - (ii) *The control of the range, or rate of change, of levels or flows of water:*
 - (iii) *The control of the taking or use of geothermal energy:*
- (f) *The control of discharges of contaminants into or onto land, air, or water and discharges of water into water:*
- (g) *In relation to any bed of a water body, the control of the introduction or planting of any plant in, on, or under that land, for the purpose of -*
 - (i) *Soil conservation:*
 - (ii) *The maintenance and enhancement of the quality of water in that water body:*
 - (iii) *The maintenance of the quantity of water in that water body:*
 - (iv) *The avoidance or mitigation of natural hazards:*
 - (v) *Any other functions specified in this Act.*
- (2) *The functions of the regional council and the Minister of Conservation under subparagraph (i) or subparagraph (ii) or subparagraph (vii) of subsection (1)(d) do not apply to the control of the harvesting or enhancement of populations of aquatic organisms, where the purpose of that control is to conserve, use, conserve (sic.), enhance, or develop any fisheries resources controlled under the Fisheries Act 1996.*

The purpose of a Regional Policy Statement, what it must provide for and matters to be considered by the Regional Council are set out in sections 59, 61 and 62 of the RM Act as follows.

Section 59. Purpose of regional policy statements -

The purpose of a regional policy statement is to achieve the purpose of the Act 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.

Section 61. Matters to be considered by regional council -

- (1) *A regional council shall prepare and change its regional policy statement in accordance with its functions under section 30, the provisions of Part II, and its duty under section 32 and any regulations.*
- (2) *In addition to the requirements of section 62(2), when preparing or changing a regional policy statement, the regional council shall have regard to -*
 - (a) *Any -*
 - (i) *Management plans and strategies prepared under other Acts; and*
 - (ii) *Relevant planning document recognised by an iwi authority affected by the regional policy statement; and*
 - (iia) *Relevant entry in the Historic Places Register; and*
 - (ii) *Regulations relating to ensuring sustainability, or the conservation, management, or sustainability of fisheries resources (including regulations or bylaws relating to taiapure, mahinga mataitai, or other non-commercial Maori customary fishing); and*
 - (iii) *Regulations made under this Act, including regulations made under section 43 -*
 - (b) *to the extent that their content has a bearing on resource management issues of the region; and*
 - (c) *The extent to which the regional policy statement needs to be consistent with the policy statements and plans of adjacent regional councils.*
- (3) *In preparing or changing any regional policy statement, a regional council must not have regard to trade competition.*

Section 62. Contents of regional policy statements -

- (1) *A regional policy statement shall make provision for such of the matters set out in Part I of the Second Schedule, (and such of the matters set out in Part II of that Schedule as are of regional significance), that are appropriate to the circumstances of the region, and shall state -*
 - (a) *The significant resource management issues of the region; and*
 - (b) *Matters of resource management significance to iwi authorities; and*
 - (c) *The objectives sought to be achieved by the statement; and*
 - (d) *The policies in regard to those significant issues and objectives, and an explanation of those policies; and*
 - (e) *The methods used or to be used to implement the policies; and*
 - (f) *The principal reasons for adopting the objectives, policies, and methods of implementation set out in the statement; and*

- (g) *The environmental results anticipated from implementation of those policies and methods; and*
 - (h) *The processes to be used to deal with issues which cross local authority boundaries, and issues between territorial authorities or between regions; and*
 - (ha) *For the region or any part of the region, which local authority shall have responsibility within its own area for developing objectives, policies, and rules relating to the control of the use of land for -*
 - (i) *The avoidance or mitigation of natural hazards;*
 - (ii) *The prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances -*

and may state particular responsibilities for particular hazards or hazardous substances or groups of hazards or hazardous substances; but if no responsibilities for a hazard or hazardous substance are identified in the policy statement, the regional council shall retain primary responsibility for the hazard or hazardous substance; and
 - (i) *The procedures to be used to review the matters set out in paragraphs (a) to (ha), and to monitor the effectiveness of the statement as a means of achieving its objectives and policies; and*
 - (j) *Any other information that the regional council considers appropriate; and*
 - (k) *Such additional matters as may be appropriate for the purpose of fulfilling the regional council's functions, powers, and duties under this Act.*
- (2) *A regional policy statement shall not be inconsistent with any national policy statement, New Zealand coastal policy statement, or water conservation order.*

2.4 Implementation via the Annual Plan

Each year, every local authority is required to prepare, and after public consultation, adopt an Annual Plan. This document details the work to be undertaken during the year, shows how much it will cost, where funds come from (e.g. rates, user pays) and sets out the objectives in each area of significant activity. Major performance measures and outputs are specified to help the public measure at the end of the year, how successfully the plan has been implemented.

As the Regional Policy Statement must contain objectives, policies and methods for the sustainable management of the region's natural and physical resources, it follows that the Regional Policy Statement will influence greatly the contents of the Regional Council's Annual Plan.

When preparing its Regional Policy Statement, the Regional Council has been concerned about the flow-on costs to the ratepayers. The Regional Council is mindful that the RM Act aims to promote the sustainable management of natural and physical resources - not necessarily to achieve it immediately. Sustainable management is a long-term aim which the community should all be working towards; the pace at which the community goes will be influenced by parameters such as the nature of any environmental problem and the cost and time needed to make changes.

Many of the provisions (e.g. methods) contained in the Regional Policy Statement require the Regional Council **to do something**. In many instances, they are already being implemented by the Regional Council. All activities proposed for the Regional Council in this Regional Policy

Statement will be subject to scrutiny through the Regional Council's Annual Plan and budgetary process.

3. Canterbury's Natural and Physical Resource Relationships

Canterbury has the largest land area of all the regions in New Zealand. It extends from and includes much of the Clarence River Catchment in the north to the Waitaki River in the south where most of the river catchment lies in the region, from the coast in the east to the Main Divide in the west. The Canterbury region also extends 12 nautical miles (approximately 19 km) to the limit of the territorial waters.

The region has a variety of natural resources and landscapes and a range of communities living in association with them. Physical resources associated with these communities include infrastructure associated with transport (e.g. roads, railways, sea and airports) energy (dams and hydro-electric power stations) and settlements. The latter range from the major urban settlements of Christchurch and Timaru, down to numerous scattered rural townships. Each community inter-relates with the natural and physical resources that surround it. These inter-relationships form an integral part of the environment within which we live.

3.1 Canterbury's Diverse Environment

(a) Kaikoura

The Kaikoura area is characterised by a distinctive, rocky sea coast in close proximity to high mountains which result in many short, swift flowing rivers. The spectacular rocky coastline provides habitats for many birds, fish and marine mammals. The small Kaikoura community is increasingly centred around tourism based on this wealth of marine wildlife.

(b) The Coast

Canterbury's long Pacific coastline is distinguished by sweeping sand or mixed sand and gravel beaches (north and south of Banks Peninsula respectively), rocky peninsulas (Kaikoura and Banks Peninsulas) and lagoons and estuaries (e.g. Avon-Heathcote, Ashley, Wainono). Some of the coastal wetlands have been highly modified. The coast supports a range of bird and fish species,

some of which are migratory. It is a focus for human settlement, ranging in size from Timaru to Lyttelton, through to small bach settlements like Amberley and Waikuku Beaches, to the hut communities established near the mouths of several major rivers such as the Waitaki and Rakaia.

(c) Banks Peninsula

Banks Peninsula's volcanic landforms, valleys and harbours have created a distinctive landscape with a range of microclimates which provide for the southernmost distribution of a variety of indigenous plant species. Remnants of the original vegetation remain including beech forest, bush and tussock areas, and at high altitudes sub-alpine vegetation. Like Kaikoura, its rocky coastline provides habitats for a wealth of bird and marine life and is a major source of mahinga kai for Tangata Whenua. Pastoral farming is the dominant land use, although planted production forestry is increasing. The Peninsula is an important area for recreation and tourism, including fishing, marine recreation, tramping and rock climbing. It has always attracted human settlement, with four Tangata Whenua runanga pre-dating European settlement, and many contemporary communities around its harbours and bays including the port of Lyttelton and the major tourist centre of Akaroa.

(d) The Canterbury Plains

The Canterbury Plains with their mountain backdrop slope gently from the foothills to the sea. Characterised by a mix of pastoral and crop farming they are traversed by braided rivers some of which are of international importance. The rivers are significant as wildlife habitats, as recreation areas (particularly jetboating and salmon fishing) and as irrigation sources for agriculture. There are significant wetlands in the lower plains areas which provide significant and important habitats for both indigenous and introduced bird and fish species and are important for recreation, landscape, scientific, educational and water quality reasons. Te Waihora (Lake Ellesmere) is recognised as being internationally significant. Underlying the Plains is a major groundwater resource also used for irrigation supplies, and for domestic and industrial water supplies (Christchurch and other Plains communities). Canterbury's soils, when cultivated, are vulnerable to wind erosion, particularly by the hot, dry nor'wester. Shelter belt plantings to protect soils and stock, although common, are insufficient to fully protect the soil from wind erosion. Increasingly, woodlots are being planted. Christchurch is the major centre of population (320,000 approx.) followed by towns such as Timaru, Ashburton, and Rangiora, and smaller service centres such as Darfield, Leeston and Temuka; see Table 2.

(e) Hill Country

Large parts of north and south Canterbury consist of steep to rolling hill country while immediately west of the plains is the 'foothills' area. Rainfall is generally higher than on the Plains but drought is still common, as are severe frosts and snow. Pastoral farming predominates with most areas having been developed by oversowing and/or topdressing with fertiliser. Planted production forestry is increasing rapidly, particularly in areas with higher rainfall.

Hill country areas are important for recreation (e.g. tramping, shooting, 4-wheel drive activities), landscape values, and include substantial areas of beech forest, significant areas of relatively unmodified tussock grassland and remnant habitats of other indigenous flora and fauna.

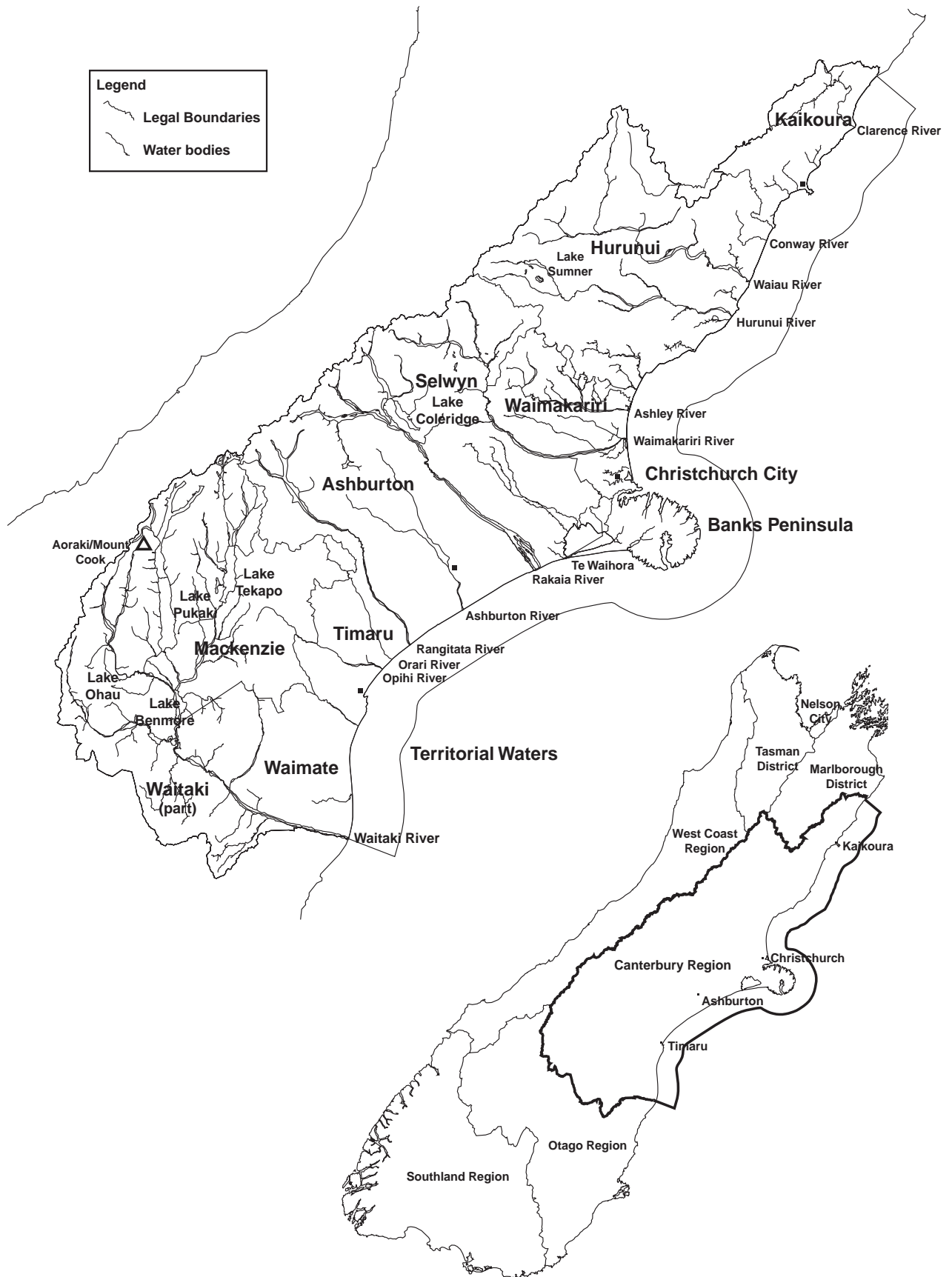
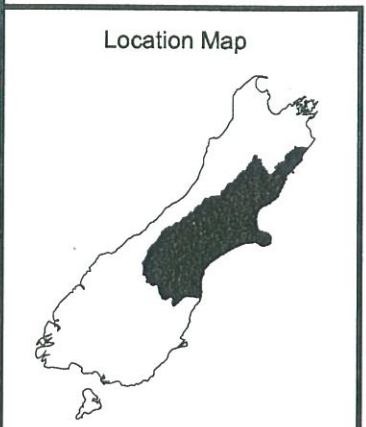
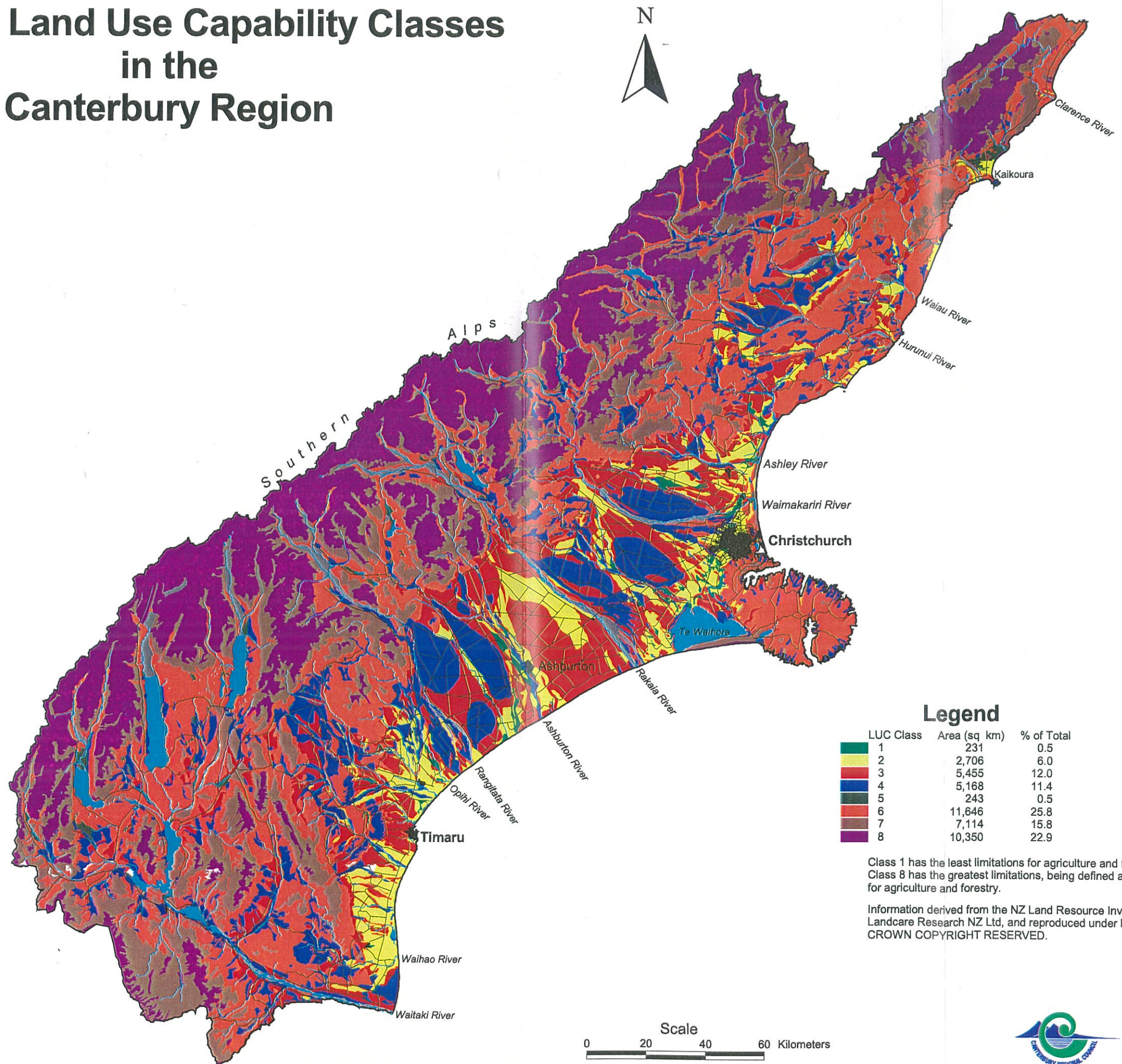


Figure 3 : Map of Canterbury Region

Figure 4: Land Use Capability Classes in the Canterbury Region



Legend

LUC Class	Area (sq km)	% of Total
1	231	0.5
2	2,706	6.0
3	5,455	12.0
4	5,168	11.4
5	243	0.5
6	11,646	25.8
7	7,114	15.8
8	10,350	22.9

Class 1 has the least limitations for agriculture and forestry and Class 8 has the greatest limitations, being defined as unsuitable for agriculture and forestry.

Information derived from the NZ Land Resource Inventory, Landcare Research NZ Ltd, and reproduced under licence. CROWN COPYRIGHT RESERVED.



(f) Intermontane Basins

Large basins have formed within the upper catchments of several braided rivers, for example: Mackenzie Basin in the Waitaki River Catchment, Waimakariri River Basin, Lees Valley in the Ashley River Catchment and Hanmer River Basin in the Waiarau River Catchment. Of these, the Mackenzie Basin is by far the largest. It is characterised by extremes of summer and winter temperatures and very low rainfall in the eastern portion (less than 500 mm rain per year). The pre-European vegetation in these basins was fire-induced tussock grasslands but this has now been highly modified since pastoral farming commenced. The drier areas are prone to rabbit infestations and hence to over-grazing by sheep and rabbits if the latter are not kept at low levels. Land degradation is severe in some areas, for example: particularly parts of the upper Waitaki, and alternative land use options such as planted production forestry are being considered. However, in the driest areas the potential for commercial forestry is limited.

Glacial lakes are associated with some basins, particularly the upper Waitaki where levels of Lakes Tekapo, Pukaki and Ohau are managed for hydro-electricity production. Two additional lakes (Benmore and Ruataniwha) have been created by dams. Collectively the upper Waitaki hydro-electric system has about 34% of the nation's electricity generating potential, and 66% of New Zealand's controlled hydro-storage.

Lakes and rivers within these basins provide important areas for recreational activities (e.g. fishing, boating) and contribute significantly to amenity and landscape values. Flora and fauna values are now variable because of the high degree of modification but there are still important remnant wetlands (e.g. Cameron Fan), and other significant areas that have been identified by the Department of Conservation.

Tourism is important in some basins (e.g. Tekapo, Twizel, Hanmer) reflecting their location on state highways, their mountain surrounds, associated lakes, or geothermal springs (Hanmer).

Military training activities occur in all these basins, particularly the Mackenzie Basin.

(g) High Country

The high country is generally at a higher altitude than hill country and lies eastward of the alpine zone. It has extremes of weather, particularly heavy snow, severe frosts and strong winds. Rainfall diminishes rapidly east of the Main Divide, for example: from 8,000-10,000 mm per year on the Main Divide itself to 860 mm per year at Lake Coleridge Powerhouse, about 40 km eastwards.

High country lakes, glacial in origin, occur in most of the major river systems draining this area (e.g. Waitaki, Ashburton, Rakaia, Waimakariri, Hurunui and Clarence Rivers) and generally are of very high water quality.

The high country is greatly valued for tourism and recreation (e.g. fishing, tramping, hunting, skiing), its landscape and for its remnant indigenous flora and fauna. The tussock grasslands, of which there are few extensive unmodified areas left, and extensive areas of beech and shrubs contribute significantly to the high landscape values. Extensive pastoral farming based on fine wool merino sheep has been the predominant land use. The future of pastoralism on the tussock country is uncertain in light of land degradation problems and the spread of *Hieracium*¹. Planted production forest using introduced tree species is increasing particularly in wetter areas. Wilding trees, particularly pine species (e.g. *pinus contorta*) are spreading through parts of the high country.

¹ Several species of the introduced plant *Hieracium* (sometimes called hawkweeds) are found in Canterbury (e.g. *H. pilosella*, *H. praealtum*).

(h) Alpine Area

The Southern Alps provide the backdrop to Canterbury. They provide a barrier to moist westerly airflows resulting in heavy precipitation along the Main Divide (up to 10,000 mm/year) and high yields of water in Canterbury's major braided rivers. Extensive screes are interspersed with alpine vegetation, bare rock, permanent icefields and glaciers. It is largely unmodified by human development, except for skifields and state highways. About 90% of the alpine zone comprises public lands administered by the Department of Conservation, including two national parks. The area is highly valued for its indigenous flora and fauna, recreational values (e.g. tramping, climbing, hunting), landscape, and as a tourism resource.

The alpine area is of minimal value for agriculture and production forestry. Aoraki (Mount Cook) and other mountains are of great spiritual significance to Tangata Whenua. Within the high country and alpine zones are mahinga kai areas, and routes previously used by Tangata Whenua to get to the West Coast.

3.2 Resource Inter Relationships

(a) Natural Resource Relationships

Although environments and ecosystems within the region can be described independently, they are always connected. Integrated management of the region's natural and physical resources is based on understanding the inter-connected nature of ecosystems and recognition that the wellbeing of each natural resource within them is connected to the wellbeing of the other resources around it. For example, spring rain and summer melt from the snow and glaciers of the Alps provides a significant proportion of the water in large braided rivers such as the Waitaki. A mild, dry winter without significant snow or a spring without moist northwesterlies can mean that these rivers run low in the summer, affecting the things that rely on this water, the generation of hydro- electric power, recreational activities and agriculture.

Vegetation cover can also affect riverflows and groundwater by influencing the amount of rainfall lost by evapotranspiration. For example, small catchments covered in forest have been found to have significantly lower water yields than similar catchments covered in pasture. Wetland systems can store water in wet periods and continue releasing it in dry conditions, thereby benefiting low flows. Drainage of large areas of wetland can therefore result in decreases in summer stream flow, particularly in smaller catchments. This has an effect on both natural habitats and on human activity.

The quality of water in streams and groundwater is linked to what is happening on the land. Water running over the land, or seeping through the soil, picks up contaminants and carries these into adjacent water bodies. Types of land use and land use practices can therefore have a major influence on the water quality of adjacent water bodies. For example, streams in agricultural catchments often contain nutrients and micro-organisms from animal effluent and nutrients from fertilisers, while streams in urban areas can contain harmful contaminants washed off road surfaces. Many of the land and water processes are inseparable: soil erosion becomes water siltation, dissolved and suspended substances washed from the land find their way into surface waters. This in turn leads to change in ecosystems, including the human communities that form part of those ecosystems.

(b) Relationships with People and Communities

Integrated management provides for the links between people and their communities that extend, through their lifestyles, to the natural and physical world around them. Within the framework provided by the sustainable management of resources, people and communities need to provide for their wellbeing, health and safety. The concepts of health and safety, and social, cultural and economic wellbeing are not distinct but interconnected, forming an overall framework that may be summed up as human wellbeing.

The health of communities is linked to, and ultimately dependent on, the health of the environment, which is the basis for all aspects of wellbeing. Economic wellbeing is dependent on the meeting of basic needs, such as food and energy production, shelter and security. It implies a significant measure of commercial and financial prosperity but this needs to be achieved within a framework of sustainable resource management. The use of natural resources to provide for human wellbeing is evident in the Canterbury landscape, which is characterised by farming and the physical resource infrastructures of energy production, transport and communication. Canterbury communities are responding positively to the need for sustainable management of resources, for example: landcare in the Hakataramea Valley and Upper Waimakariri Catchment, the working party approach to water and land management in the Waitaki Catchment and integrated rural development initiatives in South Canterbury.

As Canterbury's population increases it can be expected that the demands on natural and physical resources will also increase, both by those who want to actively use resources, and those who want to protect certain resource values. For example, more people means more demand on water for energy production, irrigation and domestic/industrial consumption, but also more people who value rivers for ecological or recreation reasons.

As society has become more complex, the demands placed on the environment have intensified. Many aspects of social wellbeing are also centred on the use of natural and physical resources. These include recreation (e.g. the Coast to Coast race, the World Gliding Championships at Omarama, camping, fishing and tramping); the environment as a source of inspiration for literature and the arts (e.g. the Aoraki Festival of the Arts and Rita Angus' paintings of Cass and the Canterbury Plains) and for learning about, and from, the natural world (e.g. the unique ecosystems of braided rivers and Te Waihora (Lake Ellesmere)).

The environment can also be central to the cultural wellbeing of people and communities, particularly through a sense of belonging and 'place' that extends to both natural and physical resources. This relationship is expressed in the Maori concept of turangawaewae and through organisations such as Civic Trusts, historical societies and protection associations. Sense of place is sometimes expressed very strongly through literature, for example: Keri Hulme's 'Moeraki Conversations'. Some places also have great spiritual or sacred value for different communities and cultures. The spiritual value of Aoraki for Tangata Whenua is well known but there are other places, wahi tapu and wahi taonga, that are also valued. Spiritual value is also attributed to water in many cultures (e.g. baptism and christening) and cultural wellbeing is also linked to the environment as a place for psychological refreshment - 'getting away from it all' or 'going bush'.

Many areas of cultural significance are entrusted to the Department of Conservation as national parks and scenic reserves. There are also many areas of significance along the coast and each community has its own valued sites and special places. District/city councils maintain areas of cultural significance, such as heritage trails and historical museums, while marae and urupa are often on Maori reserves.

The strong relationship between people and communities and the natural environment indicates that promoting sustainable management of resources is an important first step in enabling people to provide for their social, economic and cultural wellbeing and for their health and safety. Although the Regional Council cannot directly provide for these matters it has a responsibility to consult and to assess the social, cultural and economic effects of its resource policies and proposals, in order to ensure that they are not disabling people and communities from providing for their wellbeing, health and safety. This involves consideration of issues such as:

- equity of access to natural and physical resources, and to the management process for resources, by different sectors of the regional community;
- resource allocation decisions where ecological, community and economic needs require reconciliation through management regimes which achieve the purpose of the RM Act.

(c) The Economic Inter-Relationships

The Canterbury Region has a strong farming economy based on well established pastoral and mixed farming sectors, and increasingly important horticulture, viticulture and other special agrarian industries. The forestry and logging sectors at present are quite small (around 2% of regional gross output) and fishing and aquaculture make a smaller contribution. Overlying this pattern is a growing tourism and recreation industry based in part on an increasing number of people wanting to experience the recreational opportunities and rural way of life that the region has to offer. International tourism numbers are likely to increase substantially by the end of the decade with a significant proportion of this growth being in the rural tourism sector.

The diversification into high value specialist crops which need reliability of water supply is increasing the demand for irrigation from groundwater and surface water.

However, the largest sectors of the economy (measured in terms of gross regional output) are all urban based, with financial and business services, wholesale and retail trade, manufacturing, public administration, and building and construction between them contributing more than 50% of gross regional output. Farming, farm related processing and timber products contribute a further 30% with transport services around 7%. Employment shows a similar pattern but with lower numbers in the primary sector, and higher in community, social and personal services, and wholesale, retail, restaurant and hotels. Central to agriculture, processing industries and manufacturing is access to energy sources. Canterbury is a major producer of hydro-electricity, however much of it is transmitted to the North Island via the national grid.

There is, of course, a high but variable interdependence between 'rural' and 'urban' activities with farming making sales to, and purchasing from, a wide range of urban services. The dependence of the urban sector on the farming economy is illustrated by the way the economic effects of events such as droughts work their way through the urban economy. The livelihood of small towns in particular is closely related to agricultural prosperity. The tourism sector needs rural and urban accommodation, retail, transport, food and servicing facilities. Urban dwellers are clients for rural recreation. As a result, tourism and recreation have wide-ranging effects across many sectors of the economy and throughout Canterbury.

Table 1: Population Distribution in the Canterbury Region*

Population by District				Towns within District Council Areas			
District Council	1986	1991	1996	Towns	1986	1991	1996
<i>Kaikoura</i>	3,529	3,714	4,040	<i>Kaikoura</i>	2,209	2,399	2,731
<i>Hurunui</i>	9,280	9,558	10,113	<i>Amberley</i>	750	795	945
<i>Waimakariri</i>	25,400	27,861	32,225	<i>Rangiora#</i>	7,955	8,395	9,255
				<i>Kaipoi</i>	6,288	6,755	6,904
<i>Selwyn</i>	20,520	21,357	25,141	<i>Leeston</i>	1,017	1,116	1,221
				<i>Darfield</i>	1,069	1,138	1,280
<i>Christchurch</i>	286,601	292,860	315,118	<i>Christchurch</i>	286,601	292,860	315,118
<i>Banks Peninsula</i>	7,232	7,636	8,768	<i>Lyttelton</i>	2,849	2,868	3,075
				<i>Akaroa</i>	722	757	834
<i>Ashburton</i>	24,855	24,435	25,127	<i>Ashburton</i>	14,030	13,878	14,221
				<i>Methven</i>	923	969	1,121
<i>Timaru</i>	43,394	43,209	42,964	<i>Timaru</i>	27,810	26,801	26,611
				<i>Temuka</i>	3,919	3,928	3,939
				<i>Gerladine</i>	2,143	2,125	2,230
<i>Mackenzie</i>	4,866	5,058	5,532	<i>Fairlie</i>	788	768	874
				<i>Twizel</i>	1,274	1,774	1,494
<i>Waimate</i>	8,234	7,794	7,604	<i>Waimate</i>	3,250	3,100	2,938
<i>Waitaki (part)</i>	2,182	2,622	2,280	<i>Kurow</i>	513	472	400

*1986 figures have been adjusted to match 1991 boundaries (Dept Statistics 1991 Census)

not including Southbrook

