

**BEFORE THE HEARINGS PANEL
FOR THE QUEENSTOWN LAKES PROPOSED DISTRICT PLAN**

IN THE MATTER of the Resource
Management Act 1991

AND

IN THE MATTER of Stage 2 including
variations to Stage 1 of
the Proposed District
Plan

**MEMORANDUM OF COUNSEL ON BEHALF OF THE QUEENSTOWN LAKES
DISTRICT COUNCIL REGARDING THE OTAGO REGIONAL POLICY STATEMENT**

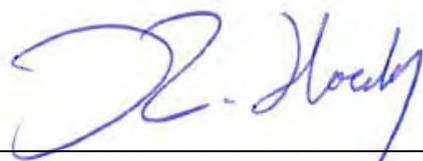
7 January 2019

Queenstown Lakes District Council
Counsel: K L Hockly
10 Gorge Road
Queenstown 9300
Ph: (03) 441 1784
Email: katharine.hockly@qldc.govt.nz

MAY IT PLEASE THE PANEL

1. This memorandum is filed on behalf of Queenstown Lakes District Council (**Council**). Its purpose is to update the Hearing Panel (**Panel**) and submitters on the status of the proposed Otago Regional Policy Statement (**pORPS**).
2. The Otago Regional Council resolved on 12 December 2018 to make operative those provisions of the pORPS that are now beyond challenge (either because they were not the subject of appeals or have been dealt with by consent orders). These provisions will become operative on 14 January 2019.
3. Public notice has not yet been issued, however the details of the Otago Regional Council meeting (including the agenda and associated reports) can be found on the Otago Regional Council Website.¹
4. In summary, from 14 January 2019 the operative parts of the Regional Policy Statement can be found in the following two documents:
 - 4.1 **Appendix 1:** Regional Policy Statement for Otago 1998: Partially Operative. The provisions of the 1998 RPS that will be revoked from 14 January 2019 are shown in shaded grey text; and
 - 4.2 **Appendix 2:** Partially Operative Otago Regional Policy Statement 2019. This document shows all provisions that will become operative on 14 January 2019. Those provisions of the pORPS that are still subject to court proceedings and therefore remain proposed, are helpfully listed on pages 3 and 4 of this document.

DATED this 7th day of January 2019



K L Hockly
Counsel for Queenstown Lakes District
Council

¹ <https://www.orc.govt.nz/news-and-events/events/2018/december/council-meeting-12-december-2018>.

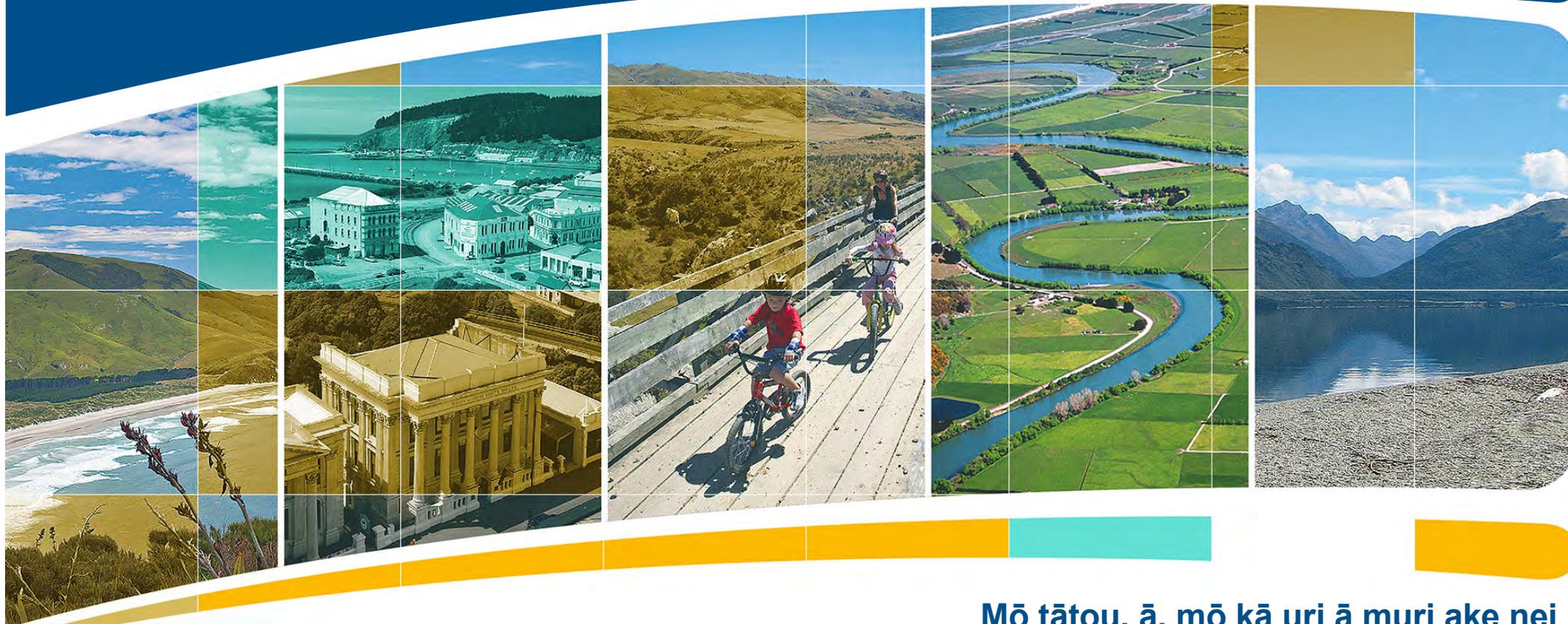
APPENDIX 1

**Regional Policy Statement for Otago 1998: Partially Operative as of 14 January
2019**

APPENDIX 2

Regional Policy Statement 2019: Partially Operative as of 14 January 2019

Regional Policy Statement for Otago 1998: Partially Operative as of 14 January 2019



Mō tātou, ā, mō kā uri ā muri ake nei
For us and for the generations
that come after us

2019

Regional Policy Statement for Otago 1998: Partially Operative, as of 14 January 2019

Explanatory note:

Being “partially operative” means that some provisions in this document have been revoked, and do not have any legal force. This document works in conjunction with the Partially Operative Regional Policy Statement for Otago 2019.

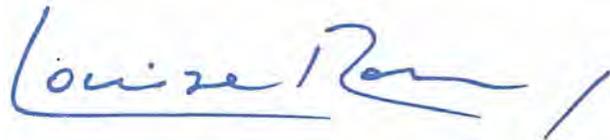
Provisions that are revoked are shaded grey. Where applicable, the provisions that directly replace revoked provisions are indicated by footnote.

This explanation does not form part of the RPS.

This is a true and correct copy of Regional Policy Statement for Otago which was approved by the resolution of the Otago Regional Council on Monday 14 September 1998.

The Regional Policy Statement for Otago is deemed to be operative on Thursday 1 October 1998.

The Common Seal of the Otago Regional Council was hereunto affixed pursuant to the resolution of the Council passed on Monday 14 September 1998, in the presence of:



Chairperson



Director Corporate Services

Regional Policy Statement for Otago

ISBN 0-908922-59-0

Otago Regional Council
October 1998

Chairperson's Foreword

It gives me great pleasure to present the fully operative Regional Policy Statement for Otago.

The Proposed Regional Policy Statement was publicly notified back in October 1993. Following the statutory process of submissions, hearings, and appeals, this Regional Policy Statement for Otago became operative on 1 October 1998.

The Regional Policy Statement for Otago was the first major policy document prepared by the Otago Regional Council under the Resource Management Act, and it has established the framework for all the Council's planning documents since that time. We now have four Regional Plans, in varying stages of development, all of which come under the umbrella of this Policy Statement.

While prepared by the Regional Council, this Policy Statement belongs to the region. It has been developed in close consultation with the territorial local authorities, Iwi, central government agencies, other relevant bodies and the public of Otago. The Otago Regional Council's focus throughout the statutory process has been on enabling people to participate and on seeking to ensure the most effective public involvement throughout the public hearing and decision making phase.

One of the fundamental prerequisites for the achievement of sustainable management is broad public participation in the policy development process.

The goal we are all working towards is in line with Agenda 21 - from the 1992 United Nations Conference in Rio de Janeiro. Like Agenda 21 and the Healthy Communities concept, we are seeking an active partnership between the physical, social and economic environment in order to achieve a sustainable future for everyone.

Sustainable management - management of the use, development and protection of resources that does not destroy or undermine the ecological, economic or social basis of which continued well being depends, is the only viable path for the 21st Century. The

resources of Otago are in our care for our children's children. The Regional Council is committed to ensuring that this Regional Policy Statement will underpin future environmental management in Otago.



The Statement considers all of Otago's natural and physical resources and puts in place a framework to ensure their sustainable use, development and protection. Sustaining the productive capacity of the land, the quantity and quality of Otago's water resources, the natural character of the coast and significant and outstanding landscapes and biota are important community objectives.

Implementing these objectives, policies and methods will require a commitment from both local and central government, in conjunction with the community.

May I take this opportunity to express the Council's sincere thanks to all those involved in the submissions process and for the valuable contributions made by so many. Your comments and suggestions have assisted us greatly and it is our hope that this Regional Policy Statement will now positively shape Otago's environment for tomorrow.

A handwritten signature in blue ink that reads "Louise Rosson". The signature is fluid and cursive, with a long horizontal stroke at the end.

Louise Rosson
Chairperson
Otago Regional Council

How to Use the Regional Policy Statement

This Regional Policy Statement considers all of Otago's significant regional resource management issues. It provides objectives, policies and methods of implementation in order to address those issues. Each of the issues, objectives and policies is accompanied by an explanation.

Although all of Otago's resources are interrelated, it has been necessary, within this Policy Statement, to consider particular resources in individual chapters. In order to reflect the interrelated nature of the use, development and protection of resources, a reference system has been used within the Statement. This provides a linkage between chapters, and between issues, objectives, policies and methods within each chapter:

- Each issue, objective and policy is referenced to other chapters within the Policy Statement, where those chapters contain issues, objectives or policies which may affect that particular issue, objective or policy.
- Each of the issues is referenced through to the relevant objectives and policies within each chapter.
- Each of the objectives is referenced through to the relevant policies within each chapter.
- Each of the policies is referenced through to the relevant methods within each chapter.

This cross referencing system is for information purposes and to highlight potential links between resource issues and concerns. Particular connections and issues of integration will still need to be addressed on a case by case basis, in relation to particular circumstances.

The Regional Policy Statement is divided into 15 chapters and 3 appendices.

Table of Contents

Chairperson’s Foreword.....	i	4 Manawhenua Perspective	27
How to Use the Regional Policy Statement.....	ii	4.1 Introduction	28
Table of Contents.....	iii	4.2 Roles of Different Agencies	33
Table of Figures	v	4.3 Issues	34
Table of Tables	v	4.4 Objectives.....	38
1 Introduction.....	1	5 Land	43
1.1 What is a Regional Policy Statement?	2	5.1 Introduction	44
1.2 Statutory Background to this Statement.....	2	5.2 Roles of Different Agencies	45
1.3 Effect of this Statement	4	5.3 Issues	46
1.4 The Contents of this Statement	4	5.4 Objectives.....	50
1.5 International Context.....	6	5.5 Policies	52
1.6 Significant Resource Management Issues of the Region.....	6	5.6 Methods.....	59
1.7 Integrated Management.....	6	5.7 Anticipated Environmental Results.....	62
1.8 Issues, Objectives, Policies, Methods and Environmental Results.....	8	6 Water.....	63
1.9 Relationship to Other Plans and Policies	9	6.1 Introduction	64
1.10 Section 32.....	9	6.2 Roles of Different Agencies	65
1.11 Methods of Implementation	10	6.3 Issues	67
1.12 Consultation.....	11	6.4 Objectives.....	73
1.13 The Review of this Statement	11	6.5 Policies	76
2 Treaty of Waitangi.....	13	6.6 Methods.....	83
3 Regional Description.....	19	6.7 Anticipated Environmental Results.....	86
3.1 Introduction	20	7 Air	87
3.2 Regional Population.....	20	7.1 Introduction	88
3.3 Regional Economy	20	7.2 Roles of Different Agencies	89
3.4 Natural and Physical Features	22	7.3 Issues	90
		7.4 Objectives.....	92
		7.5 Policies	93
		7.6 Methods.....	95
		7.7 Anticipated Environmental Results.....	97

8	Coast	99	12	Energy	167
	8.1 Introduction	100		12.1 Introduction.....	168
	8.2 Roles of Different Agencies	102		12.2 Roles of Different Agencies	170
	8.3 Issues	103		12.3 Issues.....	171
	8.4 Objectives.....	106		12.4 Objectives	173
	8.5 Policies	108		12.5 Policies.....	174
	8.6 Methods	115		12.6 Methods	176
	8.7 Anticipated Environmental Results.....	118		12.7 Anticipated Environmental Results	178
9	Built Environment	119	13	Wastes and Hazardous Substances	179
	9.1 Introduction.....	120		13.1 Introduction	180
	9.2 Roles of Different Agencies	121		13.2 Roles of Different Agencies	181
	9.3 Issues.....	122		13.3 Issues	183
	9.4 Objectives	125		13.4 Objectives	187
	9.5 Policies.....	127		13.5 Policies	189
	9.6 Methods	131		13.6 Methods	196
	9.7 Anticipated Environmental Results	133		13.7 Anticipated Environmental Results.....	198
10	Biota	135	14	Monitoring and Review	199
	10.1 Introduction	136		14.1 Introduction	200
	10.2 Roles of Different Agencies	137		14.2 Roles of Different Agencies	202
	10.3 Issues	138		14.3 Issues	203
	10.4 Objectives.....	141		14.4 Objectives	206
	10.5 Policies	143		14.5 Policies	207
	10.6 Methods.....	146		14.6 Methods	210
	10.7 Anticipated Environmental Results.....	148		14.7 Anticipated Environmental Results.....	211
11	Natural Hazards	149	15	Cross Boundary Issues	213
	11.1 Introduction.....	150		15.1 Introduction	214
	11.2 Roles of Different Agencies	152		15.2 Roles of Different Agencies	215
	11.3 Issues.....	155		15.3 Issue	216
	11.4 Objectives	158		15.4 Objective.....	217
	11.5 Policies.....	160		15.5 Policies	218
	11.6 Methods	164		15.6 Methods	219
	11.7 Anticipated Environmental Results	166			

Appendix A: Maori Terms and Phrases.....	222
Appendix B: Glossary.....	224
Appendix C: Part II of the Resource Management Act.....	231

Table of Figures

Figure 1 Resource Management Framework.....	3
Figure 2 Otago Region.....	5
Figure 3 Process for Addressing Resource Management Issues	8
Figure 4 Land Use Capability Classes in Otago.....	23
Figure 5 New Zealand's Coastal Management Framework ...	100
Figure 6 Existing and Potential Hydro-Electric Resources in New Zealand	168

Table of Tables

Table 1 Usually resident population of the Otago Region (1991), by Local Authority Area.....	20
Table 2 Glossary of Maori Terms	32

1

Introduction



1.1 What is a Regional Policy Statement?

The Otago Regional Policy Statement is part of the framework established under the Resource Management Act 1991 for the sustainable integrated management of Otago's natural and physical resources. The main elements of this framework are shown in Figure 1.

The Otago Regional Policy Statement provides an overview of the resource management issues of the Otago region and the ways of achieving the integrated management of its natural and physical resources. It provides a framework within which the regional coastal plan, any regional plan, and any district plan sit. These plans must reflect the provisions of the Otago Regional Policy Statement and cannot be inconsistent with it.

At the next level, regional plans and the regional coastal plan can be developed to assist the Otago Regional Council in carrying out any of its functions. These plans cannot be inconsistent with each other. At present, the Council has made a commitment to preparing five regional plans: the Regional Plan: Land, the Regional Plan: Water, Regional Plan: Air, the Regional Plan: Coast and the Regional Plan: Waste. This commitment is identified in the Methods section of the appropriate chapters. Other plans may be prepared from time to time as is considered necessary and appropriate.

District plans are developed by Otago's city and district councils to assist the councils in carrying out any of their functions. These plans cannot be inconsistent with any of the instruments shown.

National Policy Statements, including the New Zealand Coastal Policy Statement, are intended to provide a national overview of significant resource management issues. Every regional policy statement, regional plan, regional coastal plan, and district plan

must reflect the provisions of any national policy statement and cannot be inconsistent with such a statement.

National policy statements, prepared by the Minister for the Environment, state policies on matters of national significance that are relevant to achieving the purpose of the Act. The New Zealand Coastal Policy Statement, prepared by the Minister of Conservation, states policies in order to achieve the purpose of the Act in relation to the coastal environment of New Zealand. The New Zealand Coastal Policy Statement is the only national policy statement required by the Act.

1.2 Statutory Background to this Regional Policy Statement

Section 5 of the Resource Management Act sets out the purpose of the Act as:

"... to promote the sustainable management of natural and physical resources."

"Sustainable management" is defined as:

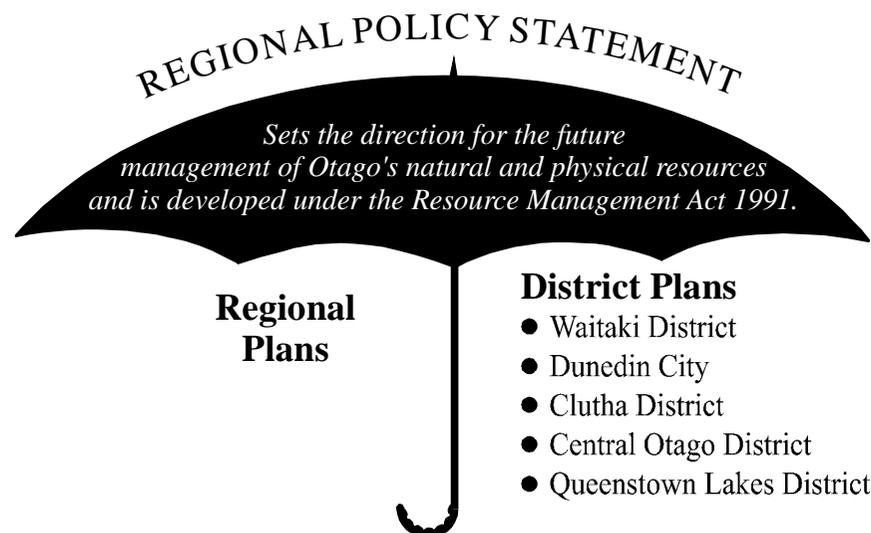
"... managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well being and for their health and safety while-

- (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".*

(Section 5)

Resource Management Act Planning Framework in Otago

National Policy Statements
(Including Coast)



Resource consents and other methods of implementation

Figure 1 Resource Management Framework

Section 59 of the Resource Management Act sets out the purpose of this Regional Policy Statement as:

“...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”.

Sections 6, 7, and 8 of the Act provide a further set of principles to be followed in achieving the purpose of the Act. (Appendix C includes the full text of Part II of the Act).

1.3 Effect of this Regional Policy Statement

This Regional Policy Statement has been prepared for the Otago Region under the provisions of Section 60 (1) of the Resource Management Act 1991.

The Regional Policy Statement shall have effect in the manner set out in the Act over “The Otago Region” as constituted by the Local Government Re-organisation Scheme 1989.

The Authorities within the Otago Region are:

- (1) The Otago Regional Council.
- (2) The **territorial authorities** are:
 - (a) Queenstown Lakes District Council
 - (b) Dunedin City Council
 - (c) Central Otago District Council
 - (d) Clutha District Council
 - (e) Part of Waitaki District Council.

Otago’s geographic area and districts are shown in Figure 2.

1.4 The Contents of this Regional Policy Statement

This chapter provides a general introduction to the Regional Policy Statement.

The second chapter contains the text of the Treaty of Waitangi. It is followed by a discussion provided by Otago’s iwi (Kai Tahu), outlining their perspective on the Treaty.

The third chapter provides a brief overview of Otago, its resource base, its economic, social and cultural attributes, its people and communities, and their activities and relationships with the environment.

Chapters 4 through to 15 describe the regionally significant resource management issues within Otago, and the objectives, policies, and methods of implementation to address those issues. Each chapter ends with the anticipated environmental results expected from the implementation of this policy statement. Each of these chapters are interrelated, emphasising the need for an integrated response to the resource management issues of the region.

Appendix A is a glossary containing definitions of Maori words and phrases used in this Policy Statement.

Appendix B is a glossary containing definitions of other words and phrases used in this Policy Statement.

Appendix C reproduces Part II of the Resource Management Act 1991.

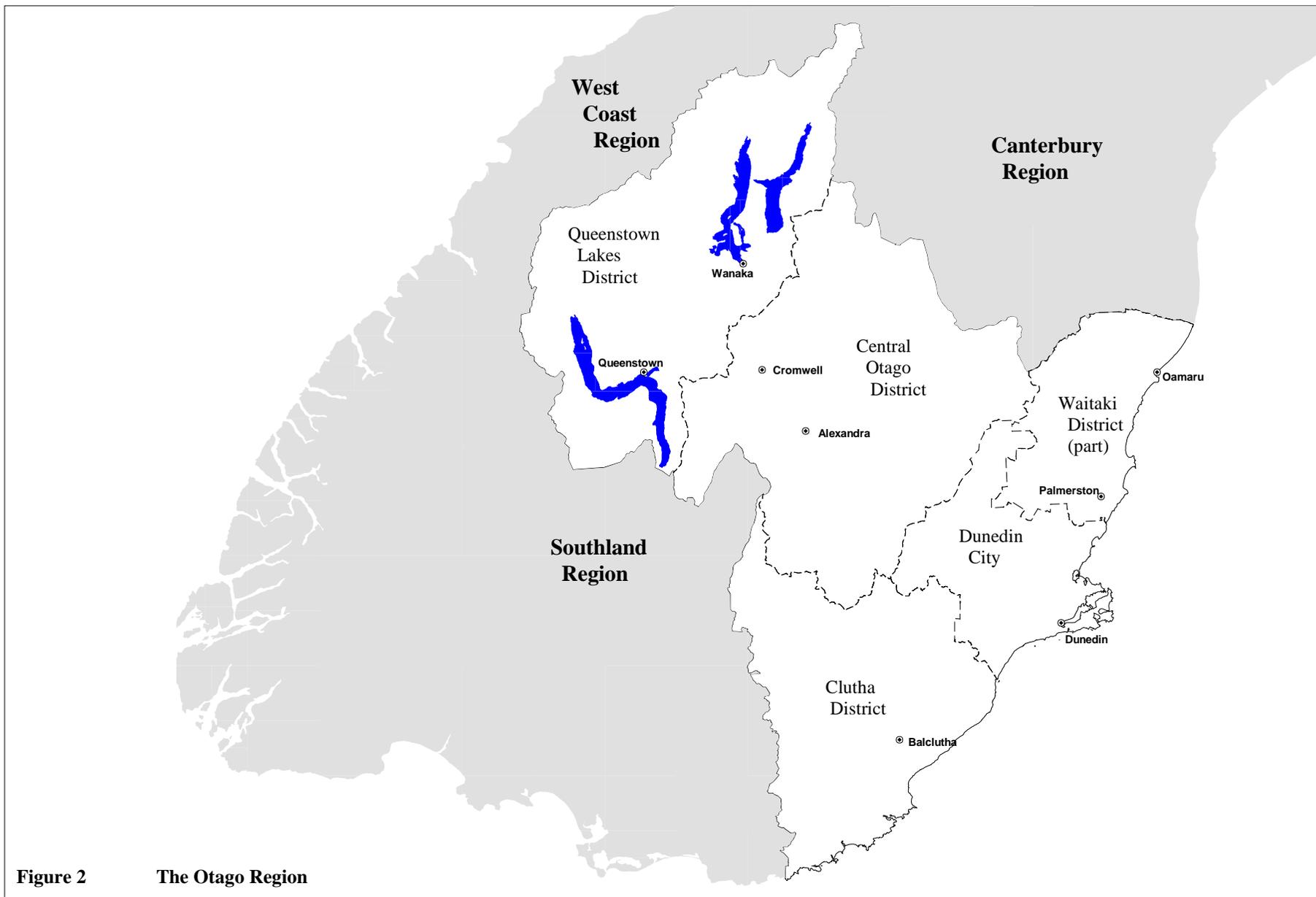


Figure 2 The Otago Region

1.5 International Context

There is increasing global concern and awareness of the need for a sustainable future. Issues such as the greenhouse effect and global warming, the integration of environment and development and the management of waste and hazardous substances have all become globally significant. There is also increasing recognition that New Zealand is part of this global community. This is reflected by the fact that New Zealand is party to many international treaties and agreements with respect to the global environment. Although the Regional Policy Statement is at the heart of promoting sustainable resource management for the region, Otago can make a contribution to improve global sustainability through adopting the maxim of “Think globally, act locally” to issues such as carbon dioxide emissions. However, it remains the responsibility of central government, through national policies and laws, to ratify international treaties and agreements.

1.6 Significant Resource Management Issues of the Region

Section 62 of the Resource Management Act requires the Regional Policy Statement to state the ‘significant resource management issues of the region’ and the ‘matters of resource management significance to iwi authorities’. This has been done through the process of consultation in the preparation of the Regional Policy Statement and through consideration of the provisions of Part II of the Act.

The issues identified in the individual chapters of this Regional Policy Statement are considered to be the significant resource management issues of the region by the Otago Regional Council.

Section 30(1)(b) of the Act also provides that the Regional Council shall have, as one of its functions, the preparation of objectives and

policies in relation to any actual or potential effects of the use of land which are of regional significance. Relevant objectives and policies are included in the chapters of the Policy Statement with additional criteria for determining “significance” where appropriate.

1.7 Integrated Management

Section 59 of the Act requires this Statement to achieve the purpose of the Act by providing an overview of the region’s resource management issues and the policies and methods to achieve integrated management of the natural and physical resources of the region.

Integrated management of natural and physical resources means taking an all-embracing, holistic approach to resource management. It requires that decision-making about any particular resource take into account the likely effects on other natural and physical resources. It also implies a long-term approach, identifying a set of agreed environmental results that enables people and communities to provide for their social, economic and cultural well being.

In order to achieve the Act’s requirement that the Regional Policy Statement provide for integrated management of the region’s natural and physical resources, its provisions must be read as a whole. To assist in the achievement of a holistic approach to resource management, the Regional Policy Statement uses a system of cross referencing to provide linkage between chapters, and between issues, objectives, policies and methods within each chapter. Within this system:

- Each issue, objective and policy is referenced to other chapters within the Policy Statement, where those chapters contain issues, objectives or policies which may affect that particular issue, objective or policy.

- Each of the issues is referenced through to the relevant objectives and policies within each chapter.
- Each of the objectives is referenced through to the relevant policies within each chapter.
- Each of the policies is referenced through to the relevant methods within each chapter.

This cross reference system is for information purposes, to aid understanding of the integrated nature of the Regional Policy Statement and to assist users to read the document as a whole by highlighting potential links between resource issues and concerns. Particular connections and issues of integration will still need to be addressed on a case by case basis, in relation to particular circumstances.

For the purposes of this Statement active integrated management includes:

- (a) Integration of **management responses across resource management agencies**: Recognising that although different agencies have varying functions, powers and duties under the Act, coordination of their actions is necessary to promote sustainable management in the region particularly in areas of shared responsibility.
- (b) Integration **toward shared environmental outcomes**: Recognising that the resolution of key resource management issues which will affect the region's future will be more effective and efficient if resource management agencies and communities work together for common goals.
- (c) Integration of policies, action and decision making needs to be **coordinated across regional boundaries**: This

recognises that there are significant cross boundary issues where the effects of natural and physical resource use cross regional boundaries.

- (d) Integration of **management responses across resource systems**: Recognising that natural and physical resources must be treated as parts of complex and inter-connected bio-physical systems affecting each other and that objectives relating to these resources be considered together in resource management decision making
- (e) Integration of **actions across a range of time scales**: Recognising that the effects of human activities on the environment can be temporary or permanent, may have already occurred, may be happening now, may happen some time in the future and may be cumulative over time.
- (f) Integration of **decision-making with community participation**: Recognising that the values and beliefs of society, particularly those of iwi, must play an important part in natural and physical resource management.
- (g) Integration of **methods to be used to implement policies**: Recognising that there is usually more than one way of implementing policies in an efficient and effective way.
- (h) Integration **across individual decisions**: Recognising that if each decision about the use of, or effects on, a resource is made in isolation, then by the time the effects accumulate to a point where they must be prevented or mitigated, the trends will be set. In such circumstances, not only will arguments of equity make it difficult to change direction, but the adverse effects of the small decisions will by then have reached a magnitude undermining the justification to resist further pressures. This could result in inefficiencies and uncertainties.

1.8 Issues, Objectives, Policies, Methods and Environmental Results

A resource management issue occurs when an activity, or a natural occurrence such as a natural hazard or a pest, creates an environmental effect requiring some form of intervention. If there is no effect, then there is no issue. The extent to which those issues are significant is dependent on the values held by people and communities in relation to natural and physical resources, activities and the environment.

The purpose of a Regional Policy Statement is to provide an overview of the resource management issues of the region. Section 62 of the Act requires the Statement to set out the significant resource management issues of the region and the matters of resource management significance to iwi authorities. It should also contain 'objectives', 'policies', 'methods' and 'anticipated environmental results'. These terms are used in this Statement in the following way:

An '**objective**' is the desired result, end state, situation or condition that is aimed for.

A '**method**' is the practical action by which a policy is implemented. It is what needs to be done to put the policy into effect.

A '**policy**' is the course of action to achieve the desirable result. It is what needs to be done to get to the objective.

An '**anticipated environmental result**' is the intended result or outcome on the environment as a consequence of implementing the policies and methods.

Figure 3 summarises this process.

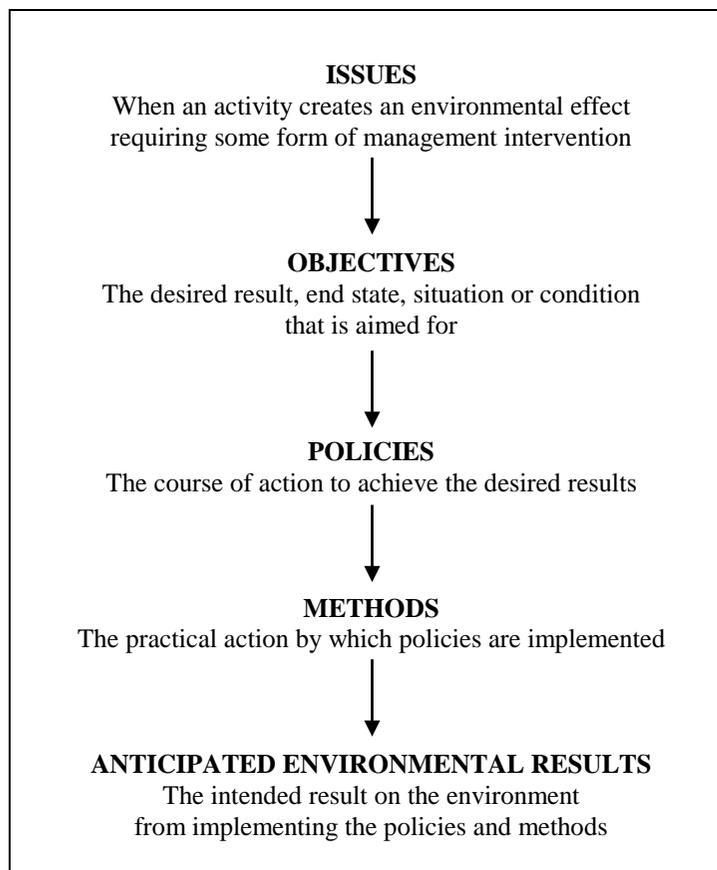


Figure 3 Process for Addressing Resource Management Issues

1.9 Relationship to other Plans and Policies

In addition to not being inconsistent with any National Policy Statement, or the New Zealand Coastal Policy Statement, this Regional Policy Statement cannot be inconsistent with any Water Conservation Order. In addition, section 61(2) of the Act requires that regard be given to:

- (1) Management plans and strategies prepared under other Acts. These could include:
 - Marine Reserve Management Plans under the Marine Reserves Act 1971.
 - Park Management Plans under the National Parks Act 1980.
 - Conservation Plans under the Historic Places Act 1993.
 - Reserve Management Plans under the Reserves Act 1977.
 - Conservation Management Strategies and Conservation Estate Management Plans under the Conservation Act 1987.
 - Sports Fish and Game Management Plans under the Conservation Act 1987.
 - Fisheries Management Plans under the Fisheries Act 1983.
 - Civil Defence Plans under the Civil Defence Act 1953.
 - Regional Land Transport Strategies under the Transit New Zealand Act 1989.
 - Annual Plans and Bylaws under the Local Government Act 1974.
 - Soil Conservation Reserve Management Plans under the Soil Conservation and Rivers Control Act 1941.

- (2) Relevant planning documents recognised by an iwi authority affected by the Regional Policy Statement.
- (3) Relevant entry in the New Zealand Historic Places Trust Register.
- (4) Regulations relating to the conservation or management of taiapure or fisheries.
- (5) Regulations made under the Act.

In preparing or changing the Regional Policy Statement the Otago Regional Council must also have regard to policy statements and plans of adjacent regional councils.

1.10 Section 32

Section 32 of the Resource Management Act requires this Council, in preparing this Regional Policy Statement to have particular regard to alternatives that may be available and the reasons for and against options, including their costs and benefits, when determining objectives, policies and methods. Alternatives were considered as part of the development of the Regional Policy Statement through the consultation held with individuals, interest groups, users and agencies. Those alternatives formed the basis for earlier draft versions of the Proposed Regional Policy Statement which were used for consultative purposes. Additional information and material is contained within the Council's files on alternatives that were considered as part of the policy development.

The Otago Regional Council has considered the requirements of Section 32 in preparing and notifying this Proposed Regional Policy Statement for Otago and is satisfied that the selected objectives, policies and methods are necessary in achieving the purpose of the Resource Management Act and are the most

appropriate means having regard to their efficiency and effectiveness.

The principal reasons for adopting the objectives, policies and methods explain why those objectives, policies and methods have been included in this Policy Statement.

1.11 Methods of Implementation

There is a wide range of alternative methods available to implement the policies of this statement in order to achieve its objectives. These include:

- Providing **incentives** for people and organisations to achieve the objectives of this Regional Policy Statement.
- Providing **information** and helping to raise awareness in the community about environmental issues and the effects of activities.
- Providing **works and services** to directly carry out a required action.
- Providing information on and requiring **assessments of environmental effects**, consistent with the scale and significance of the activity.
- **Encouraging** resource users to take **responsibility** for the management of adverse effects on resources
- Establishing, monitoring and enforcing **rules** and **performance standards** contained in regional and district plans.
- Using a range of **economic instruments** to enable desired results to be achieved.
- Obtaining **ownership** of a resource or site, in order to give management control.
- **Transferring the responsibility** for certain actions and decisions to another organisation by way of a transfer of powers or delegation of functions.
- **Advocating** changes to government policy.

- Recognising and incorporating **industry codes of practice** into planning and decision-making.
- Supporting **negotiated agreements** between parties to environmental issues.
- Undertaking **research and monitoring** to gain an understanding of natural and physical resources and the effects of activities on the environment, including the assessment of risks.
- Establishing and maintaining **inventories** of natural and physical resources.
- Recognising, encouraging and where appropriate co-ordinating the **restoration** of degraded resources, habitat and ecosystems.

The methods identified in each chapter are not intended to be an exclusive all encompassing list. There may be other methods that could be adopted by management agencies during the term of this Statement that will implement the relevant policies in a way that satisfies the requirements of the Act, particularly in regard to the positive obligations of Section 32 to consider alternative means of achieving objectives.

When implementing any of the above methods, including the granting or declining of resource consents, resource management agencies must exercise their discretion within the context of the Resource Management Act and the provisions of the Proposed Regional Policy Statement and any relevant regional or district plans.

The funding and sequencing of the mix of methods will be addressed through regional, district and annual plans of regional and district councils.

1.12 Consultation

The following principles in respect of consultation emerged from the Court of Appeal in *Wellington International Airport v Air New Zealand (1993) 1 NZLR 671*:

- Sufficient information needs to be made available to the consulted party or parties, including further information should this be requested.
- Meetings should be held with the consulted parties and these should be entered into with an open mind.
- Due notice should be taken of what consulted parties have to say.
- The consulting party should wait until all parties have had their say before making its decision.

The development of policies and plans, the undertaking of works and the consideration of resource consents all require a well informed public to have their say. The Otago Regional Council views the process of consultation with the people of Otago as a very important element of its activities.

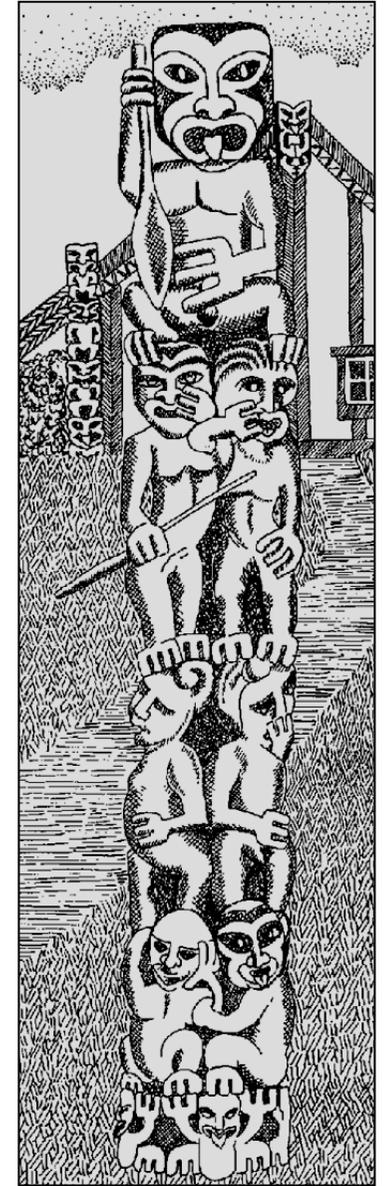
The Otago Regional Council will actively seek the views of Otago's communities, and will be guided by the Court of Appeal's principles in seeking those views. It will seek to use the consultation methods best suited to the particular circumstances and to develop consultation protocols with affected communities. It will provide adequate timeframes, adequate information, and advice to those communities as required to ensure their participation.

1.13 The Review of this Regional Policy Statement

The Regional Policy Statement may remain in operation for 10 years, after which time it must be reviewed. However, circumstances may arise before then to lead the Regional Council to review its contents earlier.

Because this Regional Policy Statement is the first such statement for the Otago region, and because it deals with many resource management issues for the first time, the Otago Regional Council believes it is likely that this document will be reviewed before the 10 year period. It is the intention of the Council to consider the need to undertake a review of this Regional Policy Statement within four years of adoption.

2 Treaty of Waitangi



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

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 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 wakaetanga ki te Kawanatanga 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.

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 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.

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

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 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.

Kai Tahu Whanui Perspective

(Supplied by Roopu Kaitiaki)

Foundation Document

The Treaty of Waitangi is the foundation document of New Zealand society, the basis on which the partnership between Maori and the Crown was established.

The Kai Tahu rangatira Karetai and Korako signed the Treaty on behalf of the Otago section of the tribe at Pukekura (Taiaoroa Heads) on 13 June 1840. The Treaty was also signed at three other locations in Te Waipounamu by Kai Tahu; at Akaroa, Ruapuke and Cloudy Bay.

Kai Tahu considered that the Treaty bound the whole tribe of Kai Tahu irrevocably to an agreement which imposed responsibilities on both signatories, the Crown and Kai Tahu alike.

Kai Tahu Treaty Principle

Although the principles of the Treaty of Waitangi are being determined by the judiciary, the Waitangi Tribunal and the Government, Kai Tahu offer their own Treaty of Waitangi principle left to them by their ancestors:

This was the command that thy love laid upon these Governors-

- That the law be made as one
- That the commandments be made one
- That the nation be made one
- That the white skin be made one and that it be made just equal with the dark skin.....
- And that all might enjoy a peaceable life.
(Petition to the Queen prepared by Matiaha Tiramorehu and the Otago Chiefs, 23 September 1857, when Kai Tahu were pressing the Crown to honour the terms of Kemp's Deed).

More recently a Kai Tahu elder has expressed the principles of the Treaty as:

Article One “Kawanatanga” or “governorship”, meaning the Crown’s responsibility to make just laws and govern by them and the citizens duty to abide by them.

Article Two “Rangatiratanga” or “chieftainship”, meaning the guarantee of Maori property rights, Maori ownership and control of their own economic resources.

Article Three “Kotahitanga” or “one-ness”, meaning equal rights for all, economic as well as political.

(Rakihia Tau, Tuahiwi Marae)

Runanga System

The signing of the Treaty of Waitangi saw the abandonment of the old aristocratic Maori tribal system in favour of a community of equals, a change encouraged also by the missionaries. This adjustment in the interests of equality required by the Treaty is today expressed in the runanga system of community organisation. This reflects the commitment and spirit with which Kai Tahu entered into the new order.

Kai Tahu Loyalty

The succeeding generations of Kai Tahu pledged their loyalty to the Treaty and the original commitment their rangatira made to it. The headstones of Chiefs Karetai and Taiaroa at the Otakou urupa bear inscriptions which are witness of their loyalty to the Queen.

The church at the Otakou marae was built in 1940 as a Centennial Memorial to two events, the signing of the Treaty of Waitangi and the establishment of the first christian mission at Waikouaiti, both of which occurred in 1840.

The Crown

The Crown has exercised its rights of governorship under Article One since the Treaty was signed in 1840. But the non observance of Kai Tahu rights under Article One and Two of the Treaty since the 1840s form the essence of the Kai Tahu ‘claim’ before the Waitangi Tribunal.

The Kai Tahu Claim before the Waitangi Tribunal

The Waitangi Tribunal conducted hearings held throughout the South Island over a two and a-quarter year period, 17 August 1987 to 10 October 1989. The efforts of the claimants, the Crown and the Tribunal’s research teams has resulted in a priceless database with detail on every facet of the ‘claim’. The tribunal produced a 1254 page report on the findings of the “nine tall trees” and a separate report on the fisheries section of the claim. In 1995 a report by the Waitangi Tribunal on the non tribal element of the ‘claim’ was produced, this is known as the ‘Ancillaries Report’.

Quoted from Volume one, page 174 of the Waitangi Tribunal Report in reference to one segment of the Kai Tahu claim “The predominant theme that constantly arises in the findings of the tribunal and indeed almost as constantly conceded by the Crown, is the failure of the Crown to ensure Kai Tahu were left with ample land for their present and future needs”.

Settlement

The Crown and Kai Tahu concluded negotiations to settle the historic Kai Tahu 'claim' with the signing of a Deed of Settlement at Kaikoura on the 21st November 1997.

Partnership

Kai Tahu embrace the ethic of partnership. The principle of sharing is central to Maori sentiment. Kai Tahu recognise the need to work with the wider community to ensure a positive future for all people. Kai Tahu are the Crown's Treaty partner and as such have a special status. The concept of partnership is fundamental to the compact or accord embodied in the Treaty of Waitangi. Inherent in it is the notion of reciprocity. The Treaty implies a partnership, exercised with the utmost good faith. The test for regional and territorial authorities is how they develop an effective partnership with Kai Tahu. The authorities might like to consider some of the Waitangi Tribunal's statements on equitable partnership.

Partnership - The Otago Regional Council View

Every person or body exercising functions or powers under the Resource Management Act 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 (section 8 of the Resource Management Act). In identifying the principles to be taken into account the Council will be bound by legal decisions and particularly notes the three principles set out by the Court of Appeal in *Court of Appeal v Attorney General 1987 CA 54/87*:

(i) The principle of partnership.

- (ii) The principle of active protection of Maori people in the use of their lands and waters to the fullest extent practicable.
- (iii) The principle of utmost good faith in dealings with the other Treaty partner.

The Council will also take into account the perspective of Kai Tahu Whanui in relation to the principles of the Treaty.

In taking account of those principles, there are two broad elements to the partnership requirements to be considered.

The first is related to the **ownership** of the region's natural and physical resources. Ownership issues relating to any of Otago's resources can only be resolved through consultation between the treaty partners - the Crown and Kai Tahu. This Regional Policy Statement cannot consider ownership issues.

The second element is one of partnership over the **management** of the region's natural and physical resources. In taking account of the principles of the Treaty, it is appropriate that this Regional Policy Statement outline how local authorities can recognise and provide for partnership with Kai Tahu relating to the management of the region's resources.

3 Regional Description



3.1 Introduction

This chapter provides a descriptive overview of the Otago region in terms of its population, economy, natural and physical features.

The Otago region, as determined by the Local Government Commission in 1989, comprises approximately 32,000sq km or 3,200,000 hectares of land, making it the second largest region in New Zealand. The region also contains New Zealand's largest city in terms of land area, with Dunedin covering approximately 3,300sq km. The region stretches from the Waitaki River in the north to The Brothers Point in the south, a distance of 480 kilometres, covering approximately 6,650sq km of Coastal Marine Area.

Otago's geographic area and districts are shown in Figure 2 (p5).

3.2 Regional Population

Just over 177,000 people lived in Otago in 1991, with 64.5% of the population living in the Dunedin urban area. Although the Waitaki District is divided between both the Otago and Canterbury Regions, 90% of its population resides in Otago. Otago's population is an ageing one, with significant rises predicted in the over-75 age group. Over 7700 people or 4% of Otago's population indicated Maori ancestry in the 1991 census.

The region's population is predicted to rise by 3.5% by the year 2016, from 177,600 in 1991 to 183,900 (Department of Statistics, 1993). The projected increase consists of a large rise in the population of the Queenstown-Lakes District (78%) and a small rise in Dunedin City, which offsets projected decreases in the other districts of Otago.

	Population	% Share
Waitaki District (part)	19,743	11.1
Central Otago District	14,934	8.4
Queenstown-Lakes District	9,966	5.6
Dunedin City	114,276	64.5
Clutha District	18,189	10.3
Usually Resident Population	<u>177,129</u>	<u>99.9</u>

Table 1 Usually resident population of the Otago Region (1991), by Local Authority Area.

3.3 Regional Economy

The use of Otago's natural and physical resources (eg. land and water) has, since the 1860's, supported primary production activities. Mining, farming, horticulture, viticulture and forestry have formed the basis of Otago's development and continue to be major sources of revenue.

Statistics NZ's 1992 data show that Otago has 8.2 million sheep, which is the second highest number for any region in New Zealand. Lambing percentages and wool production are traditionally within the top three regions in New Zealand. The semi-arid hill and high country of Central Otago is the main source of New Zealand's unique Merino wool production. Fruit production is a key feature of the inland basins. Irrigation is an important facet of production. The better rainfall experienced in the lower altitudes of South and Coastal Otago, plus irrigation in

Central and North Otago, allows intensive high producing crossbred sheep and beef systems, integrated with dairying, forestry, grain and horticulture production, for export and domestic consumption. These resources provide the basis for Otago's economic activity which recent forecasts estimate contribute over 5% of New Zealand's total economic activity.

Tourism is becoming increasingly important to the prosperity of Otago's communities, contributing approximately \$168 million to the regional economy for the year ended March 1990. In that year, Otago hosted approximately 464,000 overseas visitors and around 1,010,000 New Zealand visitors. The Queenstown-Lakes District, the fastest growing local authority in New Zealand and one of the country's major tourist destinations, hosted an estimated 325,000 international visitors who stayed 845,000 person nights and 103,000 New Zealanders who stayed 262,000 person nights during 1994.

Department of Statistics data indicate that the Otago economy has grown slightly in terms of number of business operating units or people employed over the past five years. While a decline has occurred across all business sectors, recent years have seen a more marked decrease in manufacturing, construction and the primary sectors. Otago reflects the national distribution of industry types, with slightly more people employed in the agricultural sector and a slight under-representation in manufacturing. The region also has fewer people employed in business and financial services and a greater number working in the areas of community, social and personal services.

Community, social and personal services are the most important employment sector in the region, employing 30% of the region's work force in 1994. Health Care Otago alone employed over 3,800 people or approximately 6% of the total Otago labour force. A further 3,000 people were employed in the provision of tertiary

education in Dunedin. This includes the University of Otago, Dunedin College of Education and the Otago Polytechnic. Other Government organisations were also major businesses in the region, with local authorities and government departments likely to employ at least a further 5% of the Otago labour force.

Dunedin dominates in terms of the geographical distribution of businesses in the region, with over 60% of jobs located in the city. The number of people employed in businesses within the rest of Otago tends to be fairly evenly spread amongst the other four districts.

Dunedin City provides many of the services to support rural producers, who in turn provide raw materials which are channelled into the city for processing or which pass through the city's port or other transport networks. There are four locally recognised harbours in Otago (Oamaru, Karitane, Otago and Taieri Mouth) and the region is served by a major shipping port - Port Otago. Port Otago had a Gross Registered Tonnage of 6,098,700 for the year ending 30 June 1994.

Regional development requires an efficient land transport infrastructure to ensure a fast, safe and comprehensive movement of people and products. While some areas of Otago are isolated or relatively uninhabited, regional communication networks are well established and reliable. Otago has an extensive roading network comprising 1,269 km of State Highways, 124 km of special purpose roads and 8672 km of local roads. Otago's rail networks extends over 290 km. The road network and, to a limited extent, the rail network link the major towns and rural areas.

The Otago region has been targeted as having the potential to become one of the major forestry regions in New Zealand. The Ministry of Forestry estimate that Otago's total plantation size is in the order of 92,074 ha as at 1 April 1994 with the predominant

share of trees being located in the Clutha District. A steady increase in the supply of timber is expected, reaching a predicted production of 2,340,000 cubic metres in the year 2015. This growth in wood resource is expected to provide the foundation for an export-led expansion of the forest products industry in Otago.

3.4 Natural and Physical Features

A diverse range of landforms, soils, vegetation, climates and water bodies are found within Otago. The character of the land changes significantly from coastal hills and downlands to broad inland basins and block mountains, through to the Southern Alps with their glacial lakes and rugged alpine features.

The distinctive and characteristic parts of Otago include the tussock and tor covered block mountains and dry inland basins, glacial lakes and their mountain settings, the broad grassy valleys fringed with beech forests extending well into the Southern Alps and the dramatic coastlines around the Otago Peninsula and the Catlins. Another special characteristic of the region is its diversity of vegetation, from the lowland podocarp forests of the Catlins, through the dryland, grassland ecosystems of Central Otago to the high rainfall beech and alpine communities of Mount Aspiring National Park.

Against this still predominantly natural backdrop, human activity has overlaid further distinctive characteristics such as large and small scale features left by early miners (water races, tailings, stone structures and clusters of buildings that have remained from the goldrush era), the vegetation patterns associated with long-standing pastoral and horticultural activity, hydro lakes, and the historical architecture of Dunedin and Oamaru. Otago's diverse historical and cultural past is reflected in its heritage resource, such as Maori archaeological sites, middens and ovens, Central Otago's goldfield

tailings and bridges, Arrowtown's streetscape, the quarries and kilns located in the Clutha district and Dunedin's terrace housing, amongst others. Many of the results of human activity are in harmony with their surroundings, for example, the vivid autumn colours of the deciduous trees planted in Central Otago have become yet another feature of the region and are appropriate highlights in the tussock and rock landscape.

Otago's landscape qualities are important to the region as they define Otago's distinctive character, and add to the settings for the region's tourist industry and lifestyles.

Otago contains a range of indigenous ecosystems at different stages of modification; some are still relatively unmodified by human influence, such as the indigenous beech forests in Mt Aspiring National Park and the Catlins, while others, such as tussock grasslands, became established after the destruction of forest by fire at least four centuries ago. All have degrees of landscape, cultural and nature conservation values. Many of these unmodified areas are protected as part of the lands administered by the Department of Conservation, including Mount Aspiring National Park. Some further areas are protected by covenants, while conservation, heritage, ecological and scientific values associated with other areas have been recorded in a variety of independent studies. Relatively unmodified areas characteristic of Otago are important components of its identity.

Otago has New Zealand's largest area of Crown lands, which include vast areas of high country used predominantly for pastoralism. As physical access improves, more people are using these areas for recreation and relaxation, resulting in actual and potential conflicts between property owners and occupiers and those seeking access. Some of these issues have arisen because the land used for pastoralism is predominantly held under Crown pastoral lease and the public do not have an automatic right of

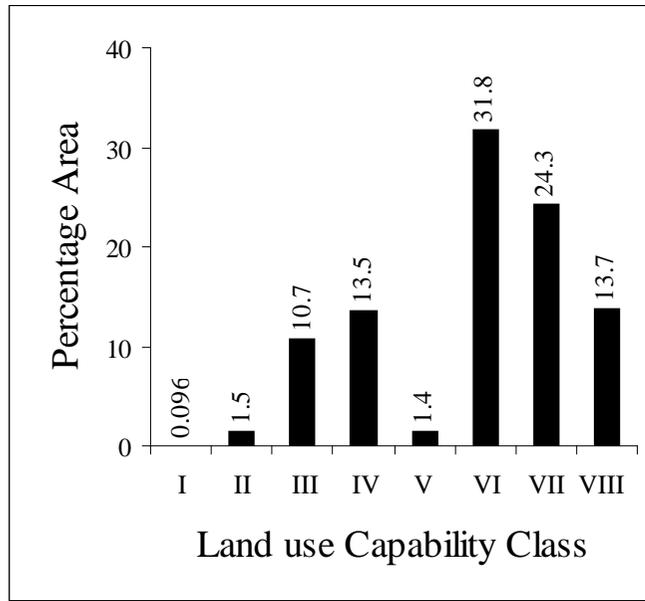


Figure 4 Land Use Capability Classes in Otago

access to such lands, but must seek the approval of the lessee. Issues have arisen between territorial local authorities, landholders and recreationists over access on public roads, especially unformed legal roads, to the coastal marine area, lakes, rivers and other areas. Maintenance of access to these areas is a matter of national importance and must be recognised and provided for.

Development of lifestyle blocks around the Queenstown-Lakes area has also produced conflict with some favouring the retention of this land as economic units while preserving the natural landscape.

Figure 4 shows that only 26% of Otago's total land resource is arable (able to be cultivated). Only 8% of this land contains high

class soils (2.2% of Otago's total land resource). Arable land is that land classed as Landuse Capability Classes I, II, III or IV. For an explanation of Landuse Capability Classes, see the glossary. Otago's high class soils are limited to the Taieri Plain, North Otago downlands, South Otago lowlands, parts of Central Otago and the Strath Taieri and along some river margins. The use of these soils can be constrained by external factors such as economics, erosion, natural and human induced hazards, animal and plant pests.

Patterns in Otago's landuse are changing. Small holdings are becoming a significant feature of rural landuse, particularly near larger urban settlements and viticulture has become increasingly important in areas previously developed for pastoral farming, eg around Queenstown, Wanaka and Alexandra. Horticultural crops continue to be important, particularly in Central Otago, and farm woodlots and windbreaks have become an important alternative source of revenue as well as providing shelter in exposed places.

Landholders are becoming more willing to experiment with alternatives to traditional agricultural practices in order to retain a viable economic base. The use of minimum cultivation techniques and direct drilling on erosion prone soils, the planting of drought tolerant species in drought prone areas and the growing alternative horticultural crops (eg. essential oils) on areas formerly used for grazing may result in less erosion and soil loss.

In response to market trends, some landholders have diversified into areas such as farm stays. This includes development of run country into ski areas or adventure or wilderness holiday destinations while retaining their traditional pastoral use. Complementary landuses such as adventure tourism over pastoral run country, eco-tourism and farm-forestry emphasise the versatility of Otago's land resource.

Water and land are closely linked. The Clutha River, which originates in the headwaters of Lakes Hawea, Wanaka and Wakatipu, discharges New Zealand's largest annual volume of water. Hydro-electric power generation makes use of the volume of this water with power stations being located at Clyde and Roxburgh. This significant catchment also includes much of the physical, historical and natural characteristics that comprises Otago's character and identity. Other significant natural features of Otago's water systems include the Taieri catchment (incorporating New Zealand's third longest river and its most developed scroll plain), a string of coastal water bodies and wetlands (including Lakes Waihola, Waipori and Tuakitoto) and numerous high altitude wetlands, string bogs and blanket bogs. Landuse, including riparian management, affects the quality and quantity of surface and groundwater. Abstraction from rivers for irrigation increases soil water balance but reduces instream flows which may adversely affect instream life, including fisheries and wildlife.

Water systems throughout the region receive quantities of sewage and industrial effluent discharged from a variety of urban areas and industrial plants. As well as causing cultural concerns, discharges into water bodies have the potential to degrade the quality of the water resource and to detract from the amenity, natural habitat and visual values of the area. Recreational and tourism use of Otago's water bodies is a significant activity, with some water bodies being extensively used (eg. Shotover River, Kawarau River, Lake Wakatipu, Lake Dunstan).

Otago's early wealth and development was largely due to gold mining. Today, both alluvial and hard rock mining, such as Macraes mining operation, occurs in the region and contributes to the regional economy. Modern mining practices, if properly managed and controlled, significantly reduce adverse effects on water, air and soil resources in comparison with the old practices. In some instances rehabilitation of mined areas may produce land

of higher quality than that which existed prior to mining. While Otago's economy is heavily dependent on primary industry sectors, the winning and processing of minerals in the region provides further opportunities for diversification and economic development.

Otago's coastline is scenic and varied, with sand and rock beaches, secluded bays and sheer cliff margins which limit accessibility. All of these features are highly valued by the people of the region but the tourist and recreational potential of Otago's coast has yet to be fully realised. Significant natural features include the Otago Peninsula, areas of fossil and mineral exposures, archaeological sites, wetlands, estuaries, lagoons and harbours, islands, headlands, peninsulas and habitats. The Moeraki boulders, together with the yellow-eyed penguin and seal populations and the Taiaroa Head albatross colony are important tourist and conservation aspects of Otago's coast which highlight its distinctive character. The Catlins area has high natural and scenic values including the only area on New Zealand's east coast with an unbroken natural vegetational sequence from podocarp broadleaf forest at the coast to sub-alpine shrub and tussock-land at higher altitudes.

Global climate change may threaten low-lying coastal areas with rising sea levels which could result in coastal erosion, invasion by the sea of urban or rural areas and contamination of surface and groundwater supplies. Low-lying areas away from the coast would flood more frequently as rivers bank up against rising sea levels. The biodiversity of inland parts of Otago may also be affected due to changes in local climate.

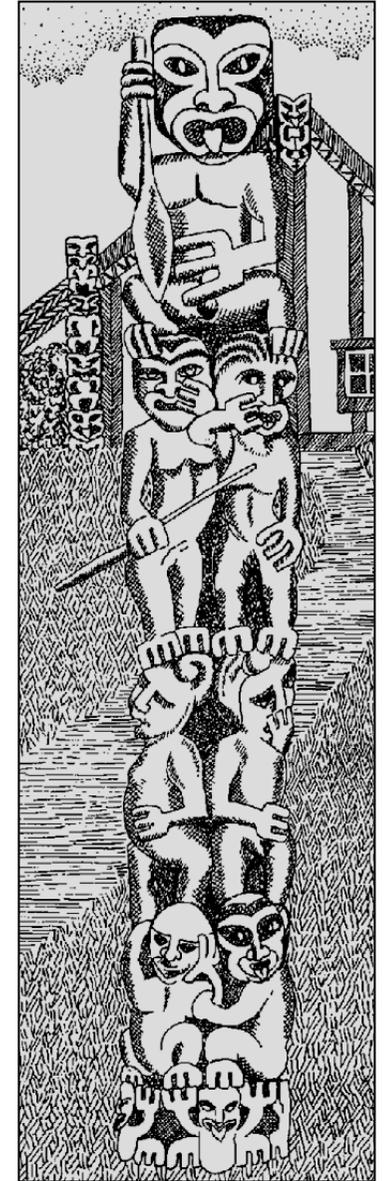
The sustainable management of the region's resources requires the regional, city and district councils to consider all related issues to achieve an integrated strategy of sustainable regional growth and development. Increasing human demands (urban, industrial, agricultural, horticultural, tourist and recreational) are placing

pressures on resources which require careful management to ensure that future needs can be met.

The sustainable management of Otago's resources requires that communities develop wise resource management attitudes, preferably through education rather than regulation. Co-operation of individuals towards a long-term sustainable system of resource use will provide regional as well as local benefits.

4

Manawhenua Perspective



4.1 Introduction

This chapter of the Regional Policy Statement has been developed in consultation with Kai Tahu. The matters of resource management significance to Manawhenua within the Otago region, as developed by Kai Tahu and conveyed to the Otago Regional Council are contained in the Issues section of this chapter.

The mythology, traditions, culture and life of the indigenous people of Te Waipounamu, Te Waka O Aoraki (South Island) the Waitaha, Hawea, Rapuwai, Kati Mamoe and Kai Tahu are intricately linked with the Otago region. The present day descendants are known as Kai Tahu whanui (the large family of Kai Tahu), the custodians of the tribal lore and history. The way in which they relate to their environment is influenced by the very earliest of their ancestors and in turn by their actions which will influence the welfare of future generations.

In this document, the use of the term “Kai Tahu” should be considered as inclusive of “Waitaha”, “Hawea”, “Rapuwai” and “Kati Mamoe”. The term “iwi” (tribe) is used in the same context.

For a definition of the Maori terms and phrases, see Table 2. The glossary contains a definition of all Maori terms and phrases used in this document.

Timatatanga (Creation Tradition)

Water is central to all Maori life. Traditionally, life came into being when Maku mated with Mahoranuiatea, another form of water and begat Rakinui, the sky. Rakinui coupled with a number of wives, including Papatuanuku. From Raki’s various unions came vegetation, animals, birds, the mountains and people and a host of departmental atua. For example, Tane is the atua of the forests and creatures within them.

Like other Maori iwi, Kai Tahu claim the same descendency from Raki and his wives. Whakapapa then, binds Kai Tahu to the mountains, forests and waters and the life supporting them. In this

way, all things are considered to have a mauri (life force) and to have a genealogical relationship with each other. People are therefore related to the natural world.

Wairua (Life Principle)

It is this very direct link, the whakapapa (genealogical) relationship with all things, that influences Kai Tahu philosophy. The interconnectedness of all things, the welfare of any part of the environment influences the welfare of people. This is best portrayed by the whakatauki (proverb):

Toi tu te marae o Tane
Toi tu te marae o Tangaroa
Toi tu te iwi

*If the marae of Tane (deity of the forests)
survives*

*If the marae of Tangaroa (deity of the sea)
survives*

The people live on

Mauri (life force)

Kai Tahu maintain that all elements of the environment possess a mauri or “life force”, be they mountain, flora, or fauna, their quality and sanctity is to be carefully protected from degradation. The mauri is an extinguishable value, the loss of which is recognised by its degraded state, the loss of life supporting values, and at worst, irreversible breakdown.

Mauri binds the spiritual and physical elements of resources together, enabling their existence within the bounds of their own creation. When something dies, the mauri is no longer able to bind the physical and spiritual elements together and thereby give life.

Naming the Land

Kai Tahu whanui tradition of settlement is recorded in the names on the landscape. The history is in the names. Such names take their source from the earliest people, creation traditions, incidents, food resources, weather and ancestors to name a few. The names often reflect specific characteristics of a location. The physical presence of the ancestors in every part of Otago is evidenced by the names that survive. Some examples such as Wanaka, Hawea, Otakou (Otago), Waihola, Kaitangata, Owaka, Moeraki, Kawarau, Wakatipu, Makarora, Pounawea, Waitaki and Waikouaiti form part of every day language in Otago. It is the viewpoint of Kai Tahu that many traditional placenames have been displaced by European counterparts, submerged and in many cases lost.

Waahi Tapu (Sacred Places)

Numerous waahi tapu exist in the Otago region. They take a variety of forms and may be important to iwi while others will have special significance to hapu or whanau. The urupa or burial site is the most significant of all waahi tapu; the place where the bones of many ancestors rest; gone but never forgotten. Other waahi tapu may have significance to iwi such as the site where Pukekura pa once stood at Taiaroa Head, a pa whose history and occupants feature in South Island pre-european contact history.

Mahika Kai (Places where food is produced or procured)

The development of a comprehensive system of food and resource use in the Otago region attracted Kai Tahu into all corners of Otago on a seasonal basis. Numerous food resources, for example ducks, weka, eel and moa were sought after inland. Coastal dwelling people relied on eels, fern and ti, ducks and estuarine and offshore fish. Many forest dwelling birds were also harvested. Water was central to all activity, a sustainer of life. Hapu claimed considerable honour, prestige and mana by virtue of their water and associated resources. This system of resource use, to procure or produce a wide range of resources, is known as mahika kai. Annual expeditions were made beyond Otago also to gather or trade goods.

Kohatu Taoka (Treasured Stone Resources)

Stone materials important to the economy of Kai Tahu, such as greenstone, silcrete, porcellanite and schist were gathered in the interior of Otago and basalt and chert from the coast.

Manawhenua (Those with Rangatiratanga)

The manawhenua of Otago, Kai Tahu whanui, relate to the environment in both a spiritual and physical manner. Their long association with Te Waka O Aoraki (one of the earliest names applied to the Island) or Te Waipounamu (a later name), is evidenced by the manner in which tradition links Kai Tahu from the beginning to the present day - from the time of nothingness to the creation of all things - culminating with the arrival of the first people. The placement of names on the landscape further enhanced the link. The history of occupation and travel throughout the region has left many sites of importance to Kai Tahu. These include places of burial, settlement, battles and of mahika kai and stone and timber resources, to name a few. Kai Tahu identity is indelibly intertwined with the entire region. This enduring relationship enjoyed by Kai Tahu is the responsibility of each generation to protect and care for through the exercise of Kaitiakitanga.

Kaitiakitanga (Guardianship)

Kaitiakitanga refers to how people are the guardians and protectors of places, objects and ideas of value to them. Each means of protection is variable to the place or thing being protected. The traditional relationship Kai Tahu share with the land, sea and air are important to them. Of importance to iwi is the opportunity to provide input into resource management, protecting that which is significant to iwi by restoring its mauri and ensuring that sustainable use of the resource is achieved. In this, iwi have a desire to exercise kaitiakitanga in the region. Enhancement programmes and studies of particular resources lead to alternative methods of use and development in areas where co-operation between Kai Tahu and authorities can occur. The regeneration of plants, such as pingao used in cultural handcrafts, is important to iwi. Kai Tahu value conservation for sustainable use purposes

rather than for its intrinsic values alone. This needs to be addressed to achieve mutual understanding and respect.

Kaitiakitanga in the present day brings Kai Tahu into direct contact with all resource users. The transmitting of cultural concepts and methods of resource use and protection requires consultation.

Consultation on the development of resource policy and plans, and in response to resource consents, is a key element in achieving recognition of kaitiakitanga, and provides Kai Tahu with the opportunity to advocate for the sustainable use and management of the natural and physical resources consistent with cultural beliefs and values.

Management

Maintaining the balance between the main elements of kaitiakitanga is central to the objectives of Maori environmental management systems. This is governed by the use of the concepts of:

- Kawa -protocol and customs, learnt from childhood
- Tapu -spiritual protection
- Noa -unrestricted
- Rahui -restrictions for a limited or indefinite period

These elements are an essential component of Te Ao Maori (the maori world) and the belief system of Kai Tahu. Every member of the community understands and shares the responsibility of living by these customs to avoid adverse effects on the environment.

Present day Kai Tahu

The centres of cultural activity for Otago Kai Tahu are the papatipu marae based runanga of Te Runanga O Moeraki at Moeraki, Kati Huirapa Ki Puketeraki Runanga near Karitane, Te Runanga Otakou at Otakou and Te Runanga Hokonui near Gore. The former three Runanga are located on Maori Reserves, land that has never been alienated and is part of the wider tribal runanga network of which there are eighteen papatipu runanga. The re-emergence of traditional runanga may occur in Otago as Kai Tahu

return to their papatipu lands. Runanga to the north and south of Otago share an interest over inland areas. The four runanga are principal kaitiaki for Kai Tahu resource management matters in Otago.

The Te Runanga o Ngai Tahu Act 1996 created the body corporate responsible for the collective interests of Kai Tahu whanui, and replaces the former Ngai Tahu Maori Trust Board. The legislation provides Te Runanga o Ngai Tahu with statutory recognition as an iwi authority, representing the whole body of Kai Tahu whanui. Papatipu Runanga, of which there are currently four in Otago, are constituent members of the body corporate. Te Runanga o Ngai Tahu is directed by and receives policy guidance from the member runanga, it does not replace the kaitiaki function of the individual runanga.

Maori Reserves

A number of Maori reserves exist in Otago; areas which were excluded from the land sales of the 1840s. These reserves are steeped in history and association and are a place of belonging. For many Kai Tahu it is their turangawaewae. Remaining reserves are located at Moeraki, Waikouaiti, Otakou, Onumia (Taieri Mouth) and Te Karoro (Kaka Point).

Other categories of Maori land exist at Koputai (Port Chalmers) and Otepoti (Dunedin) where tauraka waka 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.

Living on the Land

Papakaika housing and the ability to live on ancestral land is important to Kai Tahu. Land was traditionally owned communally. The decision by the Crown in 1860 to enact legislation which created individual title to Maori land led to multiple ownership and eventual fragmentation of land holdings. The original purpose of the retention of these reserves was lost in the process. The exodus

from the land in search of jobs has reduced many reserves to unused land. Large areas are in a natural state, with numerous absentee owners. Attempts by rating authorities to apportion rate demands has in the main failed. The Rating and Amendment Act 1992 allows for a more flexible approach to be taken where multi-owned land is concerned.

Some sites and resources of cultural importance are located on private land, where protection and access requires the co-operation of the landholder. In cases where the whanau or runanga have a particular interest, consultation with the landholder occurs.

Table 2 Glossary of Maori Terms (See also Appendix A)

Atua	God	Rahui	Restrictions
Hapu	Subtribe, extended whanau	Rakinui	Sky Father
Inaka	Whitebait, colour of whitebait as in pounamu	Rangatiratanga	Chieftainship or authority
Inaka pounamu	Pale greenstone	Runanga	Local representative groups or community system of organisation
Iwi	Tribe	Tane	Deity of the forests
Kai Tahu	Descendants of Kai Tahu	Tangaroa	Deity of the sea
Kai Tahu whanui	The large family of Kai Tahu	Taoka	All things highly prized, including treasures, property, a resource or resources or even a person
Kaitiaki	Guardians	(same as taonga)	
Kaitiakitanga	Guardianship	Taoka raranga	Prized cultural resource used in weaving, flax, pingao
Kohatu Taoka	Treasured stone resources	Tapu	Sacred
Kohanga	Reseeding areas for shellfish	Te Waipounamu	A traditional name for the South Island
Koputai	Traditional name for Port Chalmers	Te Waka O Aoraki	One of the earliest names applied to the South Island
Kotahitanga	Oneness	Ti Kouka	Cabbage trees
Koiwi tangata	Unidentified Maori remains	Timatatanga	Creation tradition
Mahika Kai	Places where food is procured or produced	Tuaki	Cockle
Mahinga mataitai	Places where sea food has been traditionally gathered	Tupapaku	Human corpses
Mana	Authority or influence or prestige	Turangawaewae	Place of belonging through ancestral rights, linked to land
Manawhenua	Those with rangatiratanga for a particular area of land or district	Urupa	Burial places
Manuhaea	Lake Hawea (site of settlement)	Utu	Cost
Marae	Courtyard or meeting place	Waahi	Place
Mauri	Life force	Waahi Taoka	Treasured resources
Muru	Confiscate	Waahi Tapu	Sacred places
Otakou	Kai Tahu settlement on Otago Peninsula	Wai	Water
Otepoti	Dunedin	Wai ki tai	Coastal waters
Pa	Village or fortified village	Wai ki uta	Inland waters
Papakaika	Settlement	Wai whakaheke tupapaku	Places where water burial was practised
Papatipu	Maori Land	Wairua	Life principle
Papatipu Whenua	Ancestral lands	Whakapapa	Genealogy or family tree
Papatuanuku	Earth mother	Whakatauki	Proverb
Pingao	Fibrous plant used for weaving	Whanau	Family
		Whanui	Large or extended

4.2 Roles of Different Agencies

Under the Resource Management Act, every person who exercises functions or powers under the Act in relation to the use, development and protection of natural and physical resources, must take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) (Section 8 of the Act).

As well, the Act specifies that every person who exercises such functions and powers must recognise and provide for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taoka as a matter of national importance (Section 6(e) of the Act). Section 7(a) of the Act also requires that every person exercising such functions and powers have particular regard to Kaitiakitanga.

These requirements under the Resource Management Act must be recognised by local authorities when considering policy and plan development, in the carrying out of works and in the consideration of consent applications. This Regional Policy Statement puts in place a framework within which that recognition can be provided for.

4.3 Issues

	Explanation	Objectives	Policies	See Also Other Issues
<p>4.3.1¹ Waahi Tapu (Sacred Places) The importance of waahi tapu, culturally, spiritually and physically, to Kai Tahu requires greater recognition.</p>	<p>The Resource Management Act leaves waahi tapu undefined. A major reason for not defining waahi tapu is that subtle differences to its meaning occur between the various iwi. To Kai Tahu, waahi tapu are places held in reverence according to tribal custom and tradition. Many waahi tapu exist in Otago, some important tribally, while others are important to runanga. For this reason knowledge of the location of waahi tapu may be limited to a small number of individuals such as in cases where the waahi tapu is of significance to a family who protect and care for that site.</p>	4.4.1		<p>5.3.6 6.3.4 6.3.9 to 6.3.10 8.3.1 to 8.3.3 8.3.6 8.3.8 11.3.1 11.3.3 11.3.7 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1</p>
<p>4.3.2² Waahi Taoka (Treasured Resources) Significant cultural loss to Kai Tahu has occurred through the lack of recognition and protection given to Waahi Taoka and its importance to the culture of Kai Tahu.</p>	<p>“Taoka” is defined as meaning “all things highly prized” and is capable of incorporating a range of economic, spiritual and cultural associations. The word “waahi” means place/s. While having different status to waahi tapu, nonetheless consultation with Kai Tahu and Runanga is required before any action is taken involving such sites. Waahi taoka are a range of resources and places that are important to iwi and runanga. Taoka signifies the whakapapa (genealogical) tree of our world; waahi taoka are the various parts of it, the branches of that tree. Waahi taoka are those resources that sustain life and are culturally and historically important to Kai Tahu. In some contexts waahi taoka can be similar to waahi tapu for the purpose of resource management. Waahi taoka are among those resources that require consultation with runanga and iwi by regional and territorial authorities in Otago.</p>	4.4.2		<p>5.3.2 to 5.3.6 6.3.2 to 6.3.3 6.3.5 to 6.3.8 6.3.10; 7.3.1 8.3.1 to 8.3.8 9.3.1 10.3.1 to 10.3.5 11.3.1 11.3.7 12.3.1 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1</p>
<p>4.3.3³ Wai (Water)</p>	<p>Water plays a significant part in Kai Tahu traditions and culture.</p>	4.4.3		<p>5.3.3 6.3.1 to 6.3.3</p>

¹ Superseded by PORPS 14 January 2019 (Issue 2.2)

² Superseded by PORPS 14 January 2019 (Issue 2.2)

³ Superseded by PORPS 14 January 2019 (Issue 5.4 Issue 2.2)

Issues	Explanation	Objectives	Policies	See Also Other Issues
The mauri of many of Otago's water bodies has been seriously eroded by pollution discharges and further eroded by land and water management practices.	Water is seen as the provider and sustainer of life. The level of water flow, quality of the water, the integrity of the various categories of water traditionally known to Kai Tahu and the health or the mauri of water bodies is important. The mahika kai resources that Kai Tahu depend on are in turn reliant on water quality and quantity. The loss of a substantial part of this resource through drainage, pollution and damming has resulted in the material and cultural deprivation of Kai Tahu.			6.3.5 to 6.3.8 8.3.1 8.3.6 to 8.3.8 9.3.1 10.3.1 to 10.3.2 10.3.4 to 10.3.5 11.3.7 12.3.1 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1
4.3.4⁴ Mahika Kai (Places where food is produced or procured) The vast majority of mahika kai in Otago has been lost through: (a) Land clearance; (b) Water abstraction; (c) Wetland drainage; (d) Pollution discharges; (e) Reclamations; (f) The removal of access; (g) Damming of water bodies.	Mahika kai, described as places where food resources could be procured or produced, is the cornerstone of Kai Tahu existence and culture in Te Waipounamu. In the southern half of the South Island Kai Tahu were dependent on their knowledge of mahika kai and their ability to gather such resources from the land, forests, rivers, lakes and sea. Kai Tahu were a highly mobile iwi and the people depended for their survival on hunting and gathering of food resources over vast distances. Kai Tahu would move to an area and there catch and preserve food to be taken back to the more permanent settlements. The seasonal journeys also gave hapu the opportunity to barter with other hapu. Wilful destruction or pollution of mahika kai was avoided with the aid of an elaborate set of rules, restrictions and guidelines which were enforced by concepts such as tapu, rahui, utu and muru. It was through kaitiakitanga that the balance of resource use and protection was operated. The loss to Kai Tahu of the major part of their mahika kai resources is a breach of the Treaty of Waitangi, redress for which is incorporated in the deed of settlement (21/11/97) between Kai Tahu and the Crown, to be passed into legislation. Regional and territorial authorities will need to have regard to the cultural	4.4.4		5.3.2 to 5.3.3 5.3.5 to 5.3.6 6.3.2 to 6.3.10 8.3.1 8.3.4 to 8.3.8 9.3.1 10.3.1 to 10.3.4 11.3.1 11.3.3 11.3.7 12.3.1 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1

⁴ Superseded by PORPS 14 January 2019 (Issue 2.2)

Issues	Explanation	Objectives	Policies	See Also Other Issues
<p>4.3.5⁵ Kaitiakitanga (Guardianship) The manawhenua concept and practice of Kaitiakitanga needs to be recognised or provided for in the management of Otago’s natural and physical resources.</p>	<p>redress elements of the resulting settlement legislation.</p> <p>Kaitiakitanga (Guardianship), one of the elements of the social order of Kai Tahu, was arranged in accordance with the natural resources and the exercise of tino rangatiratanga. The necessities and comforts of life were provided by this arrangement, barter and exchange among the various groups being the practical outcome and the basis for a tribal economy. As a hunter gatherer people dependent upon seasonal harvesting, a sophisticated system of management skills was developed based on the continuing sustainability of the resources. Specialised knowledge or “trade secrets” were kept by selected individuals known as kaitiaki. Kaitiaki managed when to harvest, when to stop and how to take by approved methods. They would use the signs of nature, birds and fish as allies, which in turn would also be known as kaitiaki.</p>	4.4.5		<p>5.3.1 to 5.3.7 6.3.1 to 6.3.10 7.3.1 to 7.3.2 8.3.1 8.3.4 to 8.3.9 9.3.1 to 9.3.3 10.3.1 to 10.3.5 11.3.1 to 11.3.7 12.3.1 to 12.3.3 13.3.1 to 13.3.6 14.3.1 to 14.3.6 15.3.1</p>
<p>4.3.6⁶ Whenua Papakaika (Ancestral Land) Inappropriate laws controlling papakaika Maori Reserves have resulted in the inability of Kai Tahu to utilise lands in a manner consistent with their cultural, spiritual and economic needs.</p>	<p>Whenua Papakaika are places of traditional settlement. They are ancestral lands available to Kai Tahu for social, economic and cultural development. This is land inherited from the ancestors. It is the life blood of the people and the springboard of the generations that have gone before. It is for the present and future generations to determine the appropriate means by which these resources can benefit the people. Present day papakaika is the remnants of the land reserved from the land sales of the 1840s and other land and reserves subsequently allocated. These resources were and still are, intended to be available to Kai Tahu for their economic, social and cultural security. A series of legislative measures has seen the reduction of this resource to the extent that it now forms an extremely small acreage from which to prosper. The loss of the all-important mahika kai economy the people depended</p>	4.4.6		<p>5.3.1 9.3.1 11.3.1 to 11.3.5 12.3.1 13.3.2 14.3.1 to 14.3.6 15.3.1</p>

⁵ Superseded by PORPS 14 January 2019 (Issue 2.1, Issue 2.2)

⁶ Superseded by PORPS 14 January 2019 (Issue 2.2)

Issues	Explanation	Objectives	Policies	See Also Other Issues
	<p>on added to their woes. In the present day much of the papakaika lands are fragmented, multiply owned and unproductive. The people are no longer living on their ancestral land, attributable in part to the laws preventing settlement on multiply owned lands.</p>			
	<p>People exercising powers and functions of central and local government need to be aware and responsive to the particular requirements of Maori lands when preparing or reviewing legislation, plans and policies in order that the cultural aspirations of Maori in relation to their papatipu lands meet the potential originally intended. What lands remain in the ownership of iwi, hapu and whanau should receive recognition and appropriate policies to reflect the original purpose of the reserve land. It should be noted that “ancestral lands” is not confined to lands in Maori ownership but may relate to lands and places important to iwi.</p>			

4.4 Objectives

	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
<p>4.4.1⁷ Waahi Tapu (Sacred places) To recognise the spiritual and customary importance of waahi tapu (such as burial places) to Kai Tahu and to recognise and provide for the protection of waahi tapu from physical disturbance, erosion, pollution and inappropriate landuse.</p>	<p>Urupa are the most important of all waahi tapu to Maori. These urupa include those in present use and those used in traditional times. The dead are important to Kai Tahu as they are the link to the past and to the land. By protecting the urupa, the mana of the ancestors and their descendants is remembered. Knowledge of traditional urupa location is often retained by certain individuals within iwi. These individuals are not always willing to divulge the location of urupa for fear of desecration. It may be that the iwi wish to use “silent files” to protect this information. Urupa are generally unmarked sites and may have some distinguishing features such as Ti Kouka (cabbage trees) growing nearby. Many urupa have been disturbed by earthworks in the past and also suffer from pollution. Urupa are given protection under the NZ Historic Places Trust Act 1980, the Maori Affairs Act 1953 and the Resource Management Act. These acts can be over-ridden by other legislation ie. Petroleum Act 1981. Because of this urupa do not have the absolute protection that Kai Tahu require Kai Tahu propose to develop a site location register for all known waahi tapu in order that authorities and resource consent applicants are able to consult with the appropriate Kai Tahu runanga. It will also provide information on procedures to follow in the case of archaeological sites being unearthed. Such culturally important sites should be protected from negative impacts such as pollutants.</p>	<p>5.5.1 6.5.1 7.5.1 8.5.1 9.5.1 10.5.1 11.5.1 13.5.1</p>	<p>5.4.1 to 5.4.4 6.4.4 6.4.6 to 6.4.7 8.4.1 8.4.6 9.4.1 9.4.3 11.4.1 11.4.4 12.4.1 13.4.1 13.4.4 14.4.1 to 14.4.2 15.4.1</p>
<p>4.4.2⁸ Waahi Taoka (Treasured Resources) To recognise and provide for the special significance that all taoka play in the culture of Kai Tahu.</p>	<p>The following categories of waahi taoka are provided as a guide to the range of resources requiring consultation with iwi and runanga. This should not be seen as the complete listing of waahi taoka but rather as an indicative listing. Individual runanga may have waahi taoka that are particularly important to them.</p> <p>-Archaeological: Old village sites, occupation or camp sites, earth ovens, rock art, canoe</p>	<p>5.5.1 6.5.1 7.5.1 8.5.1 9.5.1 10.5.1 11.5.1</p>	<p>5.4.1 to 5.4.4 6.4.1 to 6.4.8 7.4.1 8.4.2 8.4.4 to 8.4.6 9.4.1 9.4.3 10.4.1</p>

⁷ Superseded by PORPS 14 January 2019 (Objective 2.2 Kāi Tahu values, interests and customary resources are recognised and provided for)

⁸ Superseded by PORPS 14 January 2019 (Objective 2.2 Kāi Tahu values, interests and customary resources are recognised and provided for)

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
4.4.3⁹ Wai (Water) To recognise the principle of wairua and mauri in the management of Otago’s water bodies.	<p>landing sites and quarry sites for stone tools.</p> <p>-Mahika Kai: Places where food has historically been procured or produced.</p> <p>-Waahi Ana: Important cave areas.</p> <p>-Tuhituhi Nehera: Rock drawing sites.</p> <p>-Pa Tawhito: Ancient Pa sites</p> <p>-Waahi Tohu: Locators and their names within the landscape</p> <p>-Waahi Paripari: Cliff areas</p> <p>-Waahi Raranga: Sources of weaving material</p> <p>-Tauraka Waka: Canoe landing sites</p> <p>-Mauka: Mountains</p> <p>-Waahi Kohatu: Rock formations</p> <p>-Waahi Rakau: Areas of important trees</p> <p>-Urupa: Burial places</p> <p>-Wai: All water</p> <p>In the traditions of Kai Tahu water has figured as a most important taoka. All life began with the mating of Maku and Mahoranuiatea, who were both forms of water. To Kai Tahu the rainfall that nourishes the earth is associated with Rakinui’s tears of sadness at the forced parting from his loved one, Papatuanuku. The traditions and past practices determine the values Kai Tahu give to water; a tradition built on respect and pragmatism. The prestige of a people is linked to the quantity and quality of the resources available to them and the ability to share with others. As an example Otakou is known throughout the country for the size of tuaki (cockles) that visitors to the marae have enjoyed over the ages. This is a source of mana. The ability to safely continue the tradition of gathering tuaki is dependent on the water quality of the harbour. Traditional</p>	<p>13.5.1</p> <p>5.5.1</p> <p>6.5.1</p> <p>7.5.1</p> <p>8.5.1</p> <p>9.5.1</p> <p>10.5.1</p> <p>11.5.1</p> <p>13.5.1</p>	<p>10.4.3</p> <p>11.4.1 to 11.4.4</p> <p>12.4.1</p> <p>13.4.1</p> <p>13.4.4</p> <p>14.4.1 to 14.4.2</p> <p>15.4.1</p> <p>5.4.2</p> <p>6.4.1 to 6.4.8</p> <p>8.4.1 to 8.4.2</p> <p>8.4.4</p> <p>9.4.1</p> <p>9.4.3</p> <p>10.4.1</p> <p>10.4.3</p> <p>11.4.4</p> <p>12.4.1 to 12.4.3</p> <p>13.4.1</p> <p>13.4.4</p> <p>14.4.1 to 14.4.2</p> <p>15.4.1</p>

⁹ Superseded by PORPS 14 January 2019 (Objective 2.2 Kāi Tahu values, interests and customary resources are recognised and provided for)

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
<p data-bbox="136 1161 851 1257">4.4.4¹⁰ Mahika Kai (Places where food is produced or procured) To maintain and enhance mahika kai and access to</p>	<p data-bbox="893 272 1592 368">values are affected by other users of the water resource. Most Kai Tahu papakaika are situated at the bottom of water catchments, at mouths of rivers and harbours, similar to Otakou.</p> <p data-bbox="893 400 1592 555">Customary classification of the water bodies of Te Waipounamu was established by the Waitaha tribe many centuries ago, from who the descendant tribes of Kai Tahu and Kati-Mamoe in turn derived their customary practices. These water classifications included:</p> <ul data-bbox="893 560 1503 911" style="list-style-type: none"> - Hukawai: Melt water - Repo Raupo: Wetlands and swamps - Wai Tohi: Ceremonial use - Wai Whakaheke - Tupapaku: Water burial sites - Wai Mataitai: Important estuarine waters - Wai Maori: Important fresh water areas - Waiora: Area of water used for healing - Wai Puna: Important springs - Wai Mate: Poor quality water - Wai Kino: Polluted water <p data-bbox="893 943 1592 1129">Over a long period of time Kai Tahu accumulated an extensive amount of knowledge of water resources and water based food resources (mahika kai). Water and the availability of good quality water determined the siting of villages and the rhythm of their lives. It is the degradation of the values affecting the traditional classifications that concern Kai Tahu.</p> <p data-bbox="893 1161 1592 1257">The rights and expectations of Kai Tahu in respect of what little customary mahika kai remains in Otago should be recognised and understood by authorities in Otago. This will require greater</p>	<p data-bbox="1637 1161 1697 1193">5.5.1</p> <p data-bbox="1637 1193 1697 1225">6.5.1</p> <p data-bbox="1637 1225 1697 1257">7.5.1</p>	<p data-bbox="1778 1161 1917 1193">5.4.1 to 5.4.2</p> <p data-bbox="1778 1193 1917 1225">5.4.4</p> <p data-bbox="1778 1225 1917 1257">6.4.1 to 6.4.5 6.4.7 to 6.4.8</p>

¹⁰ Superseded by PORPS 14 January 2019 (Objective 2.2 Kāi Tahu values, interests and customary resources are recognised and provided for)

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
those traditional resources.	interaction between Kai Tahu and authorities in the region to achieve an understanding of the relationship of iwi and runanga and their mahika kai. A mix of methods in achieving greater Kai Tahu participation in environmental management will be required in Otago. Access to mahika kai resources of importance to iwi and runanga needs to be maintained and enhanced. It is important to note the role hapu (sub-tribe) play in determining resource use and policy according to local conditions and preferences. Hapu organise their community and political activities through the runanga community system. Runanga represent the rangatiratanga of the hapu in their district and operate as kaitiaki for their traditional area of interest. The hapu is the primary social and economic unit in Maori society. In some areas, where more than one runanga holds rangatiratanga, there will be a need for consultation with Kai Tahu iwi as well as individual runanga.	8.5.1 9.5.1 10.5.1 11.5.1 13.5.1	8.4.1 to 8.4.2 8.4.4 to 8.4.6 9.4.1 to 9.4.3 10.4.1 to 10.4.3 11.4.4 12.4.1 13.4.1 13.4.4 14.4.1 to 14.4.2 15.4.1
4.4.5 ¹¹ Kaitiakitanga (Guardianship) To incorporate the concept and spirit of kaitiakitanga in the management of Otago's natural and physical resources in a way consistent with the values of Kai Tahu.	The spiritual and traditional role of Kai Tahu in the care and management of the natural environment is borne from hundreds of years of deep and close affinity to the resources. There is a duty to ensure that future unborn generations will enjoy the same connection and benefits. The recognition and provision for the role of kaitiakitanga is of importance to iwi and runanga.	5.5.1 6.5.1 7.5.1 8.5.1 9.5.1 10.5.1 11.5.1 13.5.1	5.4.1 to 5.4.5 6.4.1 to 6.4.8 7.4.1 8.4.1 to 8.4.5 9.4.1 to 9.4.3 10.4.1 to 10.4.3 11.4.1 to 11.4.4 12.4.1 to 12.4.3 13.4.1 to 13.4.4 14.4.1 to 14.4.2 15.4.1
4.4.6 ¹² Whenua Papakaika (Ancestral Land) To recognise the right of Kai Tahu to manage and utilise their whenua papakaika.	Fragmentation of Maori land has occurred and multiple ownership in some blocks of land has resulted in thousands of owners. This has led to absentee ownership and uneconomic utilisation.	5.5.1 6.5.1 7.5.1	5.4.1 9.4.1 to 9.4.3 11.4.1 to 11.4.2 11.4.4

¹¹ Superseded by PORPS 14 January 2019 (Objective 2.2 Kāi Tahu values, interests and customary resources are recognised and provided for)

¹² Superseded by PORPS 14 January 2019 (Objective 2.2 Kāi Tahu values, interests and customary resources are recognised and provided for)

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
	<p>However, this still represents turangawaewae for the beneficial owners of that land. A large percentage of this land has high conservation value which the owners wish to protect. Regional and territorial authorities need to approach the issues surrounding Maori land with an open mind towards achieving equitable outcomes that are not in conflict with the cultural needs of the owners.</p>	<p>8.5.1 9.5.1 10.5.1 11.5.1 13.5.1</p>	<p>12.4.1 13.4.1 13.4.4 14.4.1 to 14.4.2 15.4.1</p>

The policies, methods and anticipated environmental results derived from the issues and objectives of the Manawhenua chapter can be found in each of the relevant chapters of this Regional Policy Statement.

5

Land



5.1 Introduction

Much of the prosperity of Otago's communities has been derived from the land. Maintaining the productive capacity of the land is essential for the continued prosperity of Otago's communities. Otago's land resource also gives rise to Otago's distinctive character, typified by its rugged and varied topography, incised river valleys, the natural landscape, high altitude lakes, significant water bodies and wetlands, diverse vegetation and isolated inner reaches. Large areas of Otago have high landscape, cultural and nature conservation values.

Mining, farming, horticulture and forestry have historically formed the basis of Otago's development and remain the major sources of revenue. Tourism and recreation are now major areas of economic activity and viticulture is growing in importance.

The productive capacity of land can be limited by physical constraints, knowledge and abilities, floods, droughts, erosion, animal and plant pests and contamination of sites. At the same time, increasing pressures of use are being placed on Otago's land resource. The use of Otago's land based resources must be managed within a framework which maximises present and future opportunities.

The sustainable management of Otago's land resource requires communities to develop wise resource management attitudes. Land owners need to work together on a regional and local basis in order to sustain long-term systems of resource use. A lack of information in some circumstances may constrain the sustainable management of Otago's land resources. The collection of relevant information and the maintenance and development of existing knowledge bases is therefore an important component in ensuring the continued sustainability of Otago's land resource.

This chapter of the Regional Policy Statement considers the effects of the use, development and protection of Otago's regional land assets.

5.2 Roles of Different Agencies

Several agencies are responsible for the management and the statutory administration of Otago's land resources.

5.2.1 Central Government

The Minister for the Environment has an overall view and monitoring role and is responsible for:

- The preparation of national policy statements to guide management of the land resource.
- Considering proposals of national significance at a national level.
- The setting of national environmental standards for matters including contaminants, soil erosion and soil quality.

The Commissioner of Crown Lands under the Land Act 1948, administers Crown Lands, including Crown Leases, and also has responsibility relating to the authorisation of fires on these lands.

The Department of Conservation is responsible for the administration of land in Otago held under the Conservation Act 1987 and the National Parks Act 1981 and reserves under the Reserves Act 1977 that are not vested in territorial local authorities. These lands include national and forest parks, conservation areas, wildlife refuges and marginal strips. The department is also responsible in terms of Section 3 of the Reserves Act for ensuring, as far as possible, the preservation of representative samples of all classes of natural ecosystems and landscape. The department's functions include conservation advocacy in relation to natural and historic values on land it does not administer and it is the agency responsible for the administration of funds

available for pest and weed control on un-allocated Crown land. The Department of Conservation also has responsibilities under the Forest and Rural Fires Act 1977 relating to fire control on, and in the vicinity of, the conservation estate.

5.2.2 Otago Regional Council

The Otago Regional Council is responsible for controlling the use of land for the purposes of soil conservation, the maintenance and enhancement of water quality, 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. The Otago Regional Council is required to establish and implement policies to achieve the integrated management of the natural and physical resources of the region and to prepare policies in relation to actual or potential effects of the use, development or protection of land which are of regional significance.

5.2.3 Territorial Local Authorities

Territorial authorities are responsible for the integrated management of the effects of the use, development and protection of land and associated natural and physical resources within the city or district. This includes the control of subdivision. Territorial authorities complement the role of regional councils in the prevention or mitigation of actual or potential effects of natural hazards and hazardous substances. Territorial local authorities also have responsibilities under the Forest and Rural Fires Act 1977 relating to fire control on rural land.

5.3 Issues

	Explanation	Objectives	Policies	See Also Other Issues
5.3.1	<p>The primary productive capacity of Otago’s high class soils may be compromised by inappropriate use and development.</p> <p>Soils in many parts of Otago are not being used intensively but are still capable of producing a wide variety of crops. Whether a particular soil can be defined as being of high class or not is determined from soil, land and climatic characteristics. High class soils are defined as “<i>Soils that are capable of being used intensively to produce a wide variety of plants including horticultural crops</i>”. This definition also requires good soil and other resource features that in combination are capable of producing a wide range of crops. It does not include areas that may be suited to one or two specialist crops, largely due to the climate rather than the soil quality. There is a need for the region’s high class soils to be defined on maps to identify their location and extent.</p> <p>At the same time, urban expansion and other uses incompatible with preservation of the primary productive capacity of high class soils are encroaching onto these high class soils which are limited in extent around Otago.</p>	<p>5.4.1 5.4.2</p>	<p>5.5.2 5.5.3</p>	<p>4.3.5 4.3.6 9.3.1 14.3.1 to 14.3.5 15.3.1</p>
5.3.2	<p>The primary productive capacity of Otago’s land resource may be compromised by activities which result in one or more of the following:</p> <p>(a) The loss of vegetation cover; or (b) The spread of plant and animal pests; or (c) The degradation of the soil resource; or (d) Flooding or inadequate drainage.</p> <p>Sustaining the primary productive capacity of the land is important for Otago. While appropriate land management techniques can enhance productive capacity, it can also be reduced through such practices as the use of drought susceptible pasture species in dry areas of North and Central Otago, the inappropriate removal of vegetation, the use of traditional cultivation practices such as working soil on steep slopes or in dry, windy conditions, the burning of tussock grassland and post burn management where this causes a long term reduction in soil nutrients, or organic carbon, exposure of soil to wind erosion and a greater risk of weed invasion, and other inappropriate land management techniques. Animal and plant pests are a serious risk to the primary productive</p>	<p>5.4.1 5.4.2</p>	<p>5.5.2 5.5.3 5.5.4</p>	<p>4.3.2 4.3.4 to 4.3.5 6.3.10 7.3.2 10.3.1 to 10.3.3 11.3.1 to 11.3.2 11.3.6 to 11.3.7 12.3.1 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.5 15.3.1</p>

Issues	Explanation	Objectives	Policies	See Also Other Issues
5.3.3 Otago’s water resources may be adversely affected by land activities.	<p>capacity and well being of the land, its ecosystems and its habitats. Examples within Otago include rabbits, possums, hieracium, nodding thistle and gorse. Soil degradation is defined as “a change in soil properties that causes a long-term decline in primary productive capacity”. Soil erosion is the most severe form of soil degradation but may be preceded by less obvious changes to physical, chemical and biological properties of topsoil and subsoil that affect plant growth and long-term primary productive capacity. These more subtle forms of soil degradation may take the form of topsoil compaction, loss of permeability, loss of fertility, loss of organic matter and declining biological activity.</p> <p>The use of Otago’s land resources can adversely affect adjacent water resources, causing changes to water quality and quantity which can create downstream impacts. Such effects include increased slope instability leading to increased sedimentation, decreased water quality through land runoff and increased stormwater runoff from paved areas and areas with changed vegetation cover. Beds and banks of water bodies can be destabilised through activities such as gravel extraction and instream mining.</p>	5.4.1 5.4.2	5.5.4 5.5.5 5.5.6	4.3.2 to 4.3.5 6.3.1 to 6.3.3 6.3.5 to 6.3.8 8.3.1 8.3.6 8.3.8 9.3.1 9.3.3 11.3.6 to 11.3.7 13.3.2 13.3.4 14.3.1 to 14.3.5 15.3.1
5.3.4 Otago’s outstanding natural features and landscapes are threatened by inappropriate subdivision, use and development.	<p>Much of Otago’s natural character is derived from its natural features and landscapes. The Resource Management Act 1991 requires that in achieving the purpose of the Act, recognition and provision shall be made for the protection of Otago’s outstanding natural features and landscapes from inappropriate subdivision, use and development. This protection is required in order to ensure that those features and landscapes will always be a part of Otago and that they will be there for future generations to enjoy and as the basic resource for recreation and tourism.</p>	5.4.2 5.4.3	5.5.6	4.3.2 4.3.5 6.3.7 6.3.9 8.3.1 9.3.1 to 9.3.3 11.3.7 14.3.1 to 14.3.5 15.3.1
5.3.5 Landuse activities can adversely affect ecological, amenity and intrinsic values associated with Otago’s	<p>Otago’s significant indigenous vegetation and significant habitat of indigenous fauna are an important and integral part of the region’s</p>	5.4.1 5.4.2	5.5.1 5.5.3	4.3.1 to 4.3.2 4.3.4 to 4.3.5

Issues	Explanation	Objectives	Policies	See Also Other Issues
significant indigenous vegetation and significant habitat of indigenous fauna.	character which may be affected by landuse practices. Overgrazing by sheep and noxious animal pests, recreational uses and a decline in natural habitats such as tussock grasslands and native wetlands, forests and shrublands may place pressure on Otago's natural and cultural heritage.		5.5.5	6.3.2 6.3.5 6.3.7 to 6.3.9 8.3.1 8.3.5 8.3.7 9.3.1 10.3.1 to 10.3.5 11.3.7 12.3.1 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.5 15.3.1
5.3.6 ¹ There is a need to maintain and enhance access opportunities to Otago's natural and physical land features.	The provision of public access to Otago's natural and physical resources is important to many of Otago's citizen's for recreation, tourism, scientific, educational and other purposes. The maintenance of existing public access opportunities and the enhancement of public access opportunities where this is restricted is considered to be a matter of regional significance and important to the achievement of integrated management of the region's natural and physical resources. Many valued natural and physical features are part of the conservation estate and as such access to them is controlled by the Minister of Conservation. Commercial development or conservation protection of Otago's natural features can restrict public access. The Regional Policy Statement cannot impose public access over privately owned land and permission needs to be sought from landholders, including Crown pastoral lessees, for access to or over such land.	5.4.4	5.5.7	4.3.1 to 4.3.2 4.3.4 to 4.3.5 6.3.9 8.3.4 10.3.1 14.3.1 to 14.3.5 15.3.1

¹ Superseded by PORPS 14 January 2019 (Issue 5.1)

Issues	Explanation	Objectives	Policies	See Also Other Issues
<p>5.3.7 Access to mineral resources may be compromised through the inappropriate location of other development activities above or in close proximity to the mineral resource.</p>	<p>Minerals are an important resource for the people and communities of Otago in providing for their present and future well being, both through the direct economic benefits derived from the extraction of gold and other minerals, and through the use of substances such as aggregates, shingle and coal for roading, building and fuel uses. However, unlike other activities which may have a range of locations in which they can be undertaken, minerals are fixed, and therefore the extraction of minerals for use and development is also fixed. Mineral resources can only be utilised in the location in which they are found and their future use and development can be compromised by the location of other land developments.</p>	<p>5.4.1 5.4.2 5.4.5</p>	<p>5.5.1 5.5.4 5.5.8</p>	<p>4.3.5 8.3.4 9.3.1 12.3.1 14.3.1 to 14.3.6 15.3.1</p>

5.4 Objectives

	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
<p>5.4.1 To promote the sustainable management of Otago’s land resources in order:</p> <p>(a) To maintain and enhance the primary productive capacity and life-supporting capacity of land resources; and</p> <p>(b) To meet the present and reasonably foreseeable needs of Otago’s people and communities.</p>	<p>In order to meet the present and reasonably foreseeable needs of Otago’s communities, sustained regional growth and development relies inherently on the sustainable management of land resources. Maintaining and enhancing the primary productive capacity and life-supporting capacity of Otago’s land resource is necessary to ensure that the needs of future generations are able to be met while safeguarding existing primary productive systems.</p>	<p>5.5.1 5.5.2 5.5.3 5.5.4</p>	<p>4.4.1 to 4.4.2 4.4.4 to 4.4.6 6.4.1 6.4.3 6.4.5 8.4.1 to 8.4.3 9.4.1 10.4.1 10.4.2 11.4.1 to 11.4.2 11.4.4 12.4.1 13.4.1 13.4.4 14.4.1 to 14.4.2 15.4.1</p>
<p>5.4.2 To avoid, remedy or mitigate degradation of Otago’s natural and physical resources resulting from activities utilising the land resource.</p>	<p>The adverse effects of land activities need to be avoided, remedied or mitigated to ensure the sustainable management of Otago’s natural and physical resources by maintaining or improving the life-supporting capacity of soils, healthy vegetative cover, soil retention, soil health, productivity and moisture holding capacity, and by avoiding the compaction of soils.</p>	<p>5.5.1 5.5.2 5.5.3 5.5.4 5.5.5</p>	<p>4.4.1 to 4.4.5 6.4.2 to 6.4.3 6.4.5 to 6.4.6 8.4.1 to 8.4.2 8.4.4 to 8.4.5 9.4.1 9.4.3 10.4.1 to 10.4.3 11.4.2 11.4.4 12.4.1 13.4.1 13.4.4 14.4.1 to 14.4.2 15.4.1</p>
<p>5.4.3 To protect Otago’s outstanding natural features and landscapes from inappropriate subdivision, use and development.</p>	<p>The subdivision of land and its use and development can adversely impact on Otago’s outstanding natural features and landscapes. The Resource Management Act requires that, in achieving the purpose of the Act, natural features and landscapes be protected from inappropriate subdivision, use and development. It is important to protect those landscapes and natural features that are outstanding or significant because of their values including their uniqueness, or because they are representative of the elements that</p>	<p>5.5.1 5.5.6</p>	<p>4.4.1 to 4.4.2 4.4.5 6.4.4 6.4.8 8.4.5 9.4.1 to 9.4.3 10.4.3 11.4.1 11.4.4 12.4.1</p>

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
	<p>particularly characterise Otago, or because of their visual, cultural, historic or scientific significance, including their cultural, historic, and spiritual value for Tangata Whenua. It is important that natural features and landscapes that are outstanding be protected through the Regional Policy Statement, and Regional and District Plan Provisions.</p>		<p>13.4.1 14.4.1 to 14.4.2 15.4.1</p>
<p>5.4.4² To ensure that public access opportunities exist in respect of activities utilising Otago’s natural and physical land features.</p>	<p>The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers is identified under Section 6 of the Resource Management Act as a matter of national importance that must be recognised and provided for. The provision of such access opportunities generally occurs across land and is therefore important in respect of the integrated management of the land resource. In addition, Otago’s natural and physical resources provide a range of use opportunities and it is important that public access to those resources exists, subject to appropriate considerations such as ecological and cultural sensitivity, public health and safety, and the agreement of landholders where access crosses private or Crown leasehold land, being met. Public access to Otago’s natural and physical land features is a significant resource management issue of the Otago region.</p>	<p>5.5.7</p>	<p>4.4.1 to 4.4.2 4.4.4 to 4.4.5 6.4.7 to 6.4.8 8.4.6 12.4.1 14.4.1 to 14.4.2 15.4.1</p>
<p>5.4.5 To promote the sustainable management of Otago’s mineral resources in order to meet the present and reasonably foreseeable needs of Otago’s communities.</p>	<p>Mineral resources are fixed in their location and therefore can only be used, developed or protected where they are found. Because of this, other development activities establishing over or in close proximity to minerals can adversely impact upon the future use or development of that mineral resource. Taking into account the present and future availability of mineral resources is an important factor in enabling the people and communities of Otago to provide for their well being, and in providing for the efficient use and development of the mineral resource.</p>	<p>5.5.1 5.5.3 5.5.4 5.5.5 5.5.6 5.5.8</p>	<p>4.5.5 6.4.2 to 6.4.6 6.4.8 8.4.1 8.4.5 9.4.3 11.4.4 12.4.1 12.4.2 13.4.5 14.4.1 to 14.4.2 15.4.1</p>

² Superseded by PORPS 14 January 2019 (Objective 5.1 Public access to areas of value to the community is maintained or enhanced)

5.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>5.5.1³ To recognise and provide for the relationship Kai Tahu have with Otago’s land resource through:</p> <p>(a) Establishing processes that allow the existence of heritage sites, waahi tapu and waahi taoka to be taken into account when considering the subdivision, use and development of Otago’s land resources; and</p> <p>(b) Protecting, where practicable, archaeological sites from disturbance; and</p> <p>(c) Notifying the appropriate runanga of the disturbance of any archaeological site and avoiding, remedying, or mitigating any effect of further disturbance until consultation with the kaitiaki runanga has occurred.</p>	<p>Recognition of tino rangatiratanga incorporates the unique cultural and spiritual affinity iwi and runanga have with their lands and resources. This needs to be taken into account in the management and control of resources to reflect and preserve that relationship. The policy helps achieve recognition of the relationship of iwi and runanga with outstanding natural features landscapes and heritage values. Taoka are a source of personal, collective, emotional and spiritual strength. The Waitangi Tribunal has given broad and flexible descriptions to the term “taoka or taonga”. Local authorities ought not to adopt more restrictive definitions when determining the range of waahi taoka that customary rangatiratanga applies to and how to accommodate iwi and hapu needs.</p> <p>The development of appropriate ways to protect cultural values may be different for each site. Close consultation with runanga and iwi will be necessary to determine appropriate methods of protection. Some sites may hold varying degrees of importance to iwi or runanga.</p> <p>Where it is known or suspected that an archaeological site exists, the site’s destruction, damage or modification is illegal pursuant to Section 10 of the Historic Places Trust Act 1993. In such circumstances, the establishment of consultation processes between kaitiaki runanga, the Historic Places Trust, appropriate authorities such as Regional and District Councils, landholders and developers will be essential. Consultation with landholders is particularly important where sites are located on private land and where an appropriate response requires the cooperation of the landholder and respect for the landholder’s occupancy and use values.</p> <p>Consultation processes could address protocols for dealing with site disturbance, such as points of contact and key contact persons,</p>	<p>5.6.1</p> <p>5.6.2</p>	<p>6.5.1</p> <p>6.5.6</p> <p>6.5.9 to 6.5.10</p> <p>8.5.1 to 8.5.4</p> <p>8.5.6</p> <p>9.5.1</p> <p>9.5.4 to 9.5.6</p> <p>10.5.1</p> <p>11.5.1 to 11.5.2</p> <p>11.5.7</p> <p>12.5.2</p> <p>13.5.1</p> <p>13.5.7 to 13.5.8</p> <p>13.5.10</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1 to 15.5.2</p>

³ Superseded by PORPS 14 January 2019 (Policy 2.2.1 Kāi Tahu wellbeing, Policy 2.2.2 Recognising sites of cultural significance, Policy 2.2.3 Wāhi tūpuna and associated sites)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>5.5.2 To promote the retention of the primary productive capacity of Otago’s existing high class soils to meet the reasonably foreseeable needs of future generations and the avoidance of uses that have the effect of removing those soils or their life-supporting capacity and to remedy or mitigate the adverse effects on the high class soils resource where avoidance is not practicable.</p>	<p>the timeframes for responding to site disturbance and respective responsibilities. Close consultation and the establishment of protocols will better identify when the adverse effects of site disturbance must be avoided and when such effects are capable of remedy or mitigation.</p>		
	<p>This policy is consistent with the provisions of the Historic Places Act 1993 in respect of the protection of archaeological sites from disturbance. It gives effect to Section 6(e) of the Resource Management Act which requires that councils provide for the relationship of Maori, their culture and traditions with their ancestral lands, waters, sites, waahi tapu and other taonga and Section 7(a), having particular regard to kaitiakitanga. It also gives effect to Section 62 of the Act which requires councils to set out the matters of resource management significance to Iwi authorities, and to contain objectives, policies and methods to recognise and provide for these matters. Provision for the relationship of Maori with their lands, sites, waahi tapu and other land based taonga is both a matter of regional significance and essential to achieve integrated management of natural and physical resources.</p>		
	<p>High class soils are limited within Otago and should be retained, as far as practicable, for present and future primary productive purposes in order to protect their primary productive capacity and to meet the needs of future generations.</p>	<p>5.6.4 5.6.5 5.6.6 5.6.7 5.6.10 5.6.11 5.6.12 5.6.13 5.6.14 5.6.15 5.6.16 5.6.19 5.6.21</p>	<p>9.5.2 9.5.4 11.5.2 12.5.2 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
	<p>The retention of high class soils is considered to be a significant resource management issue of the region because of their limited nature, their vulnerability to loss and the importance in productive terms for future generations. Safeguarding their life-supporting capacity and their potential for future generations is</p>		
	<p>essential to integrated management of the regions natural and physical resources and the effects of the use, development and</p>		

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>5.5.3 To maintain and enhance Otago’s land resource through avoiding, remedying or mitigating the adverse effects of activities which have the potential to, among other adverse effects:</p> <ul style="list-style-type: none"> (a) Reduce the soil’s life-supporting capacity (b) Reduce healthy vegetative cover (c) Cause soil loss (d) Contaminate soils (e) Reduce soil productivity (f) Compact soils (g) Reduce soil moisture holding capacity. 	<p>the protection of land containing high class soils are therefore of regional significance.</p> <p>The purpose of this provision is to ensure that alternatives are fully considered before high class soils are selected for a use that will result in their loss. The policy is intended to enable Otago to enjoy the benefits of development but also to retain the primary productive and life-supporting capacity of the high class soil resource for future generations. For example, uses which have the effect of removing the soil, its primary productive capacity, or life-supporting capacity, should avoid locations on high class soil where there are alternatives that can accommodate the use within reasonable proximity.</p> <p>It is recognised however, that there may be other objectives and policies within the Regional Policy Statement that may outweigh the importance of retaining the high class soil resource in a particular circumstance. In these situations, the loss of the high class soils may be unavoidable and the remedy or mitigation of adverse effects on the high class soil resource will be necessary.</p> <p>The concept of sustainable landuse requires adopting a long-term perspective which allows for today’s needs while providing for those of the future. While Otago has many abundant land resources, today’s resource use must be managed to ensure future generations are not disadvantaged by present day development.</p> <p>Understanding of resource management issues is the subject of constant change, however the objective should be to achieve improvement.</p> <p>Maintaining the capacity of the soil to support life requires that soil degradation be minimised. Good soils are the base for maximising the productive potential from an area. Healthy ground cover helps to bind the soil together and to prevent its loss from the productive</p>	<p>5.6.4 5.6.5 5.6.6 5.6.7 5.6.8 5.6.10 5.6.12 5.6.13 5.6.14 5.6.15 5.6.16 5.6.19 5.6.21</p>	<p>6.5.5 6.5.7 6.5.9 9.5.2 9.5.4 9.5.5 10.5.2 to 10.5.4 11.5.2 12.5.2 13.5.1 to 13.5.8 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
	system.		
	It is necessary and appropriate that the Regional Policy Statement address the adverse effect of activities on the land resource because soil conservation is a function of the Regional Council under Section 30(1)(c) and because the adverse effects of activities on the land resource is considered to be a significant management issue of the region.		
5.5.4 To promote the diversification and use of Otago’s land resource to achieve sustainable landuse and management systems for future generations.	While the existing primary productive use of Otago’s land resource is an important component of Otago’s economy, promoting and encouraging a diversification of use will assist in the development of sustainable systems to ensure that the needs of future generations are met.	5.6.6 5.6.7 5.6.8 5.6.9 5.6.10 5.6.12 5.6.13	10.5.2 to 10.5.3 14.5.1 to 14.5.8
5.5.5 To minimise the adverse effects of landuse activities on the quality and quantity of Otago’s water resource through promoting and encouraging the: (a) Creation, retention and where practicable enhancement of riparian margins; and (b) Maintaining and where practicable enhancing, vegetation cover, upland bogs and wetlands to safeguard land and water values; and (c) Avoiding, remedying or mitigating the degradation of groundwater and surface water resources caused by the introduction of contaminants in the form of chemicals, nutrients and sediments resulting from landuse activities.	Landuse activities can adversely impact on adjacent water bodies through the runoff of chemicals, nutrients and sediment. The processes that give rise to such effects can be complex. Riparian margins are able to reduce the inflow of these materials into water bodies and help safeguard them from any adverse effects. In the same way vegetation cover can also assist in reducing the inflow of materials. The water quality and river stability objective of well vegetated riparian margins can be achieved without compromising other community objectives, such as flood control and habitat values, through the integration of river management objectives. Riparian margins may also harbour unwanted pests and weeds that may impact further downstream and onto adjoining land.	5.6.3 5.6.4 5.6.6 5.6.7 5.6.8 5.6.9 5.6.10 5.6.14 5.6.23	6.5.1 to 6.5.9 6.5.11 8.5.5 to 8.5.6 9.5.1 9.5.4 10.5.1 to 10.5.2 11.5.2 12.5.2 13.5.1 to 13.5.8 13.5.10 14.5.1 to 14.5.2 15.5.1 to 15.5.2
	At the same time, everybody has a duty to try and ensure that they reduce the contamination of Otago’s water bodies.		
	Streamflow characteristics are affected by the surrounding vegetation cover. The cumulative effect of removing vegetation		

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>5.5.6⁴ To recognise and provide for the protection of Otago’s outstanding natural features and landscapes which:</p> <ul style="list-style-type: none"> (a) Are unique to or characteristic of the region; or (b) Are representative of a particular landform or land cover occurring in the Otago region or of the collective characteristics which give Otago its particular character; or (c) Represent areas of cultural or historic significance in Otago; or (d) Contain visually or scientifically significant geological features; or (e) Have characteristics of cultural, historical and spiritual value that are regionally significant for Tangata Whenua and have been identified in accordance with Tikanga Maori. 	<p>cover, upland bogs and wetlands in catchments, is to reduce water retention and prolong periods of low flows during dry periods. Sustaining the vegetative condition may benefit downstream productive systems that require scarce irrigation water, as well as benefiting aquatic habitats throughout the catchment. It is vital that land management promotes the maintenance and where practicable enhancement of upland bogs, wetlands and vegetation cover that achieve desired water quality and quantity characteristics. This is particularly important in water harvesting catchments such as Deep Stream, a major source of Dunedin’s supply of domestic water.</p> <p>Otago’s natural heritage is a finite resource that must be managed in a sustainable way for the benefit of future generations. Its protection from inappropriate subdivision, use and development is a matter of national importance that must be recognised and provided for under Section 6 of the Act. Subdivision of land and its use and development can adversely impact on Otago’s natural features and landscapes which form part of the regions natural and cultural heritage. It is important that natural features and landscapes that are outstanding be protected through regional policy and regional and district plan provisions.</p> <p>The recognition and identification of outstanding natural features and landscapes should be based on objective criteria and undertaken in consultation with the community or have outstanding or significant values that are substantially recognised by the Otago community.</p> <p>Features and landscapes that give the Otago region its distinctive character and particular identity include its expansive tussock grasslands and semi arid lowland tor country, the south-east Otago bush remnants and scroll plain wetlands, glacial lakes and block mountain ranges and heritage landscapes such as the historic</p>	<p>5.6.4 5.6.6 5.6.8 5.6.9 5.6.12 5.6.17 5.6.20</p>	<p>6.5.4 6.5.6 6.5.8 to 6.5.9 8.5.5 to 8.5.5 9.5.1 9.5.4 to 9.5.6 10.5.1 11.5.2 12.5.2 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

⁴ Superseded by PORPS 14 January 2019 (Policy 2.2.1 Kāi Tahu wellbeing, Policy 2.2.2 Recognising sites of cultural significance, Policy 2.2.3 Wāhi tūpuna and associated sites)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>5.5.7⁵ To promote the provision of public access opportunities to natural and physical land features throughout the Otago region except where restriction is necessary:</p> <ul style="list-style-type: none"> (i) To protect areas of significant indigenous vegetation and/or significant habitats of indigenous fauna; or (ii) To protect Maori cultural values; or (iii) To protect public health or safety; or (iv) To ensure a level of security consistent with the purpose of a resource consent or in circumstances where safety and security concerns require exclusive occupation; or (v) In other exceptional circumstances sufficient to justify the restriction notwithstanding the importance of maintaining that access. 	<p>goldfield sites.</p> <p>It is important that identification of Otago’s outstanding natural features and landscapes be carried out as part of the process for protection from inappropriate subdivision, use and development. Until this identification is completed, careful consideration will need to be given as to whether a particular feature or landscape falls within the scope of Policy 5.5.6.</p> <p>The means of achieving protection may include voluntary arrangements, covenants, the resource consent process or where necessary and appropriate, purchase.</p> <p>Personal and community well being, health and safety can be dependent on access to natural and physical land resources, as well as to the coast and water bodies. This will require consideration of public access needs in the development of policies, plans and in the consideration of resource consent applications, and the setting aside of access strips to natural and physical land features where it is necessary to do so in order to maintain and enhance public access. In some cases however, it may be necessary to restrict public access in order to protect a resource’s natural or associated cultural values, to protect public health or safety or to ensure a level of security consistent with the purpose of a resource consent. Consultation with and the agreement of the landowner will be required where access across private land is sought.</p> <p>The maintenance and enhancement of public access to Otago’s natural and physical land features is a significant resource management issue of the Otago region.</p>	<p>5.6.18 5.6.22</p>	<p>6.5.9 to 6.5.10 8.5.1 to 8.5.3 9.5.5 to 9.5.6 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

⁵ Superseded by PORPS 14 January 2019 (Policy 5.1.1 Public access)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
5.5.8 To recognise known mineral deposits and to consider the potential for access to those mineral resources to be compromised or removed by other alternative land development.	Minerals are a finite natural resource that are important to the present and future economic and social well being of Otago’s people and communities. It is important that known mineral deposits are recognised and that resource management in Otago provides for their sustainable management. This requires consideration of the potential for access to mineral resources to be compromised or removed as a result of alternative land development.	5.6.1 5.6.4 5.6.6 5.6.7 5.6.9 5.6.10 5.6.12 5.6.13 5.6.14 5.6.24	6.5.2 6.5.8 to 6.5.9 12.5.2 13.5.2 14.5.1 to 14.5.8 15.5.1 to 15.5.2

5.6 Methods

In order to achieve the outcomes of the policies, every agency with responsibilities under the Resource Management Act 1991 should:

- 5.6.1⁶** Take into account Kai Tahu cultural values in the management of Otago's land and mineral resources through:
- (a) Using and recognising iwi resource management plans, where available, as a basis for consultation; and
 - (b) Developing consultation protocols with iwi, runanga and hapu to provide for their input into the management of Otago's land and mineral resources.
- 5.6.2⁷** Develop mechanisms, consistent with Kai Tahu Koiwi Tangata policy to notify appropriate elders or runanga on the discovery of human remains.

The methods to be used by the Otago Regional Council include the following:

- 5.6.3** Develop policies and other means, including rules where appropriate, within the Regional Plan: Land to manage the adverse effects of the use, development or protection of the beds and banks of Otago's water bodies.

⁶ Superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty Principles, Method 1.1, Method 5.1.4)

⁷ Superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty Principles, Policy 5.2.3 Managing Historic Heritage, Method 1.1, Method 1.2)

- 5.6.4** Develop policies and other means necessary, including rules where appropriate, within the Regional Plan: Land to avoid, remedy or mitigate the adverse effects of landuse activities that could degrade Otago's natural and physical resources, including the mineral resource.
- 5.6.5** Consider inclusion of conditions on resource consents and consider declining such consents as necessary to ensure sustainability of the land resource.
- 5.6.6** Promote and use education programmes to improve agency and community awareness and understanding of land issues and sustainable management in Otago.
- 5.6.7** Provide information on the adverse and beneficial effects associated with land activities.
- 5.6.8** Recognise and encourage the role of community groups that promote sustainable management of land and associated resources.
- 5.6.9** Consult with Otago's communities, including affected landholders, regarding the sustainable management of Otago's land and mineral resources.
- 5.6.10** Promote codes of practice agreed to by industry, the Otago Regional Council, city and district councils and other interest groups to avoid, remedy or mitigate adverse effects of activities on the land resource.
- 5.6.11** Prepare maps of high class soils in the region that clearly show their location and extent.
- 5.6.12** Promote and encourage interagency liaison and cooperation and the development of protocols to

ensure integrated and coordinated management of Otago's land and mineral resources.

- 5.6.13 Initiate, support and encourage research and monitoring programmes, including self monitoring, to provide information on issues and solutions relating to Otago's land and mineral resources.
- 5.6.14 Coordinate remedial works to mitigate the degradation resulting from landuse activities.
- 5.6.15 Liaise with city and district councils to enable landuse, development and protection consistent with sustainable management of land resources.
- 5.6.16 Develop guidelines to promote the use of less productive soils instead of high class soils for urban and industrial development.
- 5.6.17 Prepare, in conjunction with relevant agencies and in consultation with the community and affected landowners, an inventory of outstanding natural features and landscapes that are regionally significant.
- 5.6.18 Facilitate mechanisms to maintain and where practicable enhance public access to Otago's natural and physical land resources.

Methods which may be used by Otago's territorial local authorities include the following:

- 5.6.19 Require that all other practicable options be considered before the high class soils within a district are used for any purpose that has the effect of removing the soil, its primary productive capacity or its life-supporting capacity.

- 5.6.20 Develop policies and other means, including rules where appropriate, to ensure that Otago's outstanding natural features and landscapes are protected from inappropriate subdivision, use and development.
- 5.6.21 Consider including provisions and conditions in district plans and on resource consents to avoid, remedy or mitigate soil degradation resulting from the subdivision, use, development or protection of land.
- 5.6.22⁸ Consider, develop and implement mechanisms to maintain and where practicable enhance public access to Otago's natural and physical land features.
- 5.6.23 Consider including provisions or conditions in district plans and on resource consents which seek to avoid, remedy or mitigate the adverse effects of land use activities on water resources.
- 5.6.24 Develop policies, rules and other means as necessary to manage landuse development that could compromise access to known mineral resources.

Explanation and Principal Reasons for Adopting

A range of agencies play a role in managing Otago's land resources. There are overlaps between the functions of regional councils and territorial local authorities in terms of the control of the use of land and effective communication and liaison between agencies is essential to achieve the desired objectives. Agencies responsible for resource management have a responsibility to

⁸ Partially superseded by PORPS 14 January 2019 (Policy 5.1.1 Public access)

provide guidelines and establish protocols in deciding on resource issues. The methods of implementation outlined above are intended to provide a means whereby the Otago community is included in the decision-making process.

5.7 Anticipated Environmental Results

The environmental results anticipated from the above policies and methods of implementation include:

- 5.7.1 Otago's communities are able to utilise the region's land resources in order to provide for their well being, health and safety, and also for the reasonably foreseeable needs of future generations.
- 5.7.2⁹ **The management of Otago's land resources takes into account the values of manawhenua.**
- 5.7.3 Otago's existing high class soils are retained, as far as practicable, for primary productive purposes.
- 5.7.4 The overall state of Otago's land resource is maintained or enhanced.
- 5.7.5 Riparian margins are maintained and where practicable enhanced, along Otago's water bodies.
- 5.7.6 Water quality and quantity is maintained and where practicable enhanced as a result of the use, development or protection of land.
- 5.7.7 Otago's outstanding natural features and landscapes are recognised and protected from inappropriate subdivision, use and development.
- 5.7.8 The ecological health of Otago's land resource is maintained and enhanced.
- 5.7.9 Public access opportunities to Otago's natural and physical land features is maintained and enhanced.
- 5.7.10 Otago's communities are able to have input into the management of Otago's land resources.
- 5.7.11 Otago's communities are able to utilise the region's mineral resources for their present and reasonably foreseeable needs.

⁹ Superseded by PORPS 14 January 2019 (AER 2.2)

6

Water



6.1 Introduction

This chapter of the Regional Policy Statement considers only Otago's fresh water resources, including groundwater. Coastal water issues are considered in the coastal chapter.

Water is an integral part of Otago's natural environment with part of its distinctive character being derived from the scenic and aesthetic impressions of its lakes and water bodies. Much of Otago's tourism and recreation is based on water activities and the landscape values inherent in the region's water bodies.

Approximately 23% of New Zealand's lake surface area occurs in Otago and the region produces 17% of New Zealand's total hydro-electric generation. 75% of the total flow of the Clutha River at Balclutha results from the catchments of Lakes Hawea, Wanaka and Wakatipu. The Clutha River drains much of the Otago region and has the largest annual discharge of any river in New Zealand. However, despite the large total water volumes present in the region's water bodies, many areas of Otago are short of water. Irrigation is an important feature of many areas of Otago and is, in many cases, critical to the continued well being of the people and communities who rely on the primary production it supports.

The region also contains large wetland systems of national significance for wildlife and freshwater fish including the Upper Taieri and Lakes Waipori and Waihola. Lake Tuakitoto and the Pomahaka River have regionally significant values which were recognised by Local Water Conservation Notices that provide for the protection of those values. These areas are now subject to controls under the Otago Regional Council's Regional Plan which restrict activities on these water bodies in order to protect those values. A Draft Water Conservation Order for the Kawarau River and Tributaries requires that certain values in the area are to be sustained and protected.

The quality of water in some areas of Otago is among the highest in New Zealand. However, water quality in the lower reaches of rivers such as the Lower Taieri and the Koau Branch of the Lower Clutha is, for many, unacceptable. Water quality can be an issue in the upper reaches of rivers as well. Both point source and non point source pollution impact on water quality and there is a general and incremental deterioration in a downstream direction. The general trend at present is that adverse effects on water quality resulting from point source pollution are reducing, while adverse effects from non point source pollution are intensifying; and that rivers and wetlands in their natural state are diminishing. There is undoubted demand in the community to deal with issues associated with these trends.

6.2 Roles of Different Agencies

Several agencies have responsibility for managing Otago's water resources.

6.2.1 Central Government

The Minister for the Environment has an overview and monitoring role with some areas of direct resource management responsibility including:

- (a) Preparing national policy statements to guide the management of water resources.
- (b) Monitoring the effect and implementation of water conservation orders.
- (c) Requiring that proposals of national significance be decided at a national level.
- (d) Setting national environmental standards for matters including contaminants and water quality.

The Department of Conservation is responsible for the administration of land in Otago held under the Conservation Act 1987, the National Parks Act 1981 and certain reserves under the Reserves Act 1977. These lands include marginal strips and some water bodies entirely within the lands so administered. The Department is the agency responsible for the funds available for pest and weed control on un-allocated Crown lake and river beds. The Department is also responsible for preserving indigenous freshwater fisheries and protecting freshwater fish habitats. The Lake Wanaka Preservation Act 1973 established the Guardians of Lake Wanaka who report and make recommendations to the Minister of Conservation on the preservation of normal water levels and shoreline of Lake Wanaka and the maintenance and enhancement of water quality.

The Otago Fish and Game Council reports to the Minister of Conservation and is the statutory management agency for sports fish (trout and salmon) and game birds (water fowl and upland game) within the Otago Region.

6.2.2 Otago Regional Council

The Otago Regional Council is concerned with the environmental aspects of resource use. Under the Resource Management Act, the Council has primary responsibility for the management of water resources and pollution control. The Regional Council is required to establish and implement policies to achieve the integrated management of the natural and physical resources of the region. The Regional Council is also responsible for the control of land for the purpose of the maintenance and enhancement of the quality and quantity of water in water bodies. The Regional Council will also control the taking, using, damming and diversion of water as well as discharging contaminants or water into water plus the control of any activities in relation to the beds of lakes and water bodies. The Resource Management Act provides for the prohibition of taking and discharging into water unless such activities are expressly authorised. To make such activities authorised requires either a rule in a regional plan to this effect or the obtaining of a resource consent. Specific activities that will be permitted, discretionary, controlled, non complying or prohibited will be specified in the Regional Plan: Water.

6.2.3 Territorial Local Authorities

Many of the functions of territorial local authorities have implications for water management. Territorial authorities are responsible for the control and integrated management of the effects of the use, development or protection of land and associated natural and physical resources within their city or district. They are also responsible for controlling any actual or potential effects of activities in relation to the surface of water in rivers and lakes, and for control of land subdivision.

6.3 Issues

	Explanation	Objective	Policies	See Also Other Issues	
6.3.1	Consumptive uses of Otago’s water resources require sufficient quantities of quality water.	<p>Water is the life blood on which Otago’s prosperity is largely based. Irrigation, particularly in the drier areas of Otago, is an important use of Otago’s water resources. Commercial and industrial users also require access to water. Water is also required for a variety of reasons by Otago’s communities. Of most importance is the need to have access to suitable quantities of quality water in order to meet the basic needs of human life. Otago’s communities typically receive their water via reticulation schemes which extract water from various Otago water sources and deliver it to each household. These, as well as individual abstractions of water, need to be able to meet the present and reasonably foreseeable needs of those communities.</p>	<p>6.4.1 6.4.2 6.4.3</p>	<p>6.5.1 6.5.2 6.5.3 6.5.4 6.5.5 6.5.11</p>	<p>4.3.3 4.3.5 5.3.3 9.3.1 14.3.1 to 14.3.6 15.3.1</p>
6.3.2	Insufficient quantities of surface water and groundwater are available for local requirements in some areas of Otago.	<p>Adequate supplies of high quality water are vital for regional development in Otago. Dairy units in Otago, the Macraes mining venture, urban areas, irrigation for summer pastoral and horticultural production in dry areas of Otago and frost fighting in the fruitgrowing areas in the Clutha valley all rely on a good supply of quality water. Such uses, as well as industrial and domestic requirements, place significant consumptive demands on Otago’s water resources. With the wide range of demands, as well as seasonal fluctuations in supply and demand, pressure on maintaining water quality and quantity in Otago becomes more significant where water bodies are used for waste disposal. Most inland communities of Otago, which have reticulated sewage schemes, discharge their residual effluent to fresh water bodies. The level of treatment differs from case to case. Other forms of waste are discharged, and non point source pollution of water can also add to difficulties in maintaining suitable water quality. Managing opportunities for development of Otago’s water resources must ensure that future opportunities are not diminished by activities that pollute or deplete those resources.</p>	<p>6.4.1 6.4.3</p>	<p>6.5.1 6.5.2 6.5.3 6.5.4 6.5.11</p>	<p>4.3.3 to 4.3.5 5.3.3 5.3.5 9.3.1 10.3.1 10.3.4 12.3.1 to 12.3.2 14.3.1 to 14.3.6 15.3.1</p>

Issues	Explanation	Objective	Policies	See Also Other Issues
6.3.3 Inefficient uses of water and wastage of water can occur.	<p>There are conflicts in the allocation of water because of competing uses and values. These competing demands on the resource cannot, at times, be satisfied. Water is of importance for:</p> <ul style="list-style-type: none"> - Drinking water and other domestic uses - Intrinsic, cultural and spiritual values - Wildlife values - Aesthetic and scenic values - Irrigation and other agricultural uses - Industrial uses - Recreational values including angling - A medium for the disposal of wastes. <p>The Resource Management Act provides that mining privileges for water resources (now called deemed permits) will expire in 2021. Deemed permits have become a significant element of Otago's water management regime and confer significant benefits upon the region and its communities. They can constrain the opportunities for the setting of minimum flows to provide for instream uses and values and can also constrain the re-allocation of water for other consumptive users off-site.</p>	6.4.1 6.4.3	6.5.3 6.5.11	4.3.2 to 4.3.5 5.3.3 10.3.1 12.3.1 to 12.3.2 14.3.1 to 14.3.6 15.3.1
	<p>Efforts to reduce wastage of water need to be encouraged and built upon.</p>			

Issues	Explanation	Objective	Policies	See Also Other Issues
<p>6.3.4 There is a need to maintain Otago’s generally high standard of water quality and to improve degraded areas.</p>	<p>Otago has some of New Zealand’s highest quality water in its natural state. This quality is an important element of the overall character of the region and supports a diversity of ecosystems and uses. The health of people and communities can be adversely affected by contaminated water. Tourism and recreation are becoming significant aspects of Otago’s economy and are dependent on water of high quality. Freshwater bodies which provide sources of food and primary productive uses of the water resource also rely on the water being of a high standard. Areas of poor water quality however, require remedial action to bring about improvement to an acceptable standard.</p>	<p>6.4.2 6.4.3 6.4.5 6.4.6</p>	<p>6.5.5</p>	<p>4.3.2 to 4.3.3 4.3.5 8.3.6 10.3.1 10.3.40 12.3.1 to 12.3.2 13.3.2 13.3.4 14.3.1 to 14.3.6 15.3.1</p>
<p>6.3.5 Otago’s existing surface water quality is compromised by the adverse effects of:</p> <p>(a) Contamination from point source and non point source discharges;</p> <p>(b) Landuse activities;</p> <p>(c) Activities within the beds and on the banks of water bodies; and</p> <p>(d) Reduced flows through abstractions or diversions.</p>	<p>Water quality can be compromised by point source discharges of industrial, agricultural, and community wastes. The direct discharge of contaminants to surface water, for example industrial waste, sewage effluent and urban stormwater can seriously compromise water quality. Recreational pressures can also impact on water quality. Water quality also can be a useful indicator of the state of the land. Some land management activities such as vegetation clearance, working soil on steep slopes, grazing riparian margins and applying fertiliser have mobilised sediments and nutrients into Otago’s water bodies and have degraded aquatic habitats. Stormwater runoff from urban settlement often contains undesirable contaminants.</p> <p>Instream activities, such as excavation and gravel removal, can also result in degradation of the water resource through increased sediment loading and the smothering of instream habitats. Discharges from domestic, commercial and industrial land uses, such as sewage and industrial effluent, can result in contamination of water resources. Such degradation of water bodies reduces opportunities for utilising the water resource for recreation, food gathering, tourism, production or consumption uses, and for the</p>	<p>6.4.2 6.4.3 6.4.4 6.4.5</p>	<p>6.5.2 6.5.4 6.5.5 6.5.6 6.5.7 6.5.8 6.5.9</p>	<p>4.3.2 to 4.3.5 5.3.3 5.3.5 8.3.1 8.3.6 8.3.8 9.3.1 10.3.1 10.3.4 11.3.7 12.3.1 13.3.2</p>

Issues	Explanation	Objective	Policies	See Also Other Issues
	sustainability of mahika kai resources to Kai Tahu.			
	When instream flows are reduced through abstractions and diversions, their capacity to assimilate point source and non-point source discharges of contaminants can be significantly reduced.			
6.3.6 Otago’s groundwater resources may be adversely affected by landuse activities and contamination.	Groundwater resources have varying rates of recharge and may be affected by drainage of wetland areas, the diversion of water bodies and the removal of vegetation in catchment areas. The quality of groundwater varies depending on geology and land management activities occurring in the vicinity of the supply. Extractions of groundwater must not exceed the rate of recharge. Contamination through discharges from landfills, chemical spraying, effluent disposal and other activities is difficult to reverse in areas where groundwater flows are slow and quantities are small.	6.4.1 6.4.2 6.4.3	6.5.3 6.5.5 6.5.11	4.3.2 to 4.3.5 5.3.3 8.3.1 8.3.6 9.3.1 11.3.7 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1
6.3.7 Ecological, amenity and intrinsic values associated with Otago’s wetlands are compromised by: (a) Reductions in instream flows and surface water availability through damming, diversions, drainage and abstractions; (b) Degraded water quality; (c) Adverse effects of activities in and around wetlands.	The ecological importance of wetlands has been increasingly recognised over recent years and the preservation of their natural character, and protection from inappropriate subdivision, use and development, is identified as a matter of national importance in Section 6(a) of the Act. The major ecological values associated with wetlands are hydrological and habitat values, although wetlands may also have significant landscape values, such as the wetlands of the Upper Taieri scroll plain. The hydrological values of wetlands include water storage capability, which can buffer low flows in water short areas, and contribution to water quality through nutrient absorption; for example, many land based sewage disposal systems use artificial wetland systems. Wetlands also provide significant, remnant habitat for indigenous flora and fauna, particularly fish and bird species, and also provide habitat for a wide range of non indigenous animal species, such as ducks and swans. Wetlands have been identified as being particularly	6.4.1 6.4.2 6.4.3 6.4.4 6.4.5 6.4.6 6.4.7 6.4.8	6.5.1 6.5.2 6.5.3 6.5.4 6.5.5 6.5.6 6.5.7 6.5.8 6.5.9	4.3.2 to 4.3.5 5.3.3 to 5.3.5 8.3.1 8.3.6 9.3.1 10.3.1 10.3.4 to 10.3.5 11.3.7 12.3.1 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1

Issues	Explanation	Objective	Policies	See Also Other Issues
<p>6.3.8 Use and development pressures in and around Otago’s lakes, rivers and other freshwater bodies may compromise:</p> <p>(a) Their natural character and landscape value; (b) Their outstanding natural features; (c) Significant indigenous vegetation and significant habitats of indigenous fauna; (d) Their ecological, amenity, intrinsic and habitat values.</p>	<p>valuable as spawning grounds for some fish species. The habitat values of wetlands also mean that they are valued by Manawhenua as mahika kai and by the public generally for their recreation values. Modification of wetlands through drainage or reclamation has removed or decreased habitats suitable for waterfowl, fish life and invertebrate fauna.</p> <p>The use and enjoyment of Otago’s water resources is important to Otago’s communities as these areas often have high visual appeal, are important habitats for both indigenous and introduced wildlife and offer a wide range of recreational opportunities. Many of Otago’s fresh water bodies still retain their natural character and form an integral part of the Otago landscape, eg parts of the Clutha and Taieri rivers. The use of the water resource and adjacent land areas, can result in adverse effects on the ecological, amenity, intrinsic and habitat values associated with those water resources. The quality of the water is important in maintaining those values and the quantity of instream flows and the availability of surface water are also important factors to consider when making use of the water resource. The adverse effects of activities need to be avoided where necessary and otherwise remedied or mitigated so that the natural character of water bodies may be preserved and outstanding landscape features and significant habitat protected. It is noted that natural instream river flows during times of water shortage may be enhanced by the release of water storage from dams.</p>	<p>6.4.1 6.4.2 6.4.3 6.4.4 6.4.5 6.4.6 6.4.7 6.4.8</p>	<p>6.5.1 6.5.2 6.5.4 6.5.5 6.5.6 6.5.7 6.5.8 6.5.9 6.5.10</p>	<p>4.3.2 4.3.4 to 4.3.5 5.3.3 to 5.3.5 8.3.1 9.3.1 10.3.1 10.3.4 to 10.3.5 11.3.6 to 11.3.7 12.3.1 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1</p>
<p>6.3.9¹ Public access to and along the margins of some of Otago’s water bodies is limited and development, landuses and other activities have the potential to further reduce public access to and along these margins.</p>	<p>The provision of public access to and along the margins of Otago’s water bodies is important to many of Otago’s citizens. Development and landuses alongside those water bodies have the potential to reduce that access. Section 6 of the Resource Management Act requires the maintenance and enhancement of public access as a</p>	<p>6.4.4 6.4.7</p>	<p>6.5.9 6.5.10</p>	<p>4.3.1 to 4.3.2 4.4.4 to 4.3.5 5.3.5 to 5.3.6 8.3.4 9.3.1 10.3.1</p>

¹ Superseded by PORPS 14 January 2019 (Issue 5.1)

Issues	Explanation	Objective	Policies	See Also Other Issues
6.3.10 Flooding and riverbank erosion threaten land resources adjacent to some of Otago's water bodies.	<p>matter of national importance. The provisions of the Act in respect of access cannot impose public access over privately owned land and permission still needs to be sought from landholders, including Crown pastoral lessees. However, the Act does provide for the creation of esplanade strips, esplanade reserves and for access strips at time of subdivision in order to maintain and enhance public access to and along lakes and rivers. There will also be times when access to water bodies may be restricted for reasons including the need to protect sensitive areas, habitats and sites of cultural importance from adverse effects.</p> <p>Otago has always faced the threat of flooding from its major water bodies. The protection of Otago's land resource from flooding has been an ongoing and continuing activity for over a century. Major urban areas, such as Balclutha and areas of primary production, such as the lower Taieri and Clutha plains, have benefited from these works. Bank instability can also adversely affect land areas adjacent to Otago's water bodies.</p>	6.4.5 6.4.6	6.5.7 6.5.8 6.5.9	<p>10.3.4 11.3.1 14.3.1 to 14.3.6 15.3.1</p> <p>4.3.1 to 4.3.2 4.3.4 to 4.3.5 5.3.2 5.3.7 8.3.2 to 8.3.3 9.3.1 10.3.1 11.3.1 to 11.3.7</p>

6.4 Objectives

	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
6.4.1	To allocate Otago’s water resources in a sustainable manner which meets the present and reasonably foreseeable needs of Otago’s people and communities.	To be able to meet the economic, social and cultural well being of Otago’s people and communities, the present and reasonably foreseeable needs of those people and communities for suitable quantities of quality water will have to be met. The demands placed on available water resources are increasing and must be managed to ensure that sufficient water of high quality is available for the future needs of the Otago region. In some cases, where water is in short supply, this will require careful allocation decisions.	<p>6.5.1 4.4.2 to 4.4.5</p> <p>6.5.2 5.4.1</p> <p>6.5.3 9.4.1</p> <p>6.5.4 12.4.1 to 12.4.3</p> <p>6.5.11 13.4.1</p> <p>14.4.1 to 14.4.2</p> <p>15.4.1</p>
6.4.2	To maintain and enhance the quality of Otago’s water resources in order to meet the present and reasonably foreseeable needs of Otago’s communities.	Otago’s water resources are generally of high quality. The use, protection and development of Otago’s water resources requires careful consideration of the different values and expectations of water users while recognising that water management issues interrelate with other resource issues such as landuse activities and discharges of wastes and stormwater. Related issues must be considered in an integrated manner to ensure that water quality is not compromised.	<p>6.5.1 4.4.2 to 4.4.5</p> <p>6.5.5 5.4.2</p> <p>6.5.7 8.4.2</p> <p>6.5.11 8.4.4</p> <p>9.4.1</p> <p>9.4.3</p> <p>10.4.1 to 10.4.2</p> <p>11.4.4</p> <p>12.4.1 to 12.4.3</p> <p>13.4.1</p> <p>13.4.4</p> <p>14.4.1 to 14.4.2</p> <p>15.4.1</p>
6.4.3	To safeguard the life-supporting capacity of Otago’s water resources through protecting the quantity and quality of those water resources.	The life-supporting capacity of a water resource refers to its ability to support life. Life-supporting capacity can be adversely affected by chemical, biological, physical and thermal contamination. The safeguarding of this capacity requires that the water resource be protected from the adverse effects of activities which could result in contamination or depletion to the extent that its ability to support life is threatened.	<p>6.5.1 4.4.2 to 4.4.5</p> <p>6.5.2 5.4.1 to 5.4.2</p> <p>6.5.3 5.4.5</p> <p>6.5.4 8.4.2</p> <p>6.5.5 8.4.4</p> <p>6.5.6 9.4.1</p> <p>6.5.7 9.4.3</p> <p>6.5.8 10.4.1 to 10.4.3</p> <p>6.5.9 11.4.4</p> <p>6.5.10 12.4.1 to 12.4.3</p> <p>6.5.11 13.4.1</p> <p>13.4.4</p> <p>14.4.1 to 14.4.2</p> <p>15.4.1</p>

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
<p>6.4.4 To maintain and enhance the ecological, intrinsic, amenity and cultural values of Otago’s water resources.</p>	<p>The ecological, intrinsic, amenity and cultural values of Otago’s water resources are important elements of those water resources which must be recognised in the management of those resources. They provide much of the character of the water resource. The Otago community and visitors to the region readily identify with Otago’s water areas as integral elements of Otago’s landscapes. Tourism relies on the inherent quality of the water resources in Otago. These resources must be protected or enhanced for the benefit of the region’s economy as well as for the aesthetic advantages they provide.</p>	<p>6.5.1 6.5.2 6.5.3 6.5.4 6.5.5 6.5.6 6.5.7 6.5.8 6.5.9 6.5.10 6.5.11</p>	<p>4.4.1 to 4.4.5 5.4.3 5.4.5 8.4.2 8.4.4 to 8.4.5 9.4.1 to 9.4.3 10.4.1 to 10.4.3 11.4.4 12.4.1 to 12.4.3 13.4.1 to 13.4.4 14.4.1 to 14.4.2 15.4.1</p>
<p>6.4.5 To avoid, remedy or mitigate degradation of water resources resulting from the use, development or protection of the beds and banks of Otago’s water bodies and of adjacent land areas.</p>	<p>The use, development or protection of the beds and banks of Otago’s water bodies and adjacent land areas can result in adverse effects which can degrade the water resource. Reducing these adverse effects as far as practicable will assist in maintaining the overall quality of Otago waters.</p>	<p>6.5.7 6.5.8 6.5.9</p>	<p>4.4.2 to 4.4.5 5.4.1 to 5.4.3 5.4.5 9.4.1 9.4.3 10.4.1 10.4.3 11.4.4 13.4.1 13.4.4 14.4.1 to 14.4.2 15.4.1</p>
<p>6.4.6 To mitigate the threat of flooding and riverbank erosion resulting from the use, development or protection of Otago’s water bodies and lake beds.</p>	<p>Many activities undertaken within the beds and banks of water bodies and on land areas adjacent to water areas can help in mitigating the adverse effects of flooding and riverbank erosion. The clearing of dense stands of trees in water bodies can reduce the risk of flood waters banking up behind them. At the same time, trees are useful means of providing improved habitat and for reducing riverbank erosion by binding and holding the bank soil in place. Different approaches will be required in different areas.</p>	<p>6.5.7 6.5.8 6.5.9</p>	<p>4.4.2 to 4.4.3 4.4.5 5.4.2 5.4.5 8.4.3 9.4.1 9.4.3 10.4.3 11.4.1 to 11.4.4 14.4.1 to 14.4.2 15.4.1</p>

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
6.4.7² To maintain and enhance public access to and along the margins of Otago’s water bodies.	Otago’s water bodies provide a range of use opportunities, including recreation, tourism, scientific and educational opportunities. It is important that public access to water bodies exists and is enhanced wherever possible, subject to appropriate considerations such as ecological and cultural sensitivity, public health and safety, and the agreement of landholders where access crosses private or Crown leasehold land.	6.5.1 6.5.6 6.5.9 6.5.10	4.4.1 to 4.4.5 5.4.4 8.4.6 9.4.1 12.4.1 14.4.1 to 14.4.2 15.4.1
6.4.8 To protect areas of natural character, outstanding natural features and landscapes and the associated values of Otago’s wetlands, lakes, rivers and their margins.	Otago’s lakes, rivers and wetlands are made up of a variety of different landscapes and natural features which make them unique. People appreciate the natural beauty and character of these water bodies and wish to retain that character. The preservation and protection of the natural character and the outstanding natural features and landscapes of lakes, rivers, wetlands and their margins is a matter of national importance under Section 6 of the Resource Management Act and important in achieving integrated management of the region’s water resources.	6.5.1 6.5.2 6.5.4 to 6.5.11	4.4.2 to 4.4.5 5.4.2 to 5.4.5 9.4.1 to 9.4.3 10.4.1 to 10.4.3 11.4.1 11.4.4 12.4.1 to 12.4.2 13.4.1 to 13.4.4 14.4.1 to 14.4.2 15.4.1

² Superseded by PORPS 14 January 2019 (Objective 5.1 Public access to areas of value to the community is maintained or enhanced).

6.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>6.5.1³ To recognise and provide for the relationship Kai Tahu have with the water resource in Otago through:</p> <p>(a) Working toward eliminating human waste and other pollutants from entering all water bodies; and</p> <p>(b) Consulting with Kai Tahu over any application that would result in the mixing of waters from different water bodies and the setting of water flows and levels.</p>	<p>These policies recognise the essential relationship iwi and runanga have with the water resources of Otago. All facets of water resource management are integral to the relationship iwi have with the water resource of Otago. The health of the water bodies reflects directly the health of the surrounding catchment. The degradation of the water resource is a great source of concern to Kai Tahu. The many classifications of water known to Kai Tahu require consideration from planners and resource managers when policy and resource consents are under consideration.</p>	<p>6.6.1</p>	<p>5.5.1 5.5.5 7.5.1 8.5.1 8.5.6 9.5.1 9.5.4 to 9.5.6 10.5.1 to 10.5.2 13.5.1 13.5.8 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
<p>6.5.2⁴ To allocate water in areas of Otago where there is or potentially will be insufficient water supplies through:</p> <p>(a) Considering the need to protect instream amenity and habitat values; and</p> <p>(b) Considering the needs of primary and secondary industry; and</p> <p>(c) Considering Kai Tahu cultural and spiritual values; and</p> <p>(d) Considering the extent to which adverse effects can be avoided, remedied or mitigated.</p>	<p>Water is required for many uses within Otago and within some areas the supply of water is limited. In these areas it will be necessary to allocate water on the basis of considering the importance of competing needs. The Resource Management Act already requires that the domestic and stock drinking water requirements of communities be met where this does not have an adverse effect on the environment. The needs of primary and secondary industry are of importance as are instream amenity and habitat values. They are important to the continued ecological well being of any water resource and to the social, economic and cultural needs of those communities that use those resources for recreational or other purposes. These competing needs will need to be considered together, while also considering the cultural and spiritual values that Kai Tahu place on that water resource.</p>	<p>6.6.1 6.6.2 6.6.4 6.6.5 6.6.7 6.6.8 6.6.11 6.6.12 6.6.14 6.6.16 6.6.17 6.6.18 6.6.21 to 6.6.27 6.6.29 6.6.30 6.6.32</p>	<p>5.5.3 5.5.5 9.5.2 9.5.5 10.5.1 to 10.5.2 12.5.2 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

³ Superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty Principles, Policy 2.2.1 kāi Tahu wellbeing, 5.4.1 Offensive or Objectionable discharges, Policy 4.6.8 Waste storage, recycling, recovery, treatment and disposal)

⁴ Partially superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty Principles, Policy 2.2.1 kāi Tahu wellbeing)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>6.5.3 To promote efficient consumptive water use through:</p> <p>(a) Promoting water use practices which minimise losses of water before, during and after application; and</p> <p>(b) Promoting water use practices which require less water; and</p> <p>(c) Promoting incentives for water users to use less water.</p>	<p>Traditional management techniques and methods of irrigation or reticulation, including urban and rural domestic uses, may not provide the most efficient method of water use. Casual attitudes towards water conservation may not encourage efficient use, further reducing the amount of available water among competing users.</p> <p>Attitudes towards water wastage will eventually impact on the ability of Otago’s water supplies to meet the needs of future generations.</p>	<p>6.6.2</p> <p>6.6.3</p> <p>6.6.4</p> <p>6.6.5</p> <p>6.6.7</p> <p>6.6.12</p> <p>6.6.14</p> <p>6.6.16</p> <p>6.6.17</p> <p>6.6.22</p> <p>6.6.23</p> <p>6.6.24</p> <p>6.6.25</p> <p>6.6.26</p> <p>6.6.32</p>	<p>5.5.5</p> <p>9.5.2</p> <p>12.5.2</p> <p>13.5.3</p> <p>13.5.9</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1 to 15.5.2</p>
<p>6.5.4⁵ To investigate and, where appropriate, set minimum flow levels and flow regimes for Otago water bodies and maximum and minimum lake levels to protect any of the following:</p> <p>(a) The needs of Otago’s communities;</p> <p>(b) Kai Tahu cultural and spiritual values;</p> <p>(c) Lake margin stability;</p> <p>(d) The natural character of the water body;</p> <p>(e) Habitats of indigenous fauna and flora;</p> <p>(f) Amenity values;</p> <p>(g) Intrinsic values of ecosystems;</p> <p>(h) Salmon or trout habitat;</p> <p>(i) Outstanding natural features or landscapes.</p>	<p>In some water short areas, it may be necessary to establish minimum flow levels and flow regimes for rivers and water bodies to protect significant values associated with them. Minimum and maximum lake levels may similarly need to be set. The setting of such levels and regimes will depend on the particular water resource and the values associated with it.</p> <p>In investigating the need or otherwise to set and apply minimum flows through the Regional Plan: Water, recognition will be given to the effects of Mining Privileges for water resources (now called deemed permits) and the options available for addressing any adverse effects. Because Mining Privileges will expire in 2021, provision will need to be made to manage this change through the implementation and review of the Regional Plan: Water.</p>	<p>6.6.1</p> <p>6.6.2</p> <p>6.6.3</p> <p>6.6.4</p> <p>6.6.7</p> <p>6.6.11</p> <p>6.6.12</p> <p>6.6.16</p> <p>6.6.25</p> <p>6.6.27</p>	<p>5.5.5 to 5.5.6</p> <p>9.5.2</p> <p>9.5.4 to 9.5.6</p> <p>10.5.1 to 10.5.2</p> <p>12.5.2</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1 to 15.5.2</p>

⁵ Partially superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty Principles, Policy 2.2.1 kāi Tahu wellbeing)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>6.5.5⁶ To promote a reduction in the adverse effects of contaminant discharges into Otago’s water bodies through:</p> <p>(a) Adopting the existing water quality of Otago’s water bodies as a minimum acceptable standard; and</p> <p>(b) Investigating and where appropriate, enhancing water quality so that as a minimum standard it is suitable for contact recreation and aquatic life where:</p> <p>(i) There is a high public interest in, or use of the water; or</p> <p>(ii) There is a particular Kai Tahu interest in the water; or</p> <p>(iii) There is a particular value to be maintained or enhanced; or</p> <p>(iv) There is a direct discharge containing human sewage or wastes from commercial or industrial activities; and</p> <p>(c) Requiring that all discharges into Otago’s water bodies maintain the standard for the receiving waters after reasonable mixing; and</p> <p>(d) Promoting discharges to land where practicable and where there are no significant adverse effects on groundwater or surface water resources, or soil; and</p> <p>(e) Preparing contingency responses for accidental pollution spills; and</p> <p>(f) Investigating and addressing the effects of diffuse source discharges on water quality; while considering financial and technical constraints.</p>	<p>Otago’s existing water quality is generally high but there are areas, such as the lower reaches of some rivers and in water bodies such as Lake Hayes, where degradation has occurred. Maintaining high water quality is important for human consumption, community health, and aquatic ecosystems. In order to maintain water quality that is of an acceptable standard and to enhance it in degraded areas, discharges of contaminants will have to be treated to a level which ensures that the quality of the receiving waters is not degraded after reasonable mixing has occurred. Areas where degraded water quality is of concern will result in conflict between differing users. In such cases, a higher standard may be set to bring about an improvement, over time, in the quality of that water for human consumption, community health and aquatic ecosystems. Priorities for the investigation of water bodies requiring improved water quality include the lower Clutha and lower Taieri catchments, the Tokomairiro and Waikouaiti Rivers and urban streams such as the Kaikorai in Dunedin. However, in any case where sufficient concern arises about water quality, investigation should be undertaken to determine whether water quality should be enhanced. All discharges will need to meet the applicable standard for the receiving waters after reasonable mixing. Discharges to land, provided they do not result in adverse effects greater than the same discharge to water, will be promoted wherever practicable.</p> <p>Accidental spills of contaminants, such as diesel or chemicals, have the potential to cause significant damage to water bodies. The preparation of suitable response strategies is necessary so as to minimise the damage they may cause.</p> <p>The effects of land uses adjacent to Otago’s water bodies also need to be considered with respect to water quality. Sometimes pollution from diffuse sources resulting from land use practices, septic tanks and urban run off cause as much harm as pipe discharges.</p>	<p>6.6.1</p> <p>6.6.4</p> <p>6.6.8</p> <p>6.6.10</p> <p>6.6.12</p> <p>6.6.13</p> <p>6.6.14</p> <p>6.6.17</p> <p>6.6.18</p> <p>6.6.19</p> <p>6.6.20</p> <p>6.6.21</p> <p>6.6.23</p> <p>6.6.24</p> <p>6.6.25</p> <p>6.6.26</p> <p>6.6.28</p>	<p>5.5.3</p> <p>5.5.5</p> <p>8.5.1</p> <p>8.5.4 to 8.5.6</p> <p>9.5.4 to 9.5.5</p> <p>10.5.1 to 10.5.2</p> <p>12.5.2</p> <p>13.5.1 to 13.5.8</p> <p>13.5.10</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1 to 15.5.2</p>

⁶ Superseded by PORPS 14 January 2019 (Policy 2.2.1 kāi Tahu wellbeing, Policy 5.4.1 Offensive or Objectionable discharges)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
	<p>The requirements of Otago’s communities and the financial and technical constraints relating to any particular discharge are relevant matters to be considered in order to meet the social, economic and cultural well being of Otago’s communities.</p>		
<p>6.5.6⁷ To protect Otago’s remaining significant wetlands from the effects of any activity except:</p> <p>(a) Where such activities can be shown to have no significant adverse effects on:</p> <p>(i) Community needs; or</p> <p>(ii) Kai Tahu cultural and spiritual values; or</p> <p>(iii) The natural hydrological characteristics of the wetland; or</p> <p>(iv) The natural character of the water body; or</p> <p>(v) Habitats of indigenous fauna; or</p> <p>(vi) Amenity values; or</p> <p>(vii) Intrinsic values of ecosystems; or</p> <p>(viii) Salmon or trout habitat; or</p> <p>(b) Where alternative habitats of a similar or improved nature are provided in compensation for any loss of habitat</p>	<p>Water bodies and wetlands contain natural features such as vegetation and fauna habitats and ecosystems which depend on reliable supplies of water for their existence. Extraction of water or land reclamation may adversely impact on ecosystems if such activities are not correctly managed. Until the identification of Otago’s significant wetlands is completed careful consideration will need to be given to determine whether or not a particular activity affecting a wetland would have adverse effects on matters (a) (i) to (viii) of this policy. Where an alternative, compensatory wetland is provided in accordance with the provisions of (b) of this policy, it will automatically become entitled to the same degree of protection as an original wetland under (a).</p>	<p>6.6.1</p> <p>6.6.3</p> <p>6.6.5</p> <p>6.6.6</p> <p>6.6.9</p> <p>6.6.14</p> <p>6.6.17</p> <p>6.6.18</p> <p>6.6.19</p> <p>6.6.20</p> <p>6.6.21</p> <p>6.6.23</p> <p>6.6.25</p> <p>6.6.26</p> <p>6.6.29</p> <p>6.6.30</p>	<p>5.5.1</p> <p>5.5.5 to 5.5.6</p> <p>8.5.1</p> <p>8.5.4 to 8.5.5</p> <p>9.5.1</p> <p>9.5.4 to 9.5.5</p> <p>10.5.1 to 10.5.2</p> <p>11.5.1 to 11.5.2</p> <p>11.5.4</p> <p>12.5.2</p> <p>13.5.1 to 13.5.8</p> <p>13.5.10</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1 to 15.5.2</p>
<p>6.5.7 To maintain and where practicable enhance existing well vegetated riparian margins and, where necessary, to promote the creation of further such margins:</p> <p>(a) To provide for the preservation of the natural character of wetlands, rivers, lakes and their margins; and</p> <p>(b) To maintain and enhance water quality; and</p> <p>(c) To maintain and enhance ecological, amenity,</p>	<p>Well vegetated riparian areas help to minimise the adverse effects associated with runoff from adjacent landuses and add stability to the banks of the water bodies. They also provide important habitats for a variety of Otago’s fauna. At the same time, overgrown riparian areas can result in an increased risk of flooding as a result of water build up behind them. Riparian vegetation may also harbour unwanted pests which can spread to adjacent land. Such areas need to be actively managed to ensure that valuable habitats</p>	<p>6.6.2</p> <p>6.6.3</p> <p>6.6.10</p> <p>6.6.13</p> <p>6.6.14</p> <p>6.6.21</p> <p>6.6.23</p> <p>6.6.25</p> <p>6.6.26</p>	<p>5.5.3</p> <p>5.5.5</p> <p>8.5.1</p> <p>8.5.4 to 8.5.5</p> <p>9.5.1</p> <p>9.5.4 to 9.5.5</p> <p>10.5.1 to 10.5.3</p> <p>11.5.1 to 11.5.2</p> <p>11.5.4</p> <p>11.5.7</p> <p>14.5.1 to 14.5.8</p>

⁷ Partially superseded by PORPS 14 January 2019 (Policy 2.2.1 kāi Tahu wellbeing)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>intrinsic and habitat values; while considering the need to reduce threats posed by flooding and erosion.</p>	<p>are maintained and pest problems managed while reducing the risk of flooding.</p>	<p>6.6.28 6.6.31</p>	<p>15.5.1 to 15.5.2</p>
<p>6.5.8 To allow the extraction of alluvial material from Otago’s rivers provided: (a) The stability of structures, riverbanks and beds within the river system is not reduced; and (b) The maintenance and, where practicable, enhancement of instream amenity and habitat values is considered and provided for; and (c) The adverse effects on water quality are avoided, remedied or mitigated.</p>	<p>The extraction of alluvial material, such as silt, sand, gravel and boulders, from Otago’s water bodies is an important activity for the construction and residential needs of Otago’s communities. While this material is required for a variety of uses, its extraction must take account of the natural dynamics of the river systems to ensure that yields are able to be sustained over the long-term. The stability of riverbanks and structures can also be undermined by the removal of this material in excess of the natural supply. Instream values and other uses will always need to be considered in the management and use of instream alluvial resources.</p>	<p>6.6.3 6.6.9 6.6.10 6.6.13 6.6.14 6.6.18 6.6.19 6.6.20 6.6.21 6.6.23 6.6.25 6.6.26 6.6.27 6.6.30</p>	<p>5.5.5 to 5.5.6 5.5.8 5.5.8 7.5.2 8.5.5 9.5.4 to 9.5.5 10.5.1 to 10.5.2 11.5.1 to 11.5.5 11.5.7 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
<p>6.5.9⁸ To allow for the community’s use, development or protection of the beds and banks of Otago’s water bodies provided: (a) Any adverse effects on: (i) Kai Tahu cultural and spiritual values; or (ii) The natural character of the water body; or (iii) Habitats of indigenous fauna; or (iv) Amenity values; or (v) Intrinsic values of ecosystems; or (vi) Salmon or trout habitat; or (vii) Outstanding natural features or landscapes;</p>	<p>The use, development and protection of the beds and banks of Otago’s water bodies all have potential impacts on the many important values associated with the resource. These values include natural, cultural and intrinsic value. The use and development may include such practices as cultivation, grazing or vegetation disturbance along the beds or banks of water bodies, gravel extraction, mining, channel modification and the building of defences against water. These practices may cause off site effects such as siltation and erosion, which impact on water quality and aquatic habitat. Steps can be taken to avoid, remedy or mitigate adverse effects, for example, facilitating the passage of fish over instream obstructions. There is also a need to consider adverse impacts arising from the use, development and protection of river</p>	<p>6.6.1 6.6.2 6.6.3 6.6.4 6.6.5 6.6.9 6.6.10 6.6.13 6.6.14 6.6.15 6.6.18 6.6.19 6.6.20</p>	<p>5.5.1 5.5.3 5.5.5 to 5.5.8 7.5.2 8.5.2; 8.5.6 9.5.1 9.5.4 to 9.5.6 10.5.1 to 10.5.3 11.5.1 to 11.5.4 11.5.6 to 11.5.7 12.5.2 13.5.1 to 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

⁸ Superseded by PORPS 14 January 2019 (Policy 2.2.1 Kāi Tahu wellbeing)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>are avoided, remedied or mitigated, and that the life-supporting capacity of the water body is maintained and, where practicable, enhanced; while</p> <p>(b) Considering the maintenance and, where practicable, enhancement of the natural functioning of river systems; and</p> <p>(c) Considering the need to provide mitigation to lessen the threat posed by flooding and riverbank erosion.</p>	<p>beds and banks, upon important physical resources such as transport, energy, communication and water management structures and the need to provide for the mitigation of natural hazards.</p>	<p>6.6.21 6.6.23 6.6.25 6.6.26 6.6.31 6.6.33</p>	
<p>6.5.10⁹ To maintain and enhance public access to and along the margins of Otago's water bodies through:</p> <p>(a) Encouraging the retention and setting aside of esplanade strips and reserves and access strips to and along the margins of water bodies which will enhance access; and</p> <p>(b) Identifying and providing for other opportunities to improve access; except where restriction is necessary:</p> <p>(i) To protect areas of significant indigenous vegetation and/or significant habitats of indigenous fauna,</p> <p>(ii) To protect Maori cultural values,</p> <p>(iii) To protect public health or safety,</p> <p>(iv) To ensure a level of security consistent with the purpose of a resource consent; or</p> <p>(v) In other exceptional circumstances sufficient to justify the restriction notwithstanding the national importance of maintaining that access.</p>	<p>All agencies with responsibilities under the Resource Management Act 1991 will need to provide for the access needs of Otago's communities to and along the margins of Otago's water bodies, which are highly valued for recreation and other purposes. Section 6 of the Resource Management Act requires the maintenance and enhancement of public access as a matter of national importance. It is also considered to be a significant resource management issue of the region because it has aroused widespread concern throughout the region, because it is a matter of resource management significance to Manawhenua, both in terms of maintaining access and of protecting valued areas, and because it is essential, in terms of achieving integrated management that the policy statement give effect to Section 6.</p>	<p>6.6.1 6.6.14 6.6.15 6.6.21 6.6.23 6.6.25 6.6.26 6.6.33</p>	<p>5.5.1 5.5.7 8.5.1 8.5.3 9.5.4 to 9.5.6 10.5.1 to 10.5.2 11.5.1 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
<p>(ii) To protect Maori cultural values,</p> <p>(iii) To protect public health or safety,</p> <p>(iv) To ensure a level of security consistent with the purpose of a resource consent; or</p> <p>(v) In other exceptional circumstances sufficient to justify the restriction notwithstanding the national importance of maintaining that access.</p>	<p>This will require consideration of access needs in the development of policies, plans and any other means and in the consideration of resource consent applications, and the setting aside of esplanade strips, esplanade reserves and access strips to and along the margins of Otago's water bodies where it is necessary to do so in order to maintain or enhance public access. Access can also be provided for under other legislation, such as the provision of marginal strips under the Conservation Act 1986 and the provision of public road</p>		

⁹ Superseded by PORPS 14 January 2019 (Policy 5.1.1 Public access)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>6.5.11 To promote the allocation of groundwater within the sustainable yield of the particular water body having regard to its recharge capability and the possibility of sea water intrusion.</p>	<p>reserves under the Local Government Act 1974. These means should also be considered, and either created or retained as appropriate, in order to maintain and enhance public access. In some cases however, it may be necessary to restrict public access in order to protect the water margins, or the water body itself, and associated cultural values, to protect public health or safety or to ensure a level of security consistent with the purpose of a resource consent. Aside from these reasons, public access should not be restricted unless the circumstances are exceptional and can be justified when measured against the maintenance and enhancement of public access as a matter of national importance.</p> <p>Many people rely on groundwater resources for water. Over abstraction can result in loss of supply to other users, and in some locations sea water intrusion. By keeping abstraction within recharge rates these problems can be avoided.</p>	<p>6.6.2 6.6.3 6.6.4 6.6.7 6.6.11 6.6.12 6.6.14 6.6.16 6.6.17 6.6.18 6.6.22 6.6.23 6.6.24 6.6.25 6.6.26</p>	<p>5.5.5 9.5.4 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

6.6 Methods

In order to achieve the outcomes of the policies, every agency with responsibilities under the Resource Management Act 1991 should:

- 6.6.1¹⁰** Take into account Kai Tahu cultural values in the management of Otago's water resources through:
- (a) Using and recognising iwi resource management plans as a basis for consultation; and
 - (b) Developing consultation protocols with iwi, runanga and hapu to provide for their input into the management of Otago's water resources.

The methods to be used by the Otago Regional Council include the following:

- 6.6.2** Develop policies and other means, including rules where appropriate, within the Regional Plan: Water for the management of the region's water resources.
- 6.6.3** Develop policies and other means, including rules where appropriate, within the Regional Plan: Water to avoid, remedy or mitigate the adverse effects of the use, development or protection of the beds and banks of Otago's water bodies.
- 6.6.4** Consider including conditions on resource consents or consider declining such consents as necessary to maintain and where practicable enhance the quality of Otago's water resources.

- 6.6.5** Consider including conditions on resource consents or consider declining such consents as necessary to protect Otago's significant wetlands.
- 6.6.6** Investigate and identify the region's significant wetlands as part of the preparation of the Regional Plan: Water.
- 6.6.7** Initiate, support and encourage research and monitoring programmes, including self monitoring, to provide information on Otago's water issues and solutions.
- 6.6.8** Encourage and, where necessary, require the inclusion of research, management and enhancement programmes for any affected flora or fauna in any major developments utilising Otago's water resources.
- 6.6.9** Promote, encourage, and, where necessary and practicable, require the creation of habitats of a similar or improved nature in compensation for any loss of habitat resulting from development utilising Otago's water resources.
- 6.6.10** Promote, encourage and, where necessary and practicable, require the creation, retention and enhancement of riparian margins.
- 6.6.11** Establish systems for the allocation of surface water and groundwater while considering:
 - (a) The need to protect instream amenity and habitat values; and
 - (b) The needs of primary and secondary industry.

¹⁰ Superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty principles, Method 1.1.3, Method 5.1.4)

- 6.6.12** Establish and implement programmes to monitor water yield, water usage and the quality of water in Otago.
- 6.6.13** Where necessary, actively manage the beds and banks of Otago's water bodies to mitigate the threat of flooding and riverbank erosion.
- 6.6.14** Provide resource information and educate about means available for better resource use and management.
- 6.6.15¹¹** Facilitate develop and implement mechanisms to maintain and where practicable enhance public access to and along the margins of Otago's water bodies.
- 6.6.16** Support water user groups where they exist to implement water restrictions.
- 6.6.17** Consult with Otago's communities regarding the management of Otago's water resources.
- 6.6.18** Take enforcement action to address unauthorised water use activities.
- 6.6.19** Promote, encourage and coordinate remedial works to mitigate the degradation of Otago's water resource resulting from contaminants.
- 6.6.20** Develop contingency plans and a response capability to deal effectively and efficiently with accidental spills of environmentally damaging substances into water bodies.
- 6.6.21** Promote and encourage interagency liaison and cooperation and the development of protocols and standards to achieve integrated and coordinated management of Otago's water.
- 6.6.22** Promote user cooperation in the allocation and reallocation of water for consumptive use.
- 6.6.23** Use education programmes to improve community awareness and understanding of water issues and sustainable management in Otago.
- 6.6.24** Provide information on the adverse effects associated with water activities.
- 6.6.25** Recognise and encourage the role of community groups that promote sustainable management of water and associated resources.
- 6.6.26** Promote codes of practice agreed to by industry, the Otago Regional Council, city and district councils and other interest groups as appropriate to avoid, remedy or mitigate the adverse effects of activities on the water resource.
- 6.6.27** Through the implementation and review of the Regional Plan: Water:
- Identify water bodies in Otago where significant resource conflicts occur;
 - Set minimum flows, investigate and monitor the effects of abstraction; and review minimum flows where appropriate;
 - Identify the methods and strategies to be used to achieve an orderly transition from Mining Privileges to Water Permits under the Resource Management Act.

¹¹ Superseded by PORPS 14 January 2019 (Policy 5.1.1 Public access)

methods of implementation outlined above are intended to provide for today's requirements while allowing for future needs.

Methods which may be used by Otago's territorial local authorities include the following:

- 6.6.28 Consider including conditions on resource consents or consider declining such consents as necessary to maintain and where practicable enhance the quality of Otago's water resources.**
- 6.6.29 Consider including conditions on resource consents or consider declining such consents as necessary to protect Otago's significant wetlands.**
- 6.6.30 Consider controls within district plans necessary to protect Otago's wetlands and water resources.**
- 6.6.31 Promote, encourage and, where necessary and practicable, require the creation, retention and enhancement of riparian margins.**
- 6.6.32 Promote and educate about mechanisms available to reduce or prevent inefficiencies in water use.**
- 6.6.33 Facilitate develop and implement mechanisms to maintain and, where practicable, enhance public access to and along the margins of Otago's water bodies.**

Explanation and Principal Reasons for Adopting

Water is an essential resource which no individual or community can survive without. Sufficient quantities of high quality water are required by many groups or individuals for a range of uses. Such a key regional resource must be protected and allocated in order that future options are not disadvantaged by current activities. The

6.7 Anticipated Environmental Results

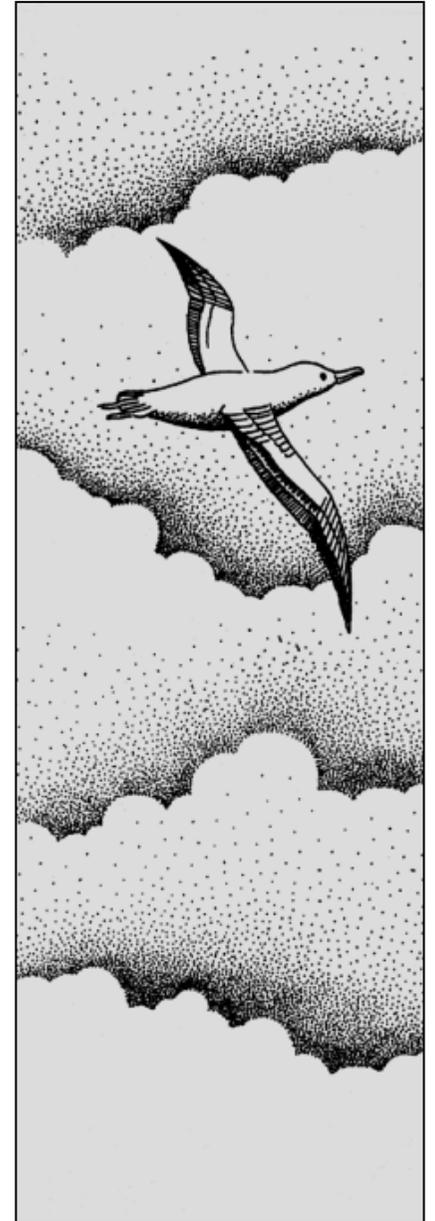
The environmental results anticipated from the above policies and methods of implementation include:

- 6.7.1¹² Otago's people and communities have access to suitable supplies of high quality water for their present and reasonably foreseeable needs.**
- 6.7.2 The management of Otago's water resources takes into account the values of manawhenua.**
- 6.7.3 The views of Otago's communities are taken into account in the management of Otago's water resources.**
- 6.7.4 Otago's water resources are allocated to a level which does not degrade the resource.**
- 6.7.5 The quality of Otago's water resource is maintained and enhanced.**
- 6.7.6 Ecological, amenity and intrinsic values associated with Otago's rivers, lakes, wetlands and freshwater habitats are protected.**
- 6.7.7 Otago's available water resources are used efficiently.**
- 6.7.8 Public access is maintained and enhanced both to and along the margins of Otago's water bodies.**

¹² Superseded by PORPS 14 January 2019 (AER 1.1)

7

Air



7.1 Introduction

The issues of air can be grouped into two major categories: those that are global in scale but where regional air quality management can make an important contribution and those that result in specific local effects on the environment. Unlike other resources in the region, air is not constrained by physical boundaries - just influenced by them. It is, however, a finite resource.

Problems associated with unacceptable air quality can be categorised into two main groups. Firstly, environmental or health risks which relate not only to human health and welfare but also the well being of all ecosystems; secondly, aesthetic problems which whilst not necessarily serious, affect an individual's enjoyment of the environment through undesirable odour, visibility or general amenity values.

The Otago region is predominantly rural in nature with centres of urban development. Otago enjoys a generally high standard of air quality, considered by many residents of Otago to be one of the region's great assets. The National Institute of Water and Atmospheric Research station is based in the Lauder area because of the clean air and high optical quality of the surrounding environment. This is due to the low population of the region relative to land area and the relatively frequent flushing of the region's air mass. However, there are some localised air quality problems within the region including emissions from industrial, domestic and rural activities and localised urban air pollution problems.

7.2 Roles of Different Agencies

7.2.1 Central Government

The Minister for the Environment has an overview and monitoring role and is responsible for:

- The setting of national environmental standards for matters including contaminant discharges into the air and air quality.
- The preparation of national policy statements and guidelines.
- The provision of funding and subsidies to Regional Councils so that they can undertake functions of policy, monitoring and education with respect to the management of the air resource.

7.2.2 Otago Regional Council

The Otago Regional Council is concerned with promoting the sustainable management of the air resource pursuant to the Resource Management Act 1991. The Regional Council is responsible for:

- The preparation of objectives, policies and methods of implementation, including the setting of standards.
- The consideration of discharge permits where they are required.
- The monitoring of the quality of the air resource.
- The policing of unauthorised discharges into the air.
- The implementation of national policies and standards.

7.2.3 Territorial Local Authorities

Territorial local authorities are concerned with the management of discharges under the Resource Management Act, the Building Act 1992 and other legislation including the Health Act. Responsibilities include:

- Ensuring that contaminated air is disposed of in a way which avoids causing a nuisance or hazard to people and other property.
- The consideration of impacts on air quality in preparing plans and considering resource consents, even though a discharge permit may not be required.

7.3 Issues

	Explanation	Objective	Policies	See Also Other Issues
<p>7.3.1¹ Otago’s existing air quality, including visual appearance, may be compromised by the adverse effects of discharges to air from activities such as:</p> <p>(a) The combustion of fuels; and (b) Industrial activities; and (c) Waste disposal practices; and (d) Land management practices.</p>	<p>Otago’s air resource can be affected by a variety of pollution sources including stationary point sources (such as industrial and domestic emissions), stationary diffuse sources (such as vegetative burnoffs and wind blown dust) and moving point sources (such as vehicle exhaust emissions and spray and chemical drift from agricultural or horticultural operations).</p> <p>The burning of combustible fuels such as coal, wood and petroleum products create the majority of the nation’s air pollution issues. Avoiding, remedying or mitigating these adverse effects is often difficult as the burning typically occurs at a variety of both stationary and moving sources. Discharges to air from industrial processes typically occur in identified locations and are more easily recognised and controlled. Waste disposal practices include backyard burning, the incineration of wastes and discharges from landfill tips. All of these discharges have the potential to adversely affect Otago’s air quality.</p>	7.4.1	7.5.2 7.5.3 7.5.4 7.5.5	4.3.2 4.3.5 9.3.1 to 9.3.3 8.3.6 10.3.1 10.3.4 to 10.3.5 12.3.1 12.3.2 13.3.2 13.3.4 to 13.3.5 14.3.1 to 14.3.6 15.3.1
<p>7.3.2² Otago’s environment may be compromised by the adverse effects of the global emission of greenhouse gases and ozone depleting substances.</p>	<p>Greenhouse gases, such as water vapour, carbon dioxide, methane and nitrous oxide trap a proportion of the sun’s energy, warming the Earth. These gases have increased in concentration over the last 130 years, largely due to worldwide population increases and technological changes which have increased the demand for energy. The most significant source of additional greenhouse gas is carbon dioxide from the burning of fossil fuels such as oil and coal. Another significant greenhouse gas is methane, produced both from animals and anaerobic decomposition of refuse land fills. Scientists predict that increasing concentrations of greenhouse gases may lead to sea level rise and climate changes. This may</p>	7.4.1	7.5.4	4.3.5 5.3.2 8.3.3 9.3.1 to 9.3.3 10.3.1 10.3.4 to 10.3.5 12.3.1 13.3.4 13.3.5 15.3.1

¹ Superseded by PORPS 14 January 2019 (Issue 5.4)

² Superseded by PORPS 14 January 2019 (Issue 4.2)

Issues	Explanation	Objective	Policies	See Also Other Issues
	<p>result in changed weather patterns eg. greater frequency and intensity of storms in some regions and droughts in others. There is still considerable uncertainty about these predictions since scientific understanding is still developing.</p>			
	<p>As set out in “Information for the Guidance of Local Authorities on Climate Change 1993”, provided to local authorities by the Ministry for the Environment, New Zealand has two objectives with regard to the discharge of carbon dioxide. The first objective is to stabilise net carbon dioxide emissions at 1990 levels by the year 2000, and maintain them at that level beyond then. If possible, however, the Government’s ultimate objective is to reduce <u>net</u> carbon dioxide emissions 20% below their 1990 levels by 2000, subject to a number of conditions for the measures likely to be required. A long term goal is a reduction of <u>all</u> greenhouse gas emissions, not just carbon dioxide.</p>			
	<p>The ozone layer, at 15 to 50 kilometres above the Earth’s surface, screens out harmful ultra-violet radiation. Chloro-fluorocarbons and halons are considered to be responsible for a depletion of the ozone layer and the appearance of the ozone hole which has been measured over both poles and a consequential increase in the amount of radiation reaching the Earth’s surface. These ozone depleting substances are put to a variety of uses such as refrigerants, the manufacture of foam plastics, as propellants in aerosols and as industrial cleaners. Due to the ozone hole and the increased radiation levels, ozone depletion is a major concern in the southern lying countries such as New Zealand, parts of South America, South Africa and Australia.</p>			

7.4 Objective

	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
7.4.1 ³ To maintain and enhance Otago’s existing air quality, including visual appearance and odour.	The maintenance and enhancement of Otago’s existing air quality is important for the continued well being of Otago’s communities and its attractiveness for visitors. Discharges of contaminants to air have the potential to have an impact upon the environment including the health of the community. Given the dynamic nature of the air resource (originating outside the region and passing across the region and onto other areas) the maintenance and enhancement of the air resource is also important for surrounding areas. This requires that all persons “Think Globally Act Locally” over Otago’s air resource.	7.5.1 7.5.2 7.5.3 7.5.4 7.5.5	4.4.2 4.4.5 9.4.3 10.4.1 12.4.1 to 12.4.2 13.4.1 13.4.4 14.4.1 to 14.4.2 15.4.1

³ Superseded by PORPS 14 January 2019 (Objective 5.4 Adverse effects of using and enjoying Otago’s natural and physical resources are minimised)

7.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
7.5.1⁴ To recognise and provide for the relationship Kai Tahu have with the air resource in Otago.	The discharge of pollutants to air can have significant adverse effects on the cultural and spiritual relationship Kai Tahu have with Otago's natural and physical resources. This policy recognises the relationship of runanga and hapu to their places and resources of cultural importance and provides for their role in the management of Otago's waste stream.	7.6.1	6.5.1 8.5.1 9.5.1 10.5.1 12.5.1 13.5.1 13.5.5 13.5.8 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2
7.5.2⁵ To avoid, remedy or mitigate any discharges which have adverse effects on the air resource including effects on human health, the environment, visual impacts and odour.	<p>New developments will be necessary within Otago if the region's community is to continue to prosper. Many of these developments will include discharges of contaminants to air. Such developments will only be permitted if the adverse effects of the discharge are avoided, remedied, or mitigated, including effects on the human health of the community in which it is located. Similarly the assessment must include consideration of alternatives.</p> <p>Existing discharges should also meet these same criteria as their consents are considered for renewal.</p>	7.6.2 7.6.3 7.6.4 7.6.5 7.6.7 7.6.9 7.6.10 7.6.11 7.6.12 7.6.13	8.5.1 8.5.5 9.5.3 to 9.5.5 6.5.8 to 6.5.9 10.5.2 12.5.2 13.5.1 to 13.5.2 13.5.4 13.5.8 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2
7.5.3⁶ To promote and encourage improvements to existing discharges in order to reduce the amount and toxicity of contaminants released.	There are ongoing developments in new technologies and processes world-wide that improve both the efficiency of fuels used and the discharges from processes. The Otago community has a responsibility for the environment to ensure that existing processes are upgraded as far as practicable to reduce the adverse effects of discharges to air.	7.6.2 7.6.3 7.6.4 7.6.7 to 7.6.17 7.6.19 7.6.20	8.5.5 9.5.3 9.5.5 10.5.2 12.5.2 13.5.2 13.5.4 13.5.7 13.5.10

⁴ Superseded by PORPS 14 January 2019 (Policy 2.2.1 Kāi Tahu wellbeing)

⁵ Superseded by PORPS 14 January 2019 (Policy 5.4.4 Emission standards, Policy 5.4.1 Offensive or objectionable discharges)

⁶ Superseded by PORPS 14 January 2019 (Policy 4.5.1 Providing for urban growth and development, Policy 5.4.1 Offensive or objectionable discharges, Policy 5.4.4 Emission standards, Policy 5.4.7 Offsetting for air quality)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
7.5.4 To promote and encourage activities and methods that avoid, remedy or mitigate the production and discharge of greenhouse gases and ozone depleting substances.	International agreements such as the Montreal Protocol include national obligations on greenhouse gases and ozone depleting substances. In New Zealand the Ozone Layer Depletion Act is in place. The Otago Regional Council supports initiatives aimed at reducing greenhouse gases and ozone depleting substances.	<p>7.6.21</p> <p>7.6.2 7.6.3 7.6.4 7.6.7 7.6.8 7.6.9 7.6.10 7.6.11 7.6.12 7.6.14 to 7.6.17 7.6.19 7.6.20</p>	<p>14.5.1 to 14.5.8 11.5.1 to 11.5.2</p> <p>8.5.8 9.5.3 to 9.5.5 12.5.2 13.5.1 13.5.7 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
7.5.5⁷ To encourage the use of fuels and combustion processes that have minimum adverse effects on the environment.	<p>Present day fuel usage produces air contaminants at rates which can lead to the environment's carrying capacity being exceeded. The region should be encouraging non or low polluting fuels such as hydrogen, biomass and solar fuels to reduce the discharges of contaminants into the region's air resource.</p> <p>Approximately 46% of New Zealand's CO₂ emissions result from the combustion of transport fuel. Any transport plan for the region should encourage a reduction in CO₂ emissions as a matter of high priority.</p>	<p>7.6.2 7.6.3 7.6.4 7.6.6 7.6.7 7.6.8 7.6.9 7.6.10 7.6.13</p>	<p>9.5.2 to 9.5.5 10.5.2 12.5.2 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

⁷ Superseded by PORPS 14 January 2019 (Policy 4.4.6 Energy efficient transport, Policy 4.4.7 Fuels)

7.6 Methods

In order to achieve the outcomes of the policies, every agency with responsibilities under the Resource Management Act 1991 should:

- 7.6.1⁸ Take into account Kai Tahu cultural values in the management of Otago's air resources through:
- (a) Using and recognising iwi resource management plans as a basis for consultation; and
 - (b) Developing consultation protocols with iwi, runanga and hapu to provide for their input into the management of Otago's air resources.

The methods to be used by the Otago Regional Council include the following:

- 7.6.2⁹ Develop policies and other means, including rules where appropriate, within the Regional Plan: Air to avoid, remedy or mitigate the adverse effects of the region's air discharges.
- 7.6.3¹⁰ To consider the development of air quality standards within the Regional Plan: Air.
- 7.6.4¹¹ Consider including conditions on resource consents or consider declining such consents as necessary to

⁸ Superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty of Waitangi, Method 1.1, Method 5.1.4)

⁹ Partially superseded by PORPS 14 January 2019 (Method 2.1.4)

¹⁰ Partially superseded by PORPS 14 January 2019 (Method 2.1.4)

¹¹ Partially superseded by PORPS 14 January 2019 (Method 2.1.4)

maintain and where practicable enhance the quality of Otago's air resources.

- 7.6.5 Take enforcement action to address unauthorised air discharges.
- 7.6.6 Assess the communities' expectations over air quality in relation to odours and visual appearance.
- 7.6.7 Develop an ongoing regional inventory of Otago's air pollution sources.
- 7.6.8¹² Address air quality concerns in the development of the regional land transport strategy.
- 7.6.9 Actively collect, prepare and make available information on Otago's air quality and air management requirements.
- 7.6.10 Initiate, support and encourage research and monitoring programmes to provide information on Otago's air issues and solutions.
- 7.6.11 Advocate to Central Government on air management issues of importance to Otago, and the need for a National Policy Statement on greenhouse gas emissions including CO₂ reduction targets and methods.
- 7.6.12¹³ Promote and encourage liaison and cooperation and the development of protocols and standards to achieve

¹² Partially superseded by PORPS 14 January 2019 (Method 2.1.4)

¹³ Superseded by PORPS 14 January 2019 (Method 2.1.4)

integrated and coordinated management of Otago's air resources.

7.6.13 Consult with Otago's communities regarding the management of Otago's air resources.

7.6.14 Support and encourage research into and conversion to the use of alternative fuels.

7.6.15 Educate about and promote practices which reduce the use of ozone depleting substances.

7.6.16 Promote mechanisms which mitigate the production of greenhouse gases, eg tree planting in appropriate circumstances.

7.6.17 Use education programmes to improve community awareness and understanding of air issues and sustainable management in Otago.

7.6.18 Provide information on the adverse effects associated with air activities.

7.6.19 Recognise and encourage the role of community groups that promote sustainable management of air and associated resources.

7.6.20¹⁴ Promote codes of practice agreed to by industry, the Otago Regional Council, city and district councils and other interest groups as appropriate to avoid, remedy or mitigate the adverse effects of activities on the air resource.

¹⁴ Superseded by PORPS 14 January 2019 (Method 2.1.4)

Methods which may be used by Otago's territorial local authorities include the following:

7.6.21¹⁵ Review the control of nuisance associated with domestic incineration and open air outdoor burning of rubbish, including vegetation, and private solid fuel heating appliances and installations, in accordance with the provisions of the Health Act 1956.

Explanation and Principal Reasons for Adopting

Air is an essential resource to all life on the planet. Sufficient quantities of high quality air are required by all individuals and communities so that they can carry on with everyday life. Air as a regional resource must be protected and managed. The methods of implementation outlined are intended to provide for the sustainable management of today's requirements so that we may enjoy the resource in the future.

¹⁵ Superseded by PORPS 14 January 2019 (Policy 4.5.1 Providing for urban growth and development, Method 2.1.4)

7.7 Anticipated Environmental Results

The environmental results anticipated from the above policies and methods of implementation include:

7.7.1¹⁶ Otago's communities have suitable supplies of acceptable quality air for their present and reasonably foreseeable needs.

7.7.2 The management of Otago's air resources takes into account the values of manawhenua.

7.7.3 The quality of Otago's air resource is maintained to existing standards and where practicable enhanced.

7.7.4 The adverse effects of Otago's air pollution discharges are avoided, remedied or mitigated.

7.7.5 Air quality in urban environments is improved in respect of public health, visual appearance and odour.

¹⁶ Superseded by PORPS 14 January 2019 (AER 1.1)

8

Coast



8.1 Introduction

The coastal area of Otago has historically been managed in a piecemeal and fragmented manner. Managing the coastal environment involves the integrated management of the various components of the coastal environment to ensure the sustainability of the coast's resources. These components include:

- The natural physical processes that act to shape Otago's coastline;
- The ecological communities that are an integral part of Otago's coastal character;
- The built environment (including urban areas, roads and structures) and the activities within and around the coastal area;
- The cultural connections made with the coast.

New Zealand has international obligations with respect to the coastal environment relating to marine pollution. These have been implemented through the enactment of the Maritime Transport Act, by which the discharge and dumping of harmful substances from ships is regulated by central government.

The Resource Management Act establishes a framework for the sustainable management of Otago's coastal area. The key elements of this are shown in Figure 5.

The New Zealand Coastal Policy Statement puts in place national priorities and direction to guide the use, development and protection of New Zealand's coastal environment. This Regional Policy Statement cannot be inconsistent with the New Zealand Coastal Policy Statement. The Regional Policy Statement is the only sub-national mechanism that provides for the integrated management of the coastal environment, extending across the mean high water mark. While the Regional Plan: Coast considers the coastal marine area, which extends from the mean high water spring mark out to the limits of the territorial sea (12 nautical miles or 22.2 kilometres), the Regional Policy Statement considers the

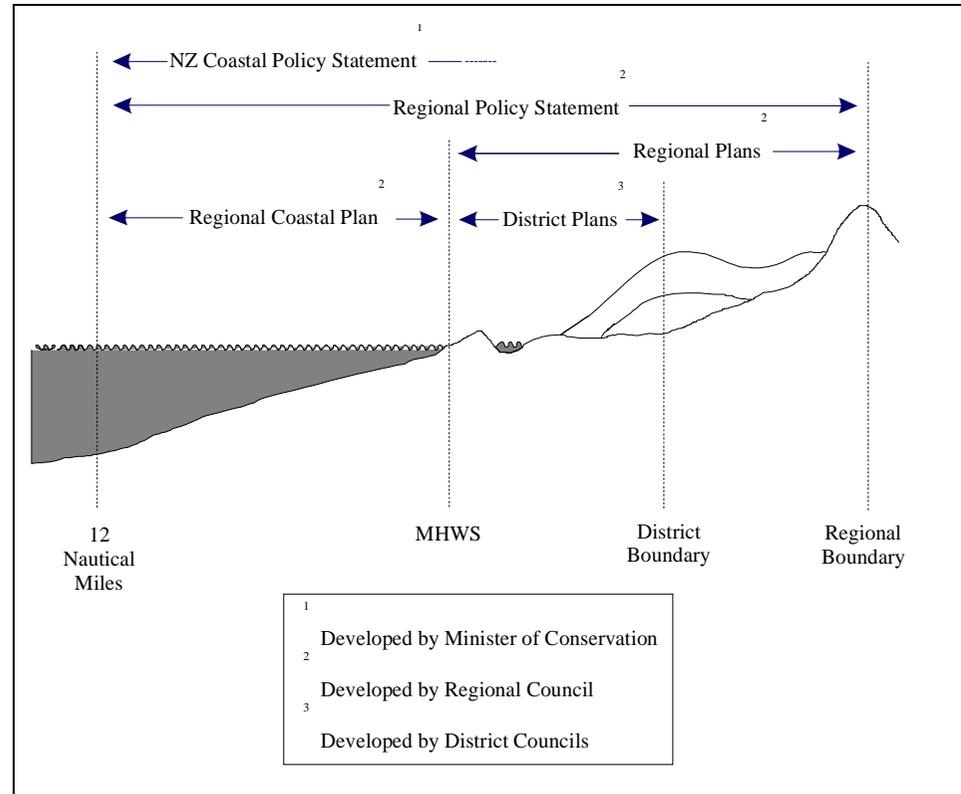


Figure 5 New Zealand's Coastal Management Framework

entire coastal environment. This includes the coastal marine area as well as the land and river components which can be classed as being part of the coastal environment.

The coastal environment is the geographic area in which the coast is usually the significant part or element. This includes the coastal marine area as well as the land and river components within which activities directly affect, or are affected by, matters occurring in the

coastal marine area. The extent of this geographic area will therefore vary from place to place.

The Otago coastal environment exhibits a variety of natural features, flora, and fauna found elsewhere on New Zealand's coastline, while containing many distinguishing characteristics. Such features include the Moeraki Boulders, spectacular headlands and stacks such as those at the Nuggets, Cape Wanbrow and Otago Peninsula, the isolated sand beaches in the Catlins backed by lowland podocarp forests, deep water off Otago Peninsula feeding an array of wildlife, and numerous beaches and estuaries accessible and popular with people and wildlife alike.

Elements of Otago's coastal environment, which reflect our national coastal environment, are the mixed sand and gravel beaches created by alluvial rivers, the areas of significant erosion, the vast stretches of relatively uninhabited coastline and the high proportion of the population living a small distance from the coast. The majority of Otago's people (approximately 73%) live adjacent to the coast in the major urban areas of Dunedin and Oamaru along with the smaller settlements such as Moeraki, Karitane, Warrington and Owaka. The presence of Otago's communities reflects our historical and continuing interaction with the coast.

8.2 Roles of Different Agencies

The management of Otago's coastal environment is the responsibility of a number of agencies:

8.2.1 Central Government

The Minister of Conservation oversees the management of the coast from a national perspective and develops the New Zealand Coastal Policy to provide national direction for the way the coast is managed and used.

The Minister is also responsible for issuing coastal consents for activities which would cause significant or irreversible impacts on the coastal marine area. These activities are termed restricted coastal activities.

The Department of Conservation is also responsible for the administration of the Marine Reserves Act (1971) and the Marine Mammals Protection Act (1978).

The Ministry of Fisheries is responsible for the conservation and management of fisheries in the coastal marine area under the Fisheries Act 1983. This Act extends to the management, conservation, protection and allocation of fishing rights to Maori.

The Ministry for the Environment is responsible for regulating discharges and dumping from ships and offshore installations into the coastal environment. The Regional Council must enforce such regulations.

8.2.2 Otago Regional Council

The Otago Regional Council, in conjunction with the Minister of Conservation, is responsible for the sustainable management of the coastal marine area (from mean high water spring mark out to the 12 nautical mile limit). As part of that responsibility, the Otago Regional Council must develop a regional coastal plan for the coastal marine area of the Otago region. This sets the framework within which all coastal activities occur, providing a basis for the allocation of the coastal space and for the control of the effects of any use. The role of the Otago Regional Council does not however, extend to the control of fishing activities in the coastal marine area. This is provided by the Fisheries Act 1983. The Otago Regional Council also issues coastal permits for activities within the coastal marine area.

Provision also exists under the Harbours Act 1950 for the Otago Regional Council to take on the functions, responsibilities and roles of a Harbour Board for the entire coastal space, being safety and navigation functions. These functions are separate from its resource management functions under the Resource Management Act 1991.

8.2.3 Territorial Local Authorities

Otago's district and city councils are responsible for controlling the adverse effects of landuses, primarily through the provisions of their district plans and through the issuing of landuse consents for land activities.

8.3 Issues

	Explanation	Objective	Policies	See Also Other Issues
<p>8.3.1 Use and development pressures within Otago’s coastal environment may compromise:</p> <p>(a) The natural character; (b) Estuarine areas; (c) Significant habitats of indigenous flora and fauna; (d) Outstanding natural features and landscapes; (e) Areas of Significant Conservation Value; (f) Amenity values; (g) Water quality.</p>	<p>Otago’s communities want to be able to use and enjoy the coastal environment. Some activities can only locate in the coastal environment and some of these activities are essential to community well being (eg ports, roads, marinas). Other activities have adverse effects which are inappropriate in the area (eg. developments having a high visual impact in a pristine coastal environment). The adverse effects of all activities need to be avoided, if possible, or remedied or mitigated, so that the environmental quality of the coastal environment is maintained and where possible enhanced. There are some particular attributes, identified in the issue itself, that are more susceptible than others to the adverse effects associated with activities.</p>	<p>8.4.1 8.4.2 8.4.4 8.4.5</p>	<p>8.5.1 8.5.2 8.5.4 8.5.5 8.5.6 8.5.7 8.5.10</p>	<p>4.3.1 to 4.3.5 5.3.3 to 5.3.5 6.3.4 to 6.3.8 9.3.1 to 9.3.3 10.3.1 10.3.4 to 10.3.5 11.3.6 to 11.3.7 12.3.1 13.3.1 to 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1</p>
<p>8.3.2 The continual action of dynamic coastal processes along the boundary between the land and the sea is resulting in erosion and accretion along Otago’s coastline.</p>	<p>The natural action of coastal processes on the interface between the land and the sea can result in erosion of some areas and the building up (accretion) of others. Natural processes that result in erosion or accretion are considered a natural hazard when there are human structures or values associated with the areas that are threatened by those natural actions. Within Otago there has been concern over erosion such as at New Haven in the Catlins River estuary, at Aramoana, along Te Rauone Beach, at the Tokomairiro River mouth and along the North Otago coastline, particularly around Oamaru and Waitaki Boys High School. Areas that are accreting include Blueskin Bay and other bays to the north of Otago Peninsula and areas south of the Pleasant River.</p>	<p>8.4.3</p>	<p>8.5.7</p>	<p>4.3.1 to 4.3.2 4.3.4 9.3.1 to 9.3.3 6.3.10 11.3.1 to 11.3.7 14.3.1 to 14.3.6 15.3.1</p>
<p>8.3.3¹ Otago’s communities and natural and physical resources are threatened by possible sea-level rise in the long term.</p>	<p>Estimates of possible sea-level rise resulting from the gradual warming of the earth vary. What is known is that any rise in sea-level will result in the inundation of low lying coastal areas with salt water.</p>	<p>8.4.1 8.4.3 8.4.5</p>	<p>8.5.7 8.5.8</p>	<p>4.3.1 to 4.3.2 7.3.2 6.3.10 9.3.1 to 9.3.3 10.3.1 11.3.1 to 11.3.7</p>

¹ Superseded by PORPS 14 January 2019 (Issue 4.2)

Issues	Explanation	Objective	Policies	See Also Other Issues
8.3.4² Public access to some areas of Otago’s coastline is limited and development, landuses and other activities have the potential to further reduce public access to and along the coastal marine area.	Maintaining existing public access to and along the coast, and enhancing access where this is restricted, is important to many of Otago’s citizens. Developments and landuses within the coastal environment have the potential to reduce that access. Section 6 of the Resource Management Act requires the maintenance and enhancement of public access as a matter of national importance. However there may be some exceptional circumstances sufficient to justify imposing restrictions on public access.	8.4.1 8.4.2 8.4.6	8.5.3	14.3.1 to 14.3.6 15.3.1 4.3.1 to 4.3.2 4.3.4 5.3.6 to 5.3.7 6.3.9 9.3.1 to 9.3.3 14.3.1 to 14.3.6 15.3.1
8.3.5 Some space within Otago’s coastal marine area is currently occupied by exclusive uses and further exclusive use may be sought in the future.	The coastal marine area is generally in public ownership. However, there are occasions where use of the coast requires that exclusive occupation rights be given to an individual or group in order that they are able to carry out their activities (eg. port activities, marinas and defence activities). Decisions to grant such exclusive use over parts of the coast are likely to be of high public interest given the general view of the coast being available for all. It is also important however, to recognise that facilities such as ports and marinas of necessity require space allocation in certain areas of the coastal marine area.	8.4.1 8.4.5 8.4.6	8.5.2	4.3.2 4.3.4 to 4.3.5 5.3.5 to 5.3.7 6.3.9 9.3.1 to 9.3.3 10.3.1 11.3.4 to 11.3.5 14.3.1 to 14.3.6 15.3.1
8.3.6 Discharges to the coastal environment may create adverse environmental effects which are of concern to Otago’s communities.	Discharges and rubbish from urban, industrial and rural areas, and from vessels into the coastal environment can have significant adverse effects, are culturally abhorrent to manawhenua, and are opposed by many. The Otago community has asked that alternatives to coastal discharges be investigated or that the quality of existing discharges be improved.	8.4.1 8.4.2 8.4.4 8.4.5	8.5.1 8.5.5 8.5.6 8.5.10	4.3.1 to 4.3.5 5.3.3 to 5.3.5 6.3.4 to 6.3.7 7.3.1 9.3.1 10.3.1 13.3.1 to 13.3.2 13.3.4 to 13.3.5 14.3.1 to 14.3.6 15.3.1

² Superseded by PORPS 14 January 2019 (Issue 5.1)

Issues	Explanation	Objective	Policies	See Also Other Issues
8.3.7 The discharge of ballast water into Otago’s coastal marine area has the potential to result in contamination and in the introduction of exotic unwanted organisms.	Ballast water carried by ships particularly from international ports can contain foreign organisms destructive to our coastal ecosystem, as well as oil and other wastes. The discharge of ballast into New Zealand’s coastal waters can result in the introduction of exotic unwanted species and the pollution of coastal areas.	8.4.2 8.4.4 8.4.5	8.5.1 8.5.5 8.5.6	4.3.2 to 4.3.5 10.3.1 10.3.2 to 10.3.5 13.3.1 13.3.2 14.3.1 to 14.3.6 15.3.1
8.3.8 Otago’s coastal environment is threatened by pollution spills both on the land and in the water and by maritime shipping disasters.	The risk of accidents is ever present in the coastal environment. In order to minimise the adverse effects of any accident, contingency plans and suitable equipment need to be in place to allow agencies to respond quickly and effectively. The development of contingency plans will need to be undertaken within the legislative framework provided by the Resource Management Act and the relevant marine pollution legislation.	8.4.2 8.4.4 8.4.5	8.5.1 8.5.5 8.5.6 8.5.10	4.3.1 to 4.3.5 5.3.3 to 5.3.5 6.3.5 to 6.3.6 9.3.1 10.3.1 10.3.4 13.3.2 13.3.4 to 13.3.5 14.3.1 to 14.3.6 15.3.1
8.3.9 Excess noise within Otago’s coastal environment can adversely affect community and ecological values.	Noise associated with activities in the coastal environment, particularly those on the water, has the potential to travel significant distances and to disturb individuals over a wide distance. The control of noise rests with the Otago Regional Council for the coastal marine area and the various district and city councils for the landward edge.	8.4.1 8.4.2	8.5.2 8.5.4 8.5.5 8.5.9	4.3.5 9.3.1 10.3.1 10.3.4; 10.4.5 14.3.1 to 14.3.6 15.3.1

8.4 Objectives

	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives	
8.4.1	To promote the sustainable management of Otago’s coastal resources in order to meet the present and reasonably foreseeable needs of Otago’s people and communities.	Otago’s communities make use of the coastal environment for a variety of industrial, commercial and recreational uses. These uses help provide for the social, economic and cultural well being of Otago’s communities. The management of the coastal environment needs to recognise the importance of these uses and the need for them to be sustainable.	8.5.1 8.5.2 8.5.3 8.5.6 8.5.7 8.5.8 8.5.9	4.4.1 to 4.4.5 5.4.1 to 5.4.2 5.4.5 6.4.1 to 6.4.3 7.4.1 9.4.1 to 9.4.2 10.4.1 to 10.4.3 11.4.1 to 11.4.4
8.4.2	To maintain and enhance the health and diversity of Otago’s existing coastal ecology.	The life-supporting capacity of Otago’s coastal ecosystems is to a large extent dependent on their continuing health and diversity. That life-supporting capacity is also important to Otago’s communities who variously derive economic, social and cultural rewards from having a healthy and diverse coastal system.	8.5.1 8.5.2 8.5.3 8.5.4 8.5.5 8.5.6 8.5.8 8.5.9 8.5.10	4.4.2 to 4.4.5 5.4.2 5.4.5 6.4.2 to 6.4.5 7.4.1 9.4.1 9.4.3 10.4.1 to 10.4.3 11.4.4 12.4.1 13.4.1 14.4.1 to 14.4.2 15.4.1
8.4.3	To recognise and understand the action of natural physical coastal processes affecting the natural and physical resources within Otago’s coastal environment.	Otago’s coastal environment, as with all of New Zealand’s coastal environments, is subject to natural processes which shape the physical structure of the coast. Currents and wave action can result in scouring of bays, movement of sediments, erosion and accretion. Recognising the nature and effect of these and other natural coastal processes is required in the management of the coastal environment.	8.5.4 8.5.5 8.5.7 8.5.8	4.4.5 6.4.6 9.4.1 to 9.4.2 10.4.1 to 10.4.3 11.4.1 to 11.4.4 14.4.1 to 14.4.2 15.4.1

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
8.4.4 To seek to maintain existing water quality within Otago’s coastal waters and where water quality is degraded, to seek to achieve water quality suitable for contact recreation and the eating of shellfish.	Water quality varies along Otago’s coastline. Where water quality is not degraded, it is important that this standard is maintained. Some of Otago’s coastal water is degraded but there is insufficient information at present with which to base water quality classes. In order to ensure that this information is collected, this objective seeks to achieve water quality classes suitable for contact recreation and shellfish gathering.	8.5.1 8.5.2 8.5.5 8.5.6 8.5.10	4.4.2 to 4.4.5 5.4.2 5.4.5 6.4.2 to 6.4.5 9.4.3 10.4.3 13.4.1 13.4.4 14.4.1 to 14.4.2 15.4.1
8.4.5 To protect areas of natural character, outstanding natural features and landscapes and their associated values within the coastal environment.	Otago’s coastline is made up of a variety of different landscapes and natural features which make it unique. People appreciate the natural beauty and character of the coast and wish to retain that character. The preservation and protection of natural character, outstanding natural features and landscapes in the coastal environment is a matter of national importance under Section 6 of the Resource Management Act and is important in achieving integrated management of the coastal resource.	8.5.1 8.5.2 8.5.3 8.5.4 8.5.5 8.5.7 8.5.8	4.4.2 4.4.4 to 4.4.5 5.4.2 to 5.4.3 5.4.5 9.4.1 9.4.3 10.4.1 10.4.3 11.4.2 to 11.4.4 14.4.1 to 14.4.2 15.4.1
8.4.6³ To maintain and enhance public access to and along Otago’s coastal marine area.	Otago’s coastal environment provides a range of use opportunities, including recreation, tourism, scientific and educational activities. It is important that public access to the coast exists and is enhanced wherever possible, subject to appropriate considerations such as ecological and cultural sensitivity, public health and safety and the agreement of landholders, where access crosses private or Crown leasehold land.	8.5.1 8.5.2 8.5.3 8.5.4 8.5.5 8.5.7 8.5.9	4.4.1 to 4.4.2 4.4.4 to 4.4.5 5.4.4 6.4.7 9.4.1 9.4.3 14.4.1 to 14.4.2 15.4.1

³ Superseded by PORPS 14 January 2019 (Objective 5.1 Public access to areas of value to the community is maintained or enhanced)

8.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>8.5.1⁴ To recognise and provide for the relationship Kai Tahu have with Otago’s coast through:</p> <p>(a) Identifying in conjunction with Kai Tahu priority areas and mechanisms for upgrading mahika kai and for protecting waahi tapu, waahi taoka and places of cultural importance;</p> <p>(b) Facilitating, where practicable, the maintenance and enhancement of access for Kai Tahu to waahi tapu, waahi taoka and mahika kai and places of cultural importance; and</p> <p>(c) Protecting the characteristics of the coastal environment of special value to tangata whenua.</p>	<p>Kai Tahu are the kaitiaki of the Otago coastal environment which includes the harbours and linking systems. The coastal environment has many features and values that are important to the culture of Kai Tahu and these should be protected. Mahika kai, places for the gathering of food, are an important cultural element of the coastal environment and coastal marine area and their sustainable management is important to Manawhenua. It is also important that access be available to mahika kai and other important sites such as waahi tapu and waahi taoka. In some cases however, access may also have to be restricted in order to protect cultural values and special characteristics of the coastal environment.</p>	<p>8.6.1 8.6.2 8.6.4 8.6.7 8.6.19</p>	<p>5.5.1 5.5.5 to 5.5.7 6.5.1 6.5.5 to 6.5.7 6.5.10 7.5.1 to 7.5.2 9.5.1 9.5.4 to 9.5.6 10.5.1 to 10.5.2 11.5.1 12.5.1 to 12.5.2 13.5.1 to 13.5.4 13.5.6 to 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
<p>8.5.2 To recognise uses within the coastal environment through:</p> <p>(a) Accepting the continuation of lawfully existing uses;</p> <p>(b) Allowing for the maintenance and where practicable enhancement of existing infrastructure; and</p> <p>(c) Allowing for activities requiring a coastal location; subject to avoiding, remedying or mitigating the adverse effects of any activity.</p>	<p>The management of Otago’s coastal environment is regarded as one of the significant resource management issues of the region and therefore needs to be provided for through the Regional Policy Statement, which must also provide the policies necessary to achieve integration between the coastal marine area and adjoining land, water and air resources.</p> <p>The Otago community already makes use of the coastal environment, establishing facilities such as recreational sites, homes and buildings. The continuation of that use is important to the social, cultural and economic well being of the region. The coast is also the site of significant existing infrastructural assets such as road, rail and communication links which have to be maintained. Some activities, such as commercial port operations, marinas and fishing bases have to be located on the margin. Within Otago, these occur at Oamaru, Moeraki, Karitane, Otago Harbour, Taieri Mouth and the Nuggets. While these activities have to be recognised and provided for in the management of the coast, the adverse effects of those activities must be avoided, remedied or</p>	<p>8.6.2 8.6.3 8.6.4 8.6.5 8.6.8 8.6.9 8.6.12 8.6.13 8.6.14 8.6.15 8.6.16 8.6.21 8.6.23 8.6.25 8.6.26 8.6.27 8.6.28</p>	<p>5.5.1 5.5.4 to 5.5.8 9.5.1 to 9.5.2 9.5.4 to 9.5.6 10.5.1 to 10.5.2 12.5.1 to 12.5.2 13.5.1 to 13.5.2 13.5.4 13.5.7 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

⁴ Superseded by PORPS 14 January 2019 (Policy 2.2.1 Kāi Tahu wellbeing, Policy 2.2.2 Recognising sites of cultural significance)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>8.5.3⁵ To maintain and enhance public access to and along Otago’s coast through:</p> <ul style="list-style-type: none"> (a) Identifying areas where access is not meeting community expectations; and (b) Providing for the retention and setting aside of esplanade strips and reserves or access strips along the coastal margin which may enhance access; and (c) Identifying and providing for other opportunities to improve access; except where such restriction is necessary; <ul style="list-style-type: none"> (i) To protect areas of significant indigenous vegetation and/or significant habitats of indigenous fauna; or (ii) To protect Maori cultural values; or (iii) To protect public health or safety; or (iv) To ensure a level of security consistent with the purpose of a resource consent; or (v) In other exceptional circumstances sufficient to justify the restriction notwithstanding the national importance of maintaining that access. 	<p>mitigated to reduce the impact on the coastal environment. Specific</p> <p>Activities which will be permitted, discretionary, controlled, non-complying or prohibited, based on the effects that those activities have, is specified in the Proposed Regional Plan: Coast.</p> <p>All agencies with responsibilities under the Resource Management Act will need to provide for the access needs of Otago’s communities to the margins of Otago’s coastal waters. This will require consideration of access needs in the development of policies, plans and in the consideration of resource consent applications, and the setting aside of esplanade strips, esplanade reserves and access strips to and along the coastal margin, where it is necessary to do so in order to maintain or enhance public access. In some cases however, it may be necessary to restrict public access in order to protect the coastal environment or associated cultural values, to protect public health or safety or to ensure a level of security consistent with the purpose of a resource consent. Aside from these reasons, public access should not be restricted unless the circumstances are exceptional and can be justified when measured against the maintenance and enhancement of public access as a matter of national importance.</p>	<p>8.6.4 8.6.8 8.6.9 8.6.11 8.6.12 8.6.13 8.6.14 8.6.15 8.6.18 8.6.19 8.6.20 8.6.23 8.6.24 8.6.25 8.6.28</p>	<p>5.5.1 5.5.6 to 5.5.7 6.5.10 9.5.1 9.5.4 to 9.5.5 10.5.1 to 10.5.2 14.5.1 to 14.5.8 14.5.1 to 14.5.2</p>
<p>8.5.4 To recognise and provide for the preservation of the natural character of Otago’s coastal environment and to protect outstanding natural coastal features</p>	<p>In order to preserve Otago’s natural coastal character (as required by section 6 of the Resource Management Act), the areas which constitute that character have to first be identified and agreed to.</p>	<p>8.6.2 8.6.4 8.6.5</p>	<p>5.5.1 5.5.6 to 5.5.7 6.5.5 to 6.5.7 9.5.1</p>

⁵ Superseded by PORPS 14 January 2019 (Policy 5.1.1 Public access)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>and landscapes from inappropriate subdivision, use and development through identifying and protecting:</p> <p>(a) Estuarine areas, salt marshes and lagoons;</p> <p>(b) Significant habitats of indigenous flora and fauna;</p> <p>(c) Areas of significant conservation value;</p> <p>(d) Important coastal physical features; and</p> <p>(e) Areas of cultural, historic, spiritual, recreational and scientific significance in Otago.</p>	<p>The elements that contribute to Otago’s natural coastal character include:</p> <ul style="list-style-type: none"> • Wetlands, estuaries, coastal lagoons, salt marshes and harbours, eg. Aramoana Salt Marsh, Waitati Estuary, Papanui Inlet. • Dunes and dune slacks, eg. Tahakopa Bay and Crystal’s Beach. • Significant landforms, eg. Karitane Headland, Moeraki Peninsula, Shag Point, Nugget Point. • Significant islands and stacks, eg. Maukiki Island, Goat Island. • Marine mammal and bird colonies, eg. Jacks Bay yellow-eyed penguin colony. • Areas of coast backed by significant indigenous vegetation, eg. the Catlins. <p>Significant areas of Otago’s coastal environment contribute to the natural character of the coast and provide important ecological communities for coastal flora and fauna. Their need for protection is due to the potential adverse effects associated with the use of the coast, including cumulative effects. Consultation with the public is required to identify significant areas and to educate about the values of those areas. Once identified, the effects of activities will be restricted to ensure the preservation of those areas.</p>	<p>8.6.6</p> <p>8.6.7</p> <p>8.6.8</p> <p>8.6.10</p> <p>8.6.12</p> <p>8.6.13</p> <p>8.6.14</p> <p>8.6.16</p> <p>8.6.17</p> <p>8.6.18</p> <p>8.6.19</p> <p>8.6.20</p> <p>8.6.21</p> <p>8.6.22</p> <p>8.6.23</p> <p>8.6.24</p> <p>8.6.25</p>	<p>9.5.4 to 9.5.5</p> <p>10.5.1 to 10.5.2</p> <p>11.5.2 to 11.5.3</p> <p>13.5.1 to 13.5.7</p> <p>14.5.1 to 13.5.8</p> <p>15.5.1 to 15.5.2</p>
	<p>The protection of the coastal environment and outstanding natural features and landscapes from inappropriate subdivision, use and development is a matter of national importance that must be recognised by all agencies managing the coastal environment (Section 6 of the Resource Management Act). In order to protect these elements, areas susceptible to the effects of inappropriate subdivision, use and development will be identified and controls developed to manage the effects of those uses in those areas. In addition to the elements identified above, these areas will include scenic, recreational and historic areas, areas of spiritual and cultural significance and scientific and landscape features.</p>		
	<p>Until the identification of Otago’s outstanding natural coastal</p>		

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>8.5.5 To maintain and where practicable enhance the physical and ecological quality of the coastal environment through:</p> <p>(a) Protecting the life-supporting capacity of coastal ecosystems; and</p> <p>(b) Avoiding as far as practicable, or remedying or mitigating the adverse effects, including cumulative effects, of land and water based activities on the coastal marine area through appropriate methods.</p>	<p>features and landscapes is completed, careful consideration will need to be given as to whether a particular outstanding natural coastal feature or landscape falls within criteria (a) to (e) of this policy.</p> <p>The physical and ecological quality of the coastal environment is important in order to sustain the life-supporting capacity of coastal areas and in order to meet the present and reasonably foreseeable needs of Otago’s communities.</p> <p>Decisions made with respect to the land resource can potentially impact upon the quality of the coastal environment. Activities with potential for such impacts include urban subdivision and development, sand and aggregate extraction and reclamation. There is therefore a need to control land use effects on the quality of the coastal environment, in conjunction with territorial local authorities.</p>	<p>8.6.2</p> <p>8.6.4</p> <p>8.6.5</p> <p>8.6.6</p> <p>8.6.7</p> <p>8.6.8</p> <p>8.6.10</p> <p>8.6.11</p> <p>8.6.12</p> <p>8.6.13</p> <p>8.6.14</p> <p>8.6.16 to 8.6.25</p>	<p>5.5.5 to 5.5.6</p> <p>6.5.1</p> <p>6.5.5 to 6.5.8</p> <p>7.5.2 to 7.5.3</p> <p>9.5.4 to 9.5.6</p> <p>10.5.1 to 10.5.4</p> <p>11.5.2</p> <p>12.5.1 to 12.5.2</p> <p>13.5.1</p> <p>13.5.6</p> <p>13.5.8 to 13.5.10</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1 to 15.5.2</p>
<p>8.5.6 To promote a reduction in the adverse effects of contaminant discharges into Otago’s coastal waters through:</p> <p>(a) Adopting the existing water quality of Otago’s coastal waters as a minimum acceptable standard; and</p> <p>(b) Investigating and where appropriate, enhancing water quality so that as a minimum standard it is suitable for contact recreation and shellfish gathering where</p> <p>(i) There is a high public interest in, or use of the water; or</p> <p>(ii) There is a particular Kai Tahu interest in the water; or</p>	<p>Coastal water quality varies along the Otago coastline. In order to maintain the water quality in areas where it has not been degraded, the existing water quality has to be adopted as the minimum acceptable standard. This also prevents further degradation in areas where the quality of water has already been lowered. Areas where degraded water quality is of particular concern will need to be identified. In such cases, a higher standard may be set to bring about an improvement, over time, in the quality of that water. One example, which has recognised problems in terms of water quality in some areas, is the Otago harbour. Although the Dunedin City Council already has a programme in place to remove all sewage discharges from the harbour, and other discharges which require a consent are being progressively improved, there is still a need to address areas of poor water quality, particularly in respect of non</p>	<p>8.6.1</p> <p>8.6.2</p> <p>8.6.4</p> <p>8.6.5</p> <p>8.6.6</p> <p>8.6.7</p> <p>8.6.8</p> <p>8.6.11</p> <p>8.6.12</p> <p>8.6.13</p> <p>8.6.14</p> <p>8.6.16</p> <p>8.6.17</p> <p>8.6.20</p>	<p>5.5.1</p> <p>5.5.5</p> <p>6.5.1</p> <p>6.5.5</p> <p>7.5.2 to 7.5.3</p> <p>9.5.1</p> <p>9.5.4 to 9.5.5</p> <p>10.5.1 to 10.5.2</p> <p>12.5.1 to 12.5.2</p> <p>13.5.1</p> <p>13.5.3 to 13.5.7</p> <p>13.5.8</p> <p>13.5.10</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1 to 15.5.2</p>

⁶ Superseded by PORPS 14 January 2019 (Policy 2.2.1 Kāi Tahu wellbeing, Policy 2.2.2 Recognising sites of cultural significance)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>(iii) There is a particular value to be maintained or enhanced; or</p> <p>(iv) There is a direct discharge containing human sewage or wastes from commercial or industrial activities; and</p> <p>(c) Requiring that all discharges into Otago's coastal waters maintain the standard for the receiving waters after reasonable mixing; and</p> <p>(d) Promoting discharges to land where practicable and where there are no significant adverse effects on groundwater or surface water resources, or soil; and</p> <p>(e) Preparing contingency responses for accidental pollution spills; and</p> <p>(f) Investigating and addressing the effects of diffuse source discharges on coastal water quality;</p> <p>while considering financial and technical constraints.</p>	<p>point source discharges.</p> <p>All discharges will need to meet the applicable standard for the receiving waters after reasonable mixing. Discharges to land, provided they do not result in adverse effects greater than the same discharge to water, will be promoted wherever practicable.</p> <p>Accidental spills of contaminants such as oil along the coastline and within harbours have the potential to pollute water for long periods of time. The preparation of suitable response strategies is necessary so as to minimise the damage they may cause.</p> <p>The effects of land uses within the coastal environment also need to be considered with respect to water quality. Sometimes pollution resulting from landuse practices, septic tanks and urban run off cause as much harm as pipe discharges.</p> <p>The requirements of Otago's communities and the financial and technical constraints relating to any particular discharge are relevant matters to be considered in order to meet the social, economic and cultural needs of Otago's communities.</p>	<p>8.6.21</p> <p>8.6.22</p> <p>8.6.23</p> <p>8.6.25</p>	
<p>8.5.7⁷ To recognise the action of physical coastal processes and to minimise the impact of those processes through:</p> <p>(a) Identifying unstable coastal areas; and</p> <p>(b) Avoiding developments in those areas unless they can be easily relocated; and</p> <p>(c) Considering the need for coastal protection works where there is a threat to:</p>	<p>Human interaction with coastal processes can act to minimise or aggravate the effects of those processes. Identifying those areas subject to active coastal processes, and requiring the building of relocatable structures or the avoidance of any structures in these areas reduces the effect of those processes on human systems. These options may not be feasible for some existing infrastructure or structures, such as roading and ports, and coastal protection works may be required. In cases where coastal protection works</p>	<p>8.6.2</p> <p>8.6.3</p> <p>8.6.4</p> <p>8.6.5</p> <p>8.6.6</p> <p>8.6.8</p> <p>8.6.10</p> <p>8.6.11</p>	<p>5.5.1</p> <p>5.5.5 to 5.5.7</p> <p>6.5.10</p> <p>9.5.1</p> <p>9.5.6</p> <p>10.5.1 to 10.5.2</p> <p>11.5.1 to 11.5.7</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1 to 15.5.2</p>

⁷ Superseded by PORPS 14 January 2019 (Policy 4.1.1 Identifying natural hazards, Policy 4.1.2 Natural hazard likelihood, Policy 4.1.3 Natural hazard consequence Policy 4.1.4 Assessing activities for natural hazard risk, Policy 4.1.5 Natural hazard risk, Policy 4.1.6 Avoiding Minimising increased increase in natural hazard risk, Policy 4.1.7 Reducing existing natural hazard risk, Policy 4.1.8 Precautionary approach to natural hazard risk, Policy 4.1.9 Protecting features and systems that provide hazard mitigation, Policy 4.1.10 Mitigating natural hazards, Policy 4.1.11 Hard protection structures, Policy 4.1.13 Hazard mitigation measures, lifeline utilities, and essential and emergency services)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>(i) The built environment; or</p> <p>(ii) Sites of significant natural or heritage value; or</p> <p>(iii) Significant sites of cultural or spiritual value; and</p> <p>(d) Assessing the effects of any proposed coastal protection works; and</p> <p>(e) Promoting remedial measures which have the least adverse effect on the coastal environment.</p>	<p>are required, an assessment of the effects of that work on the environment will be required in order to identify the method with the least adverse effect.</p>	<p>8.6.12</p> <p>8.6.13</p> <p>8.6.14</p> <p>8.6.20</p> <p>8.6.21</p> <p>8.6.22</p> <p>8.6.23</p> <p>8.6.25</p> <p>8.6.26</p> <p>8.6.27</p>	
<p>8.5.8⁸ To recognise and provide for sea-level rise through requiring that the best available international estimate of the possible rise be incorporated into planning for the coastal environment and in the design and building of structures.</p>	<p>The possibility of sea-level rise is a threat that coastal developments will be required to incorporate into their designs. District and regional plans will also be required to incorporate the best available estimate of sea-level rise, in recognition of the threat of adverse effects on Otago’s coastal margins. International estimates at 1995 of possible sea-level rise as a result of greenhouse warming of the Earth, indicate a rise of 0.2 metres (range 0.1 - 0.3 metres) by year 2050 (International Panel on Climate Change). This possible rise needs to be considered in today’s planning and management.</p>	<p>8.6.2</p> <p>8.6.3</p> <p>8.6.4</p> <p>8.6.5</p> <p>8.6.6</p> <p>8.6.8</p> <p>8.6.10</p> <p>8.6.11</p> <p>8.6.13</p> <p>8.6.14</p> <p>8.6.16</p> <p>8.6.20</p> <p>8.6.21</p> <p>8.6.23</p> <p>8.6.25</p> <p>8.6.26</p> <p>8.6.27</p>	<p>11.5.1 to 11.5.7</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1 to 15.5.2</p>
<p>8.5.9⁹ To control the emission of noise within the coastal environment consistent with the adjacent Territorial Local Authority noise controls and the New Zealand</p>	<p>The Otago Regional Council is responsible for noise control in the coastal marine area, while territorial authorities have that responsibility on the land components. Unrestricted noise sources</p>	<p>8.6.2</p> <p>8.6.4</p> <p>8.6.5</p>	<p>9.5.4 to 9.5.5</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1 to 15.5.2</p>

⁸ Superseded by PORPS 14 January 2019 (Policy 4.2.1 Sea level rise)

⁹ Superseded by PORPS 14 January 2019 (Method 3.1.3)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
noise standards.	have the potential to adversely affect the amenity and intrinsic values of an area. In considering the generation of noise within the coastal environment, regard must be had to any noise control provisions stated in any relevant district plan. Regard will also be had to the standards established by the Standards Association of New Zealand applicable to the generation of noise.	<p>8.6.7 8.6.8 8.6.11 8.6.12 8.6.13 8.6.14 8.6.20 to 8.6.23 8.6.25</p>	
8.5.10 To prohibit the passage of nuclear armed or powered vessels, vessels carrying nuclear material for use in nuclear power plants or weapons or vessels carrying nuclear wastes other than for medical or research purposes within Otago’s coastal marine area.	The potential adverse effects on Otago’s coastal environment and hinterland from an accident involving a nuclear powered or armed vessel or a vessel carrying nuclear material is unacceptable to the people of Otago. Areas of the coastal environment could become contaminated with nuclear material that would persist for many years. Although the risk of an accident may be small, the effects of any accident are such that the risk should be avoided.	<p>8.6.2 8.6.4 8.6.8 8.6.10 8.6.11 8.6.12 8.6.25</p>	<p>12.5.1 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

8.6 Methods

In order to achieve the outcomes of the policies, every agency with responsibilities under the Resource Management Act 1991 should:

- 8.6.1¹⁰** Take into account Kai Tahu cultural values in the management of Otago's coastal resources through:
- (a) Using and recognising iwi resource management plans as a basis for consultation; and
 - (b) Developing consultation protocols with iwi, runanga and hapu to provide for their input into the management of Otago's coastal resources; and
 - (c) Identifying and protecting Kai Tahu values in the Proposed Regional Plan: Coast.

The methods to be used by the Otago Regional Council include the following:

- 8.6.2** Develop the Otago Regional Plan: Coast in accordance with the requirements of the Resource Management Act.
- 8.6.3** Develop and implement mechanisms within the Regional Plan: Coast, requiring that the best available international estimate of possible sea-level rise be incorporated into the design and building of structures within the coastal marine area.
- 8.6.4** Consider including conditions on resource consents or consider declining such consents as necessary to

¹⁰ Superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty Principles, Method 1.1, Method 1.2, Method 3.1.1, Method 5.1.4)

maintain and where practicable enhance the quality of Otago's coastal environment.

- 8.6.5** Educate about the complexities of the coastal environment and promote the need for everybody to play their part.
- 8.6.6** Initiate, support and encourage research and monitoring programmes to provide information on Otago's coastal issues and solutions.
- 8.6.7** Consult with Otago's communities regarding the management of Otago's coastal environment.
- 8.6.8** Develop protocols and procedures with local authorities to ensure the joint processing of applications for coastal use, development or protection that require consents on both sides of the line of mean high water spring.
- 8.6.9¹¹** Facilitate, develop and implement mechanisms to maintain and where practicable enhance public access to and along Otago's coastline.
- 8.6.10** Advocate to Central Government on coastal management issues of importance to Otago.
- 8.6.11** Liaise with all parties with a coastal management responsibility.
- 8.6.12** Take enforcement action to address unauthorised coastal activities.

¹¹ Superseded by PORPS 14 January 2019 (Policy 5.1.1 Public access)

- 8.6.13** Coordinate remedial works to mitigate the degradation of Otago’s coastal marine area from land and water based activities.
- 8.6.14** Promote and encourage interagency liaison and cooperation and the development of protocols and standards to achieve integrated and coordinated management of Otago’s coast.
- 8.6.15** Consult and negotiate with landowners adjoining the coastal marine area regarding opportunities to improve public access to the coast.
- 8.6.16** To review all permits to discharge into the coastal marine area, and review the conditions of those permits where necessary.
- 8.6.17** Develop contingency plans and a response capability to deal effectively and efficiently with accidental spills into the coastal environment of environmentally damaging substances.
- 8.6.18** To support the establishment of marine reserves which are selected following full community consultation, and which have community support.
- 8.6.19** To support the establishment of taiapure which are selected following full community consultation, and which have community support.
- 8.6.20** Use education programmes to improve community awareness and understanding of coastal issues and sustainable management in Otago.
- 8.6.21** Provide information on the adverse effects associated with coastal activities.
- 8.6.22** Recognise and encourage the role of community groups that promote sustainable management of the coast and associated resources.
- 8.6.23** Promote codes of practice agreed to by industry, the Otago Regional Council, city and district councils and other interest groups as appropriate to avoid, remedy or mitigate the adverse effects of activities on the coast.
- 8.6.24** Prepare, in consultation with relevant agencies, the community and affected landowners, an inventory of outstanding natural coastal features and landscapes that are regionally significant, including scenic, recreational and historic areas, areas of spiritual and cultural significance and scientific and landscape features.
- Methods which may be used by Otago’s territorial local authorities include the following:
- 8.6.25** Consider including conditions on resource consents or consider declining such consents as necessary to maintain and where practicable enhance the quality of Otago’s coastal environment.
- 8.6.26** Develop and implement mechanisms within the district plans that restrict or control subdivision and building in areas susceptible to inundation from sea-level rise based on the best available international estimate of possible sea-level rise.
- 8.6.27** Control subdivision and building within coastal hazard areas.

8.6.28¹² Facilitate, develop and implement mechanisms to maintain and where practicable enhance public access to and along Otago’s coastline.

Explanation and Principal Reasons for Adopting

The effective management of the coastal environment involves management initiatives throughout the Otago region. The coast is, in many cases, the final receiving environment for the adverse effects associated with resource use practices throughout the region. Close liaison with territorial authorities over the need to avoid, remedy or mitigate the adverse effects of land based activities on the coastal environment is required because of the interactions between the land and the sea.

Activities within the coastal marine area will be subject to the policies and rules within the Otago Regional Plan: Coast which will seek to ensure the sustainable management of Otago’s coastal areas. Conditions on resource consents will be able to restrict the adverse effects on the coast from all activities.

The management of the coast is also a responsibility of the Otago community, as it is the results of their actions which can improve or degrade the coast.

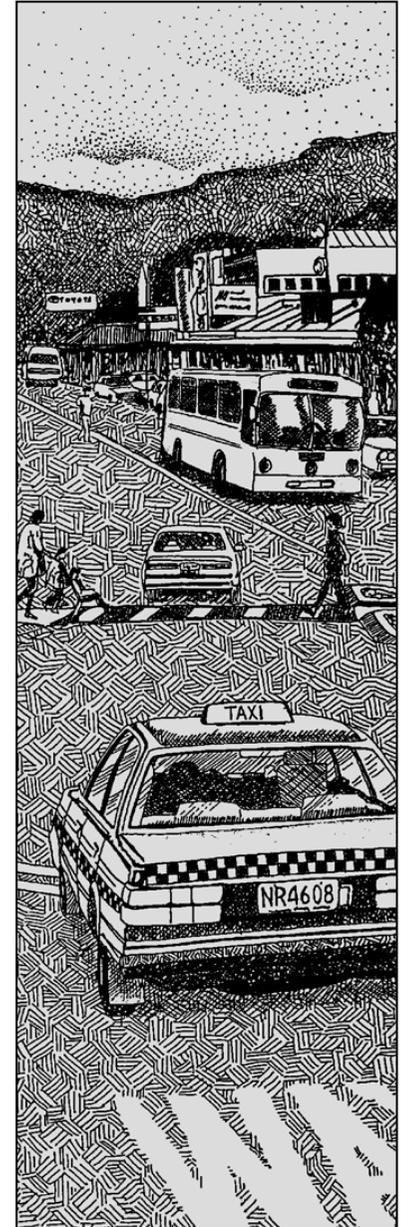
¹² Partially superseded by PORPS 14 January 2019 (Policy 5.1.1 Public access)

8.7 Anticipated Environmental Results

The environmental results anticipated from the above policies and methods of implementation include:

- 8.7.1 Otago's communities are able to utilise the region's coastal environment for their present and reasonably foreseeable needs.**
- 8.7.2 The management of Otago's coastal environment takes into account the values of manawhenua.**
- 8.7.3 The existing ecological and physical quality of Otago's coastal environment is maintained and enhanced.**
- 8.7.4 Public access is maintained and enhanced, both to and along the coastal environment.**
- 8.7.5 The natural character of Otago's coastal environment is preserved.**
- 8.7.6 The region's significant coastal wildlife, scenic and landscape values are protected.**

9 Built Environment



9.1 Introduction

In simple terms, the built environment can be considered as those man-made facilities and structures which form part of the physical resources of the region. However, in reality the built environment is far more complex, involving the relationship between people and communities and the facilities and structures they construct, use and develop to fulfil their needs and wants.

A definition of built environment is not provided in the Act. Within this Regional Policy Statement, the term refers to:

“Those man-made facilities and structures, including urban environments and their associated amenity values, that are utilised by Otago’s communities for their social, economic and cultural well being, and the relationships that exist between them.”

The built environment is made up of such things as urban and rural settlements, telecommunications, radiocommunications and electricity networks, road and rail links, sewerage and water systems, port and airport facilities, dams and flood control structures and recreational facilities.

The well being, safety and health of people and communities is closely linked to the built environment. The built environment meets basic human needs such as shelter and warmth, provides a system of mobility and access to services, infrastructure for economic activity, contributes to the community’s quality of life and protects its assets. For this reason, it is essential that the built environment is managed in a sustainable way for current and future generations.

The nature and character of Otago’s built environment has evolved from a diverse range of factors such as:

- The heritage and cultural resources of the region’s people;
- The natural and physical resource base of the region, enabling the development of economic activities such as agriculture, forestry and manufacturing;
- Technological advances allowing the expansion of the region’s infrastructure and human settlement;
- The nature of Otago’s topography and landforms, and the constraints it has placed on the pattern of settlement;
- The community’s controls on landuse activities and structures.

9.2 Roles of Different Agencies

Under the Resource Management Act, a number of agencies have key planning roles in relation to the built environment. They include:

9.2.1 Central Government

Central Government has two important roles in regard to the built environment. It is responsible for preparing national policy statements and environmental guidelines which may affect the way the built environment can be used or developed. Central Government also has a significant role in managing parts of the built environment through its ownership and control of physical resources such as state highways, dams and state housing. Other government agencies are responsible for protecting natural and physical resources, such as the Historic Places Trust which promotes the identification and conservation of the historical and cultural heritage of New Zealand.

9.2.2 Otago Regional Council

The Otago Regional Council is concerned with the regionally significant environmental consequences of decisions affecting the use, development and protection of the built environment. This strategic role is augmented by primary responsibility for soil and water concerns, coastal marine areas, hazards and discharge of contaminants into the environment. Regional plans can be prepared to cover these specific areas of responsibility.

The Otago Regional Council also has responsibilities under transport legislation for the development of a regional land transport strategy identifying the future transport needs of the region and the best means to achieve them. Other responsibilities include the planning and funding of public transport services.

9.2.3 Territorial Local Authorities

Under section 31, district and city councils have the primary responsibility for managing and controlling the use, development and protection of land, including the control of any potential or actual adverse effects.

City and district councils also own and manage parts of the built environment such as local roads, water and sewerage systems, and pensioner housing.

Territorial local authorities also have major responsibilities under the Building Act 1991. These include safeguarding public interest in health, safety, amenity and protection of other property as it is affected by the construction and maintenance of all buildings.

9.3 Issues

	Explanation	Objective	Policies	See Also Other Issues
9.3.1 ¹	<p>The adverse effects of urban development and settlement can impact upon the quality of the built environment and on the use of natural and physical resources.</p> <p>The quality and character of the built environment contributes to the community's appreciation of it as a place to live. For example, the quality of Dunedin's built environment as a place to live is bound up with its distinctive heritage cityscape - very few tall new buildings, a range of open spaces, recreational facilities, topography and climate. Similarly, Otago's smaller settlements provide a range of qualities and characteristics that make them attractive places in which to live and visit.</p> <p>It is important that a balance is achieved in maintaining the quality of the built environment as a place to live, while providing opportunities for economic change and growth and residential choice.</p> <p>Urban development and settlement patterns have a pervasive influence on the use and development of natural and physical resources within the region. Resources are used both in the expansion and maintenance of urban areas (such as land and energy), or are affected by emissions and discharges associated with urban land use (such as air and water). While dramatic changes in settlement patterns within Otago are unlikely over the next 10 years, the changes and pressures associated with urban development and settlement are readily apparent, particularly within inner Dunedin, and on the periphery of Queenstown, Cromwell and Alexandra. The issues associated with urban development and settlement include:</p> <ul style="list-style-type: none"> • Adverse effects resulting from discharges into the atmosphere such as industrial processes, domestic home heating and backyard burning, and motor vehicles; • Loss of productive land and landscape values to urbanisation 	<p>9.4.1</p> <p>9.4.3</p>	<p>9.5.1</p> <p>9.5.4</p> <p>9.5.5</p>	<p>4.3.2 to 4.3.6</p> <p>5.3.1</p> <p>5.3.3</p> <p>5.3.4 to 5.3.5</p> <p>5.3.7</p> <p>6.3.2</p> <p>6.3.5 to 6.3.10</p> <p>7.3.1 to 7.3.2</p> <p>8.3.1 to 8.3.7</p> <p>8.3.9</p> <p>10.3.1</p> <p>10.3.4 to 10.3.5</p> <p>11.3.3</p> <p>11.3.6 to 11.3.7</p> <p>12.3.1 to 12.3.2</p> <p>13.3.1 to 13.3.6</p> <p>14.4.1 to 14.4.6</p> <p>15.3.1</p>

¹ Superseded by PORPS 14 January 2019 (Issue 4.5)

Issues	Explanation	Objective	Policies	See Also Other Issues
9.3.2² Otago is dependent on an efficient network of utilities to provide for the social, economic and cultural well being of Otago's communities.	<p>and expansion of settlement;</p> <ul style="list-style-type: none"> Contamination of water bodies from industrial and domestic wastes, sewerage systems and storm water drains; Increased energy consumption resulting from inefficient patterns of settlement; The loss or degradation of heritage sites, the need to protect them from inappropriate development and ensure continued public access; and Loss of amenity values (open spaces, recreational resources, green belts, landscapes) from urban encroachment. 	9.4.1 9.4.2	9.5.2 9.5.3 9.5.5	5.3.4 7.3.1 to 7.3.2 8.3.1 to 8.3.5 10.3.1 11.3.1 11.3.3 11.3.5 to 11.3.7 12.3.2 12.3.3 14.3.1 to 14.3.6 15.3.1
9.3.3³ Otago is dependent on an efficient transport network to utilise its resources, and to provide mobility and access for its people and communities.	<p>Utility networks are important for the continued well being of Otago's communities. The costs of maintaining and developing infrastructure such as water supply, sewerage and roading is an ongoing concern for urban and rural communities within Otago. In many cases the costs will be borne by a small and declining population base. Their concerns include:</p> <ul style="list-style-type: none"> The high costs of extending services and utilities such as roads and water supplies; The lack of coordination amongst network utility operators in the provision of infrastructure; Under-utilised buildings and services and a general lack of investment in existing infrastructure; The high dependence on non-renewable resources (eg. Fossil fuels) for some activities and services (eg. transport, heating) in the built environment which is not efficient in the long-term; The maintenance and development of infrastructure for long-term sustainable use. 	9.4.1 9.4.2 9.4.3	9.5.2 9.5.3 9.5.4	4.3.1 to 4.3.5 5.3.3 to 5.3.5 6.3.5 to 6.3.8 6.3.9

² Superseded by PORPS 14 January 2019 (Issue 4.3)

³ Superseded by PORPS 14 January 2019 (Issue 4.3, Issue 4.4)

Issues	Explanation	Objective	Policies	See Also Other Issues
	<p>and providing mobility and access for its people and communities. Otago’s transport network includes an extensive roading system, rail links to adjacent regions, a major sea port on the Otago harbour and two major air ports, Dunedin airport at Momona and Queenstown airport at Frankton. The issues affecting Otago’s land transport network are both global and local in nature and include:</p> <ul style="list-style-type: none"> • The increasing use of non-renewable energy in the transport sector; • The adverse effects of transport systems including air and water pollution, noise, visual intrusion, dust and local ecological damage; • The maintenance and enhancement of the transport network to meet the needs of the regional community; and • The adverse effects of landuse activities on the transport network, especially adjacent landuse activities which would otherwise reduce safety and efficiency. 			<p>7.3.1 8.3.1 to 8.3.5 10.3.1 10.3.4 11.3.1 11.3.3 11.3.5 11.3.7 12.3.2 12.3.3 13.3.5 14.3.1 to 14.3.6 15.3.1</p>

9.4 Objectives

	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
<p>9.4.1⁴ To promote the sustainable management of Otago's built environment in order to:</p> <p>(a) Meet the present and reasonably foreseeable needs of Otago's people and communities; and</p> <p>(b) Provide for amenity values, and</p> <p>(c) Conserve and enhance environmental and landscape quality; and</p> <p>(d) Recognise and protect heritage values.</p>	<p>The well being, safety and health of people and communities is dependent, to a greater or lesser degree, on the constraints and benefits afforded by the built environment. The built environment must be sustainably managed for the present and future needs of Otago's communities. This will be achieved by promoting sustainable patterns of urban development and settlement while allowing for amenity values.</p>	<p>9.5.1</p> <p>9.5.2</p> <p>9.5.3</p> <p>9.5.4</p> <p>9.5.5</p> <p>9.5.6</p>	<p>4.4.1 to 4.4.6</p> <p>5.4.1 to 5.4.3</p> <p>5.4.5</p> <p>6.4.1 to 6.4.8</p> <p>8.4.1 to 8.4.3</p> <p>8.4.5 to 8.4.6</p> <p>10.4.1</p> <p>10.4.3</p> <p>11.4.1 to 11.4.4</p> <p>12.4.1 to 12.4.2</p> <p>13.4.1</p> <p>13.4.4</p> <p>14.4.1 to 14.4.2</p> <p>15.4.1</p>
<p>9.4.2⁵ To promote the sustainable management of Otago's infrastructure to meet the present and reasonably foreseeable needs of Otago's communities.</p>	<p>Roading and rail networks, power generation and transmission systems, water and sewage reticulation and telecommunication systems are all important in ensuring that the needs of Otago's communities are able to be met. They provide an infrastructure for urban development and settlement, economic activity and for the distribution of goods and services within the region. Their sustainable management is required to ensure that they will continue to meet the needs of Otago's communities.</p>	<p>9.5.2</p> <p>9.5.3</p>	<p>4.4.4 to 4.4.6</p> <p>5.4.2</p> <p>8.4.1</p> <p>8.4.3</p> <p>11.4.1 to 11.4.4</p> <p>12.4.1</p> <p>12.4.3</p> <p>13.4.1</p> <p>13.4.4</p> <p>14.4.1 to 14.4.2</p> <p>15.4.1</p>
<p>9.4.3 To avoid, remedy or mitigate the adverse effects of Otago's built environment on Otago's natural and physical resources.</p>	<p>Urban development and settlement, and economic activities undertaken within the built environment, may have adverse effects on Otago's natural and physical resources. These adverse effects include, amongst others, increasing air and water pollution from emissions and discharges, increasing energy use for transport, domestic and industrial uses, the taking of land for urban</p>	<p>9.5.1</p> <p>9.5.3</p> <p>9.5.4</p> <p>9.5.5</p> <p>9.5.6</p>	<p>4.4.1 to 4.4.6</p> <p>5.4.1 to 5.4.3</p> <p>5.4.5</p> <p>6.4.2 to 6.4.6</p> <p>6.4.8</p> <p>7.4.1</p> <p>8.4.2</p>

⁴ Superseded by PORPS 14 January 2019 (Objective 1.1 Otago's resources are used sustainably to promote economic, social, and cultural wellbeing for its people and communities, Objective 5.2 Historic heritage resources are recognised and contribute to the region's character and sense of identity, Objective 4.5 Urban growth and development is well designed, occurs in a strategic and coordinated way, and integrates effectively with adjoining urban and rural environments)

⁵ Superseded by PORPS 14 January 2019 (Objective 1.1 Otago's resources are used sustainably to promote economic, social, and cultural wellbeing for its people and communities, Objective 4.3 Infrastructure is managed and developed in a sustainable way, Objective 4.5 Urban growth and development is well designed, occurs in a strategic and coordinated way, and integrates effectively with adjoining urban and rural environments)

development, particularly the threat of urban expansion on high class soils, the loss of, or damage to landscapes and heritage resources, and the loss of amenity values.

9 BUILT ENVIRONMENT

8.4.4 to 8.4.6

10.4.1

10.4.3

11.4.1 to 11.4.4

12.4.1 to 12.4.3

13.4.1

13.4.4

14.4.1 to 14.4.2

15.4.1

9.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>9.5.1⁶ To recognise and provide for the relationship Kai Tahu have with the built environment of Otago through:</p> <p>(a) Considering activities involving papatipu whenua that contribute to the community and cultural development of Kai Tahu; and</p> <p>(b) Recognising and providing for the protection of sites and resources of cultural importance from the adverse effects of the built environment.</p>	<p>This policy gives heightened opportunity for runanga and hapu to develop their communities through housing projects and building of marae. The policy recognises the role of runanga and hapu in the management and control of the built environment and gives effect to the provisions of the Treaty of Waitangi.</p> <p>It is acknowledged that land provides a strong source of cultural and spiritual identity to Kai Tahu and that this relationship has not been adequately recognised by authorities in the past. Many cultural sites and values have been lost to the development of the built environment. Such development in future will have regard to such cultural values.</p>	<p>9.6.1</p>	<p>5.5.1 5.5.6 6.5.1 to 6.5.2 6.5.5 to 6.5.7 6.5.9 to 6.5.10 7.5.1 8.5.1 to 8.5.4 8.5.6 to 8.5.7 10.5.1 11.5.1 to 11.5.4 11.5.6 to 11.5.7 13.5.1 to 13.5.2 13.5.6 to 13.5.8 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
<p>9.5.2⁷ To promote and encourage efficiency in the development and use of Otago's infrastructure through:</p> <p>(a) Encouraging development that maximises the use of existing infrastructure while recognising the need for more appropriate technology; and</p> <p>(b) Promoting co-ordination amongst network utility operators in the provision and maintenance of infrastructure; and</p> <p>(c) Encouraging a reduction in the use of non-renewable resources while promoting the use of renewable resources in the construction, development and use of infrastructure; and</p> <p>(d) Avoiding or mitigating the adverse effects of subdivision, use and development of land on</p>	<p>One means of achieving the sustainable use of infrastructure is to emphasise consolidation and improved use of existing infrastructure prior to extensions or new development. This approach will help reduce the costs to the community for providing and maintaining infrastructure and promote its more efficient use in the long term.</p>	<p>9.6.2 9.6.5 9.6.7 9.6.9 9.6.13</p>	<p>5.5.2 to 5.5.3 5.5.8 6.5.2 to 6.5.4 7.5.5 8.5.2 10.5.1 11.5.2 to 11.5.4 12.5.2 to 12.5.3 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

⁶ Superseded by PORPS 14 January 2019 (Policy 1.1.2 Social and cultural wellbeing and health and safety, Policy 2.2.2 Recognising sites of cultural significance, Policy 2.2.3 Wāhi tūpuna and associated sites)

⁷ Partially superseded by PORPS 14 January 2019 (Policy 4.3.1 Managing infrastructure activities, Policy 4.4.1 Renewable electricity generation, Policy 4.5.1 Providing for urban growth and development, Policy 4.5.2 Integrating infrastructure with land use)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
the safety and efficiency of regional infrastructure.			
<p>9.5.3⁸ To promote and encourage the sustainable management of Otago’s transport network through:</p> <p>(a) Promoting the use of fuel efficient modes of transport; and</p> <p>(b) Encouraging a reduction in the use of fuels which produce emissions harmful to the environment; and</p> <p>(c) Promoting a safer transport system; and</p> <p>(d) Promoting the protection of transport infrastructure from the adverse effects of landuse activities and natural hazards.</p>	<p>Maintaining the transport network is essential for meeting the mobility and access needs of Otago’s communities. The adverse effects on transport infrastructure that undermine its ability to function efficiently and effectively also need to be considered. These include traffic demands of landuse activities which are not appropriate for the function of the road, developments which impede access to sea ports, the effects of hazards such as slipping or earth movement and erosion. However, the adverse effects of that network (which include pollution, reliance on non-renewable energy sources, congestion, road accidents, difficulties in using the network due to cost or disability and urban sprawl) must be balanced against the benefits of mobility and access. A long-term coordinated viewpoint based on the sustainability of Otago’s natural and physical resources is required.</p>	<p>9.6.2 9.6.5</p>	<p>6.5.5 to 6.5.9 7.5.2 to 7.5.5 10.5.1 to 10.5.2 11.5.1 11.5.3 11.5.4 12.5.2 to 12.5.3 14.4.1 to 14.5.8 15.5.1 to 15.5.2</p>
<p>9.5.4⁹ To minimise the adverse effects of urban development and settlement, including structures, on Otago’s environment through avoiding, remedying or mitigating:</p> <p>(a) Discharges of contaminants to Otago’s air, water or land; and</p> <p>(b) The creation of noise, vibration and dust; and</p> <p>(c) Visual intrusion and a reduction in landscape qualities; and</p>	<p>Managing the built environment in a sustainable way requires that adverse effects that arise through its existing use, or from the extension of urban areas, or in change of the use in either urban or rural settings, are avoided or lessened. These effects may be the direct result of the ongoing use and development of the built environment and would include most forms of pollution, loss of land to urban development and increased energy consumption. The effects may also be indirect and result from the built environment’s influence on landuse, accessibility to facilities and safety. They</p>	<p>9.6.1 9.6.2 9.6.3 9.6.4 9.6.5 9.6.12 9.6.14</p>	<p>5.5.1 to 5.5.3 5.5.5 to 5.5.6 6.5.1 6.5.5 to 6.5.11 7.5.2 to 7.5.5 8.5.1 to 8.5.6 8.5.9 10.5.1 to 10.5.2 11.5.2 to 11.5.4 12.5.3 13.5.1 to 13.5.10 14.5.1 to 14.5.8</p>

⁸ Superseded by PORPS 14 January 2019 (Policy 4.4.6 Energy efficient transport, Policy 4.4.7 Fuels, Policy 4.3.1 Managing infrastructure activities, Policy 4.3.5 Protecting infrastructure with national or regional significance, Policy 1.1.2 Social and cultural wellbeing and health and safety)

⁹ Superseded by PORPS 14 January 2019 (Policy 1.1.2 Social and cultural wellbeing and health and safety, Policy 4.3.4 Adverse effects of nationally or regionally significant infrastructure, Policy 4.5.1 Providing for Urban Growth and development, Policy 4.5.2 Integrating infrastructure with land use, Policy 4.5.3 Urban design, Policy 4.5.4 Low impact design)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>(d) Significant irreversible effects on:</p> <ul style="list-style-type: none"> (i) Otago community values; or (ii) Kai Tahu cultural and spiritual values; or (iii) The natural character of water bodies and the coastal environment; or (iv) Habitats of indigenous fauna; or (v) Heritage values; or (vi) Amenity values; or (vii) Intrinsic values of ecosystems; or (viii) Salmon or trout habitat. 	<p>may be local or global in impact and all impose costs on the community.</p>		15.5.1 to 15.5.2
<p>9.5.5¹⁰ To maintain and, where practicable, enhance the quality of life for people and communities within Otago's built environment through:</p> <ul style="list-style-type: none"> (a) Promoting the identification and provision of a level of amenity which is acceptable to the community; and (b) Avoiding, remedying or mitigating the adverse effects on community health and safety resulting from the use, development and protection of Otago's natural and physical resources; and (c) Avoiding, remedying or mitigating the adverse effects of subdivision, landuse and development on landscape values. 	<p>There are important features, qualities and values of the built environment which contribute to the community's quality of life. These should be conserved and enhanced and accorded appropriate recognition in planning by local and Central Government. Agencies such as district and city councils and the Historic Places Trust are encouraged to identify and protect these features and values at the local level. The health of the community is influenced by a wide range of public and private agencies, in addition to the quality of the built environment.</p>	<p>9.6.1 9.6.2 9.6.3 9.6.4 9.6.10</p>	<p>5.5.1 5.5.3 5.5.6 to 5.5.7 6.5.1 to 6.5.2 6.5.4 6.5.7 to 6.5.8 7.5.2 to 7.5.5 8.5.1 to 8.5.6 8.5.9 10.5.2 to 10.5.3 11.5.1 to 11.5.4 12.5.1 12.5.4 13.5.1 to 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
<p>9.5.6¹¹ To recognise and protect Otago's regionally significant heritage sites through:</p> <ul style="list-style-type: none"> (a) Identifying Otago's regionally significant heritage sites in consultation with Otago's 	<p>Otago has many heritage sites which serve to reinforce the region's identity and cultural past. These include features as diverse as archaeological sites, Victorian buildings and historic gold field tailings. Heritage sites should be identified and protected to</p>	<p>9.6.1 9.6.3 9.6.4 9.6.6</p>	<p>5.5.1 5.5.6 to 5.5.7 6.5.1 6.5.4 6.5.9 to 6.5.10 8.5.1 to 8.5.2</p>

¹⁰ Superseded by PORPS 14 January 2019 (Policy 1.1.2 Integrated resource management, Policy 4.5.1 Providing for Urban Growth and development, Policy 4.5.2 Integrating infrastructure with land use, Policy 4.5.3 Urban design, Policy 4.5.6 Designing for public access)

¹¹ Superseded by PORPS 14 January 2019 (Policy 5.2.1 Recognising historic heritage, Policy 5.2.2 Identifying historic heritage, Policy 5.2.3 Managing historic heritage, Policy 4.5.1 Providing for Urban Growth and development, Policy 4.5.3 Urban Design)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>communities; and (b) Developing means to ensure those sites are protected from inappropriate subdivision, use and development.</p>	<p>preserve the tangible links to Otago’s past and to enable them to be understood and appreciated by subsequent generations.</p>	<p>9.6.8 9.6.11 9.6.13</p>	<p>8.5.5 8.5.7 11.5.1 to 11.5.2 11.5.4 11.5.6 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

9.6 Methods

In order to achieve the outcomes of the policies, every agency with responsibilities under the Resource Management Act 1991 should:

- 9.6.1¹² Take into account Kai Tahu cultural values in the management of Otago's built environment through:
- (a) Using and recognising iwi resource management plans as a basis for consultation; and
 - (b) Developing consultation protocols with iwi, runanga and hapu to provide for their input into the management of Otago's built environment.

The methods to be used by the Otago Regional Council include the following:

- 9.6.2 Develop a Regional Land Transport Strategy to provide a strategic overview for the management of Otago's land transport system identifying:
- (a) Future transport needs of the region; and
 - (b) The most desirable means of responding to those needs in a safe and cost effective manner; and
 - (c) The effect the transport system is likely to have on the environment; and
 - (d) The appropriate role for each transport mode.

- 9.6.3 Assist in the identification of Otago's regionally significant heritage sites in consultation with relevant agencies and Otago's communities and promote and encourage their protection.

- 9.6.4 Investigate the potential use of the heritage order provisions under the Resource Management Act to protect heritage values of regional significance.

- 9.6.5 Consult with Otago's communities regarding the management of Otago's built environment.

- 9.6.6 Advocate to Central Government on built environment issues of importance to Otago.

- 9.6.7 Promote and encourage interagency liaison and cooperation and the development of protocols and standards to achieve integrated and coordinated management of Otago's built environment.

Methods which may be used by Otago's territorial local authorities include the following:

- 9.6.8 Utilise means to identify and protect regionally significant heritage sites within their district.

- 9.6.9¹³ Consider the effects of extensions to existing infrastructure or new developments, and the adverse effects of subdivision, use and development of land on the safety and efficiency of regionally significant infrastructure.

- 9.6.10 Provide the means to protect significant landscapes within their district from inappropriate subdivision, use and development where those landscapes

¹² Superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty principles, Method 1.1, Method 5.1.4)

¹³ Superseded by PORPS 14 January 2019 (Policy 4.3.3 Provide for the functional needs of infrastructure that has national or regional significance)

contribute to the quality of life for those within the built environment.

9.6.11 Use education programmes to improve community awareness and understanding of issues associated with the built environment and sustainable management in Otago.

9.6.12 Provide information on the adverse effects associated with activities in the built environment.

9.6.13 Recognise and encourage the role of community groups that promote sustainable management of the built environment and associated resources.

9.6.14 Promote codes of practice agreed to by industry, the Otago Regional Council, city and district councils and other interest groups as appropriate to avoid, remedy or mitigate the adverse effects of activities on the built environment.

Explanation and Principal Reasons for Adopting

These methods are designed to encourage agencies and where relevant, the community, to recognise and meet their responsibilities under the Resource Management Act and other relevant Acts, by adopting the concept of sustainable management of the built environment and the avoidance of adverse effects on the environment. Consultation with the community on matters relating to the built environment will form an integral part of this process. These matters include the significant resource management issues identified in 9.3 and the means to address them.

9.7 Anticipated Environmental Results

The environmental results anticipated from the above policies and methods of implementation include:

9.7.1¹⁴ The built environment meets the present and reasonably foreseeable needs of Otago's communities.

9.7.2 The management of Otago's built environment takes into account the values of manawhenua.

9.7.3 The use, development and protection of infrastructure is managed in a sustainable way.

9.7.4 A relative reduction is achieved in the use of non-renewable resources in the transport sector.

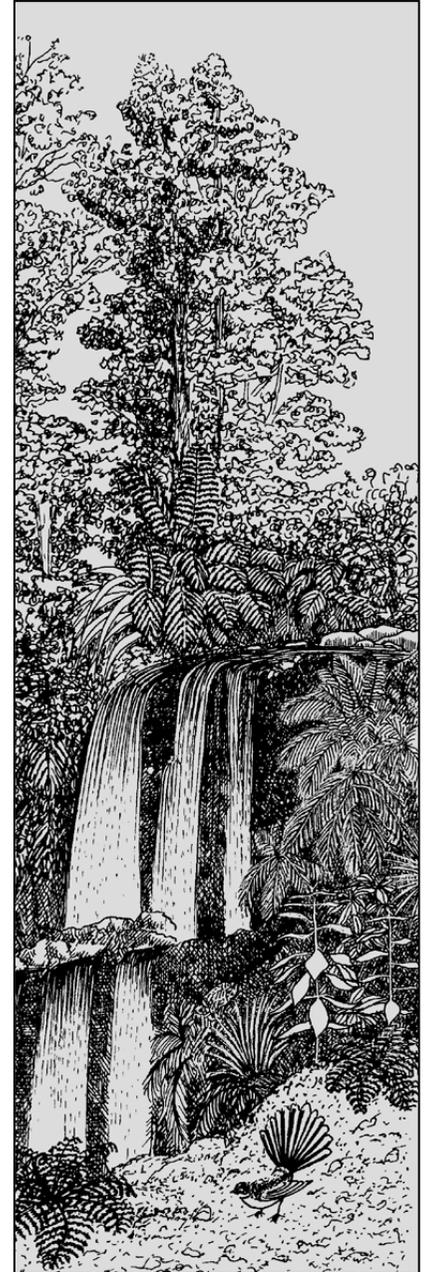
9.7.5 Heritage sites of regional significance are protected and enhanced.

9.7.6 Amenity values are provided at a level acceptable to Otago's communities.

¹⁴ Superseded by PORPS 14 January 2019 (AER 1.1)

10

Biota



10.1 Introduction

The term “Biota” describes the living components of the environment. Although humans are part of Otago’s living environment, this chapter does not deal with them expressly. It considers the animals and plants found within Otago and the interactions between them, and recognises the interactions with humans. Some examples of these interactions include the importance of healthy and diverse ecosystems to sustain economic uses such as primary production and tourism and also to sustain healthy communities through access to the recreational, aesthetic, educational, scientific and other opportunities associated with habitat and biota. The chapter addresses both indigenous and introduced species, whether they are harmful or useful to Otago’s economy. It is important to consider all species and the way in which they affect each other in a complex web of interactions.

Otago’s biota is in a dynamic state, with change occurring all the time. It is the nature of the change and the impact of human actions on it that give rise to the issues that need to be considered in this Regional Policy Statement. Change can be influenced through management aimed at promoting results that are generally considered beneficial.

Part of Otago’s character is derived from its biota, which contributes to the region’s unique landscapes and ecological communities. Some examples of Otago biota are:

- Royal albatrosses and yellow-eyed penguins;
- Skinks and Cromwell’s chafer beetles;
- Native forests in the Catlins;
- Downlands of South Otago;
- Tussock grasslands;
- The alpine fellfields of the block mountains and Mount Aspiring National Park;
- The Sinclair wetlands;
- The Sutton salt lake community.

The biota of Otago is diverse and generally readily accessible to all. But the loss of any component of that biota would mean a reduction in the quality of Otago’s environment. A loss of a species through displacement, extinction or disease within the region would mean a reduction in diversity of Otago’s living environment and the reduction of future options.

Animal and plant pests, as well as hazards and inadvertent or even deliberate modification by humans, can threaten many of the species, ecosystems or the primary production systems of agriculture, horticulture, food gathering, etc. An ecosystem’s ability to survive is due to its resilience and this depends on its biological diversity. Similarly, Otago’s economy will be more resilient if there is a wide, diverse economic base to it. A monoculture crop is at the mercy of a single threat such as falling prices or disease. A farmer or forester who diversifies has a potentially more resilient and sustainable system.

In practical terms, diversity within biota generally improves its capacity to sustain itself in the long-term. However, the introduction of a pest, while temporarily increasing the diversity, would usually result in a net loss given time. For example the introduction of the rabbit to Otago (which increased biodiversity by one species) has been a key factor in the widespread modification of dryland ecosystems, reducing the nature and extent of palatable species.

Biodiversity is generally in decline as species become extinct. Otago makes an important contribution to national and global biodiversity. It is important to manage the dynamics of the region’s biota to ensure a long-term sustainable balance.

**Biota = All Living Components of the Environment
(excluding humans)**

10.2 Roles of Different Agencies

All agencies and persons exercising functions and powers under the Resource Management Act have to recognise and provide for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna as a matter of national importance (Section 6). They are also required to have particular regard to the intrinsic values of ecosystems and the protection of the habitat of trout and salmon (Section 7). More specifically, the roles of the various agencies are:

10.2.1 Central Government

The Department of Conservation is responsible for the administration of land in Otago held under several statutes and for the purpose of protecting the habitats and interactions of species and the functioning of natural ecosystems. It is the role of the department to ensure, as far as possible, the survival of all indigenous species of flora and fauna in their natural communities and habitats, and the preservation of representative samples of all classes of natural ecosystems.

The Otago Fish and Game Council also reports to the Minister of Conservation and is the statutory management agency for sports fish (trout and salmon) and game birds (waterfowl and upland game) within the Otago region.

Other government departments such as the Ministry of Agriculture and Fisheries and Ministry of Forestry are closely involved with primary production and implementing policies to increase efficiency and reduce threats to productive biota.

The Otago Regional Council believes that all landowners and occupiers, whether the Crown or private, should have the same obligation to control pest animals and plants on the land under their control. However, in respect of the

management of pests, Central Government agencies are not bound as other landowners are by the Biosecurity Act but can agree to be bound through Order in Council.

The Otago Regional Council will seek the binding commitment of Government agencies, through this mechanism, to the funding of pest management on their land.

10.2.2 Otago Regional Council

The Otago Regional Council has a lead role in the coordination of efforts to reduce the adverse effects on the biota of Otago. Much of this role has historically been focused on pests under legislation such as the Agricultural Pest Destruction Act 1967 and the Noxious Plants Act 1978. These responsibilities will now be carried out under the Biosecurity Act 1993 which replaces those previous pieces of legislation.

The Otago Regional Council also has other roles including those under the Resource Management Act 1991 that affect biota and its habitats, such as influencing riparian and river bed use and management, controlling waste discharges to ensure environmental damage is minimised and advocating appropriate landuse practices which maintain and enhance soil and water values.

10.2.3 Territorial Local Authorities

Through district planning, territorial local authorities have the opportunity to reduce the adverse effects of development on desirable habitats.

City and district councils have the responsibility, similar to landowners and occupiers, of controlling pest animals and plants on land they own or control, such as local reserves and roadside verges.

10.3 Issues

	Explanation	Objective	Policies	See Also Other Issues
10.3.1	Otago’s significant indigenous vegetation and the significant habitats of indigenous fauna, trout and salmon may be threatened by the adverse effects of the use, development and protection of Otago’s natural and physical resources.	10.4.1 10.4.2 10.4.3	10.5.1 10.5.2 10.5.4	4.3.2 to 4.3.4 5.3.2 to 5.3.6 6.3.2 to 6.3.5 6.3.7 to 6.3.10 7.3.1 to 7.3.2 8.3.1 8.3.3 8.3.5 to 8.3.9 9.3.1 to 9.3.3 11.3.1 11.3.4 11.3.7 12.3.1 13.3.1 to 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1
	<p>Otago’s significant indigenous vegetation and areas which form significant habitat for indigenous fauna and trout and salmon, help form part of the character of Otago and are an integral part of the biodiversity of the region.</p> <p>Urban and rural development can modify landscapes which may in some cases lead to reduction in remaining native vegetation or habitats for native species and trout and salmon. Within Otago, this can be seen in the values of areas such as:</p> <ul style="list-style-type: none"> - The wetlands of Lakes Waihola and Waipori which are affected by silt accumulation and eutrophication; - Lake Hayes where the original ecosystem has been degraded as a result of nutrient inputs from the surrounding catchment; - Red and snow tussock communities in Otago’s high country which are under pressure from farming practices; - The indigenous forest in the Catlins, the only significant indigenous lowland forest on New Zealand’s east coast, which is under pressure from the creation of new pasture land. <p>Works undertaken to protect Otago’s resources from the effects of land instability or flooding can also result in a loss of indigenous habitats such as wetlands and the degradation of the habitat of wildlife such as trout and salmon.</p> <p>The use, development and protection of Otago’s natural and physical resources can adversely effect these important ecosystems and habitats. The potential for adverse effects and the need to maintain and enhance such ecosystems and habitats wherever practicable is an important component of the management of these areas. As the retention of significant indigenous vegetation, and of significant indigenous fauna, is dependent on New Zealand habitat, the protection of both vegetation and habitat is recognised as a matter of national importance by the Resource Management Act.</p>			

Issues	Explanation	Objective	Policy	See Also Other Issues
10.3.2 Plant and animal pests threaten the diversity and productivity of Otago’s natural ecosystems and primary production.	Both plant and animal pests threaten existing natural ecosystems by displacing various species and areas of primary production by reducing the productivity of the land. Landscapes can be modified as a result of grazing, browsing or soil disturbance by animal pests and the displacement of native and traditional pasture species by plant pests. This can adversely affect recreational and tourism opportunities, as well as the ability of Otago’s communities to meet their own needs. The main animal pests of concern within Otago include rabbits in the semi arid areas of Central Otago, possums, goats and deer in bush areas and rooks in agricultural areas. The major plant pests within Otago include hawkweeds, nassella tussock, old mans beard, broom and gorse and, in the water bodies, the growth of lake weed which threatens indigenous habitats as well as the region’s tourism and recreation potential. In some areas, wilding conifers are also becoming a problem.	10.4.1 10.4.2	10.5.2 10.5.3 10.5.4	4.3.2 4.3.4 to 4.3.5 5.3.2 5.3.5 14.3.1 to 14.3.6 15.3.1
10.3.3 The introduction of new species or the movement of existing species to new areas can threaten the diversity and productivity of Otago’s natural ecosystems and primary production.	New organisms can be deliberately or inadvertently introduced. Last century possums, rabbits, gorse and stoats were deliberately introduced. The stoat was brought in for rabbit control. This so-called “biological control” is more desirable to many than the use of pesticides, herbicides or shooting and trapping, however, there are potential problems associated with it. The introduction of thoroughly tested biological control agents may have advantages where there are no foreseeable adverse environmental effects. However, new introductions of animals, plants or other organisms designed to bring about a benefit to a region, district or property, may in fact prove to have harmful effects in the long-term on other species, both locally and elsewhere. This is because long-term cumulative effects are sometimes slow to show up or because the introduced species may take a while to find a niche to thrive in. An example is the stoat, which has had a profound effect on the country’s ground-dwelling birdlife.	10.4.1 10.4.2	10.5.2 10.5.3 10.5.4	4.3.2 4.3.4 to 4.3.5 5.3.2 5.3.5 8.3.7 14.3.1 to 14.3.6 15.3.1

Issues	Explanation	Objective	Policy	See Also Other Issues
10.3.4 There continues to be a danger of native species being lost from Otago.	Some of Otago's native species of flora and fauna are in danger of being lost from Otago as a result of the adverse effects associated with many activities carried out within Otago. For example there is evidence that Otago's two species of giant skinks do not survive for long when their habitat is modified for exotic pasture establishment. The yellow-eyed penguin population on the coast of Otago is precarious and has been brought to that state at least partly as a result of the removal of breeding habitat. There are only a handful each of kiwi, kaka and blue duck in Otago, and the ranges of species such as yellowhead, kea, falcon and jewelled gecko are shrinking. There have already been local extinctions of plants, eg. the early botanists reported that Otago's special salt-tolerant flora once covered square kilometres but they now cover only square metres in a few places.	10.4.1	10.5.1 10.5.2	4.3.2 to 4.3.5 5.3.5 6.3.2 6.3.4 to 6.3.5 6.3.7 to 6.3.9 7.3.1 8.3.1 8.3.3 8.3.7 to 8.3.9 9.3.1 9.3.3 11.3.1 11.3.7 12.3.1 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1
10.3.5 Otago's biodiversity needs to be maintained.	Part of the Otago environment's ability to withstand events such as long-term droughts is linked to its biological diversity. A greater diversity gives flora and fauna an improved ability to withstand adverse events because they are less dependent on any one variable. The cumulative loss of individual species can result in ecosystems losing the capacity to survive. Estuaries, wetlands and small lakes are particularly susceptible to the impacts of development. In Otago, saline soil communities have all but disappeared, and some tussock grasslands are threatened by wilding trees, hawkweeds and pasture grasses. The majority of wetlands have been drained and clearance of indigenous lowland forest goes on.	10.4.1	10.5.1 10.5.2	4.3.2 4.3.4 to 4.3.5 5.3.5 6.3.7 to 6.3.8 7.3.1 8.3.1 8.3.7 9.3.1 11.3.1 11.3.7 12.3.1 13.3.2 13.3.4 to 13.3.6 14.4.1 to 14.4.6 15.3.1

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
10.4 Objectives			
	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
10.4.1 To maintain and enhance the life-supporting capacity and diversity of Otago's biota.	<p>Otago's biota must be maintained and enhanced to ensure that the ecological diversity and the productive potential of the region is sustained for the benefit of Otago's future generations. This diversity is in terms of the variability within species, between species and of ecosystems. Stability and balance depends on the size of habitats, their biodiversity and the health of all the things that make up the ecosystem. In productive systems, economic stability and balance comes about through maximising production while minimising the effects of threats to productivity such as diseases and pests. The enhancement of biodiversity in Otago's biota systems will be achieved in consultation with Otago's communities.</p> <p>The maintenance and enhancement of Otago's ecosystems will require a recognition of the natural dynamics inherent in any ecosystem and any threats to this. These natural dynamics will result in natural change over time and must be taken account of.</p>	10.5.1 10.5.2 10.5.3 10.5.4	4.4.2 to 4.4.5 5.4.1 to 5.4.2 6.4.2 to 6.4.5 6.4.8 7.4.1 8.4.2 8.4.4 to 8.4.5 9.4.1 9.4.3 11.4.2 11.4.4 12.4.1 13.4.1 13.4.4 14.4.1 to 14.4.2 15.4.1
10.4.2 To protect Otago's natural ecosystems and primary production from significant biological and natural threats.	<p>Biological and natural threats include such things as plant and animal pests, diseases and natural hazards. The cultural, social and economic well being of Otago's communities depends, in many respects, on a sound and diverse biota, both in terms of natural ecosystems and the primary productive base of the region. Primary production, tourism, recreation, mahika kai and landscape aesthetics are but some of the values that benefit.</p>	10.5.1 10.5.2 10.5.3 10.5.4	4.4.2 4.4.4 to 4.4.5 5.4.1 to 5.4.2 6.4.2 to 6.4.4 6.4.6 6.4.8 8.4.1 to 8.4.2 8.4.5 11.4.1 to 11.4.2 11.4.4 13.4.4 14.4.1 to 14.4.6 15.4.1
10.4.3 To maintain and enhance the natural character of	Section 6(c) of the Resource Management Act provides for the	10.5.1	4.4.2 4.4.4 to 4.4.5

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
areas with significant indigenous vegetation and significant habitats of indigenous fauna.	<p>protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. Indigenous vegetation is an important part of Otago's natural character and landscapes and</p> <p>therefore an integral part of the region's biodiversity and natural heritage. As is the case throughout New Zealand, most of Otago's indigenous fauna is endemic to this country and some species, such as the Otago skink and the Cromwell chafer beetle, are found only in Otago. Such fauna has been threatened by the removal and modification of indigenous vegetation and habitat, and also by biological and natural threats. It is therefore important that those significant habitats which remain are protected, in order that indigenous fauna species may be sustained for future generations to experience and appreciate.</p>	<p>10.5.2 10.5.3 10.5.4</p>	<p>5.4.2 to 5.4.3 6.4.3 to 6.4.6 6.4.8</p> <p>8.4.2 to 8.4.5 9.4.1 9.4.3 11.4.4 12.4.1 13.4.2 13.4.4 14.4.1 to 14.4.2 15.4.1</p>

10.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>10.5.1¹ To recognise and provide for the relationship Kai Tahu have with mahika kai in Otago through:</p> <p>(a) Working towards eliminating the disposal of human wastes and pollution into or onto mahika kai; and</p> <p>(b) Facilitating the maintenance and enhancement of access to places of traditional gathering of mahika kai; and</p> <p>(c) Recognising the need to maintain and enhance mahika kai.</p>	<p>This policy recognises the importance of mahika kai to runanga and hapu and provides opportunity for enhancement of mahika kai and involves runanga and hapu in the decision making and resource consenting process.</p>	<p>10.6.1 10.6.2 10.6.3 10.6.4 10.6.6 to 10.6.16</p>	<p>5.5.1 5.5.5 to 5.5.7 6.5.1 to 6.5.2 6.5.4 to 6.5.10 7.5.1 8.5.1 to 8.5.7 9.5.1 to 9.5.4 11.5.1 to 11.5.2 12.5.2 13.5.1 to 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
<p>10.5.2 To maintain and where practicable enhance the diversity of Otago’s significant indigenous vegetation and the significant habitat of indigenous fauna, trout and salmon which are:</p> <p>(a) Covered under a statute or covenant for protection; or</p> <p>(b) Habitat or vegetation that support the maintenance or recovery of indigenous species that are uncommon or threatened with extinction (rare, vulnerable or endangered) regionally or nationally; or</p> <p>(c) Vegetation that contains associations of indigenous species which are rare or representative regionally or nationally; or</p> <p>(d) Vegetation that contains a substantially intact, uninterrupted ecological sequence of indigenous species which are rare or representative regionally or nationally; or</p> <p>(e) Important for soil and water values or have functions in natural hazard mitigation;</p>	<p>The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna is a matter of national importance (section 6 of the Resource Management Act) and is required of all persons exercising functions under the Act. The maintenance and enhancement of Otago’s indigenous vegetation and habitat is also considered to be of regional significance and essential to integrated management for reasons of sustainable management, intrinsic value and maintaining biodiversity.</p> <p>While some of Otago’s significant indigenous ecosystems are already protected through having park or reserve status, or through the use of covenants or other voluntary methods, there are other areas that may warrant protection as well. These areas need to be identified in consultation with Otago’s communities and be given appropriate protection. Until the identification of Otago’s significant vegetation and significant habitats of indigenous fauna, trout and salmon is completed, careful consideration will be required to determine whether or not a particular area of vegetation or a particular habitat falls within the scope of Policy 10.5.2.</p>	<p>10.6.1 10.6.3 10.6.4 10.6.5 10.6.6 10.6.7 10.6.8 10.6.9 10.6.10 10.6.11 10.6.12 10.6.13 10.6.14 10.6.15 10.6.16 10.6.17 10.6.18 10.6.20</p>	<p>5.5.3 to 5.5.7 6.5.1 to 6.5.2 6.5.4 to 6.5.10 7.5.2 to 7.5.3 8.5.2 to 8.5.7 9.5.3 to 9.5.5 11.5.1 to 11.5.2 11.5.4 12.5.2 13.5.2 to 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

¹ Superseded by PORPS 14 January 2019 (Policy 5.4.1 Offensive or objectionable discharges, Policy 2.2.1 Kāi Tahu wellbeing , Policy 2.2.2 Recognising sites of cultural significance)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>and to promote and encourage, where practicable, the retention, enhancement and re-establishment of indigenous ecosystems within Otago.</p>	<p>The enhancement of biodiversity in Otago’s indigenous ecosystems will be achieved in consultation with Otago communities.</p> <p>At the same time, it is also important to retain, enhance and re-establish areas of indigenous ecosystem that, while not being considered “significant”, do contribute to the character of Otago and its biodiversity.</p>		
<p>10.5.3 To reduce and where practicable eliminate the adverse effects of plant and animal pests on Otago’s communities and natural and physical resources through:</p> <p>(a) Developing strategies to effectively manage Otago’s plant and animal pests; and</p> <p>(b) Educating about the responsibilities of all parties in the management of Otago’s plant and animal pests; and</p> <p>(c) Adopting the most practicable method of pest control while safeguarding the environment.</p>	<p>The Biosecurity Act 1993 establishes a framework within which plant and animal pests are to be managed, principally through the development of pest management strategies which will establish how particular plant and animal pests will be dealt with. The aim of animal and plant pest management is to keep Otago’s biota in a state of balance and minimise undesirable changes and threats. Where pests can be successfully eradicated, this is the best avenue to pursue. However, if eradication is not achievable, then population levels should be lowered to a level where the adverse environmental effects are insignificant or acceptable.</p> <p>Community and land owner/occupier participation in establishing priorities, levels and funding arrangements is instrumental in bringing about cooperative arrangements and wider understanding of opportunities and objectives. Pest management can, in some instances, make use of nature. Threats may be reduced through biological control or by allowing natural succession, for example of native woody species through a gorse canopy which may result in the eventual eradication of the plant pest gorse, or allowing vegetation to shade out weeds, for example a closed tussock cover may reduce hieracium vigour. Methods using native species may have other benefits, such as biodiversity, landscape and aesthetic benefits.</p>	<p>10.6.2 10.6.3 10.6.4 10.6.5 10.6.6 10.6.7 10.6.8 10.6.9 10.6.10 10.6.11 10.6.12 10.6.13 10.6.14 10.6.15 10.6.16 10.6.19 10.6.22 10.6.23</p>	<p>5.5.3 to 5.5.4 5.5.6 6.5.7 6.5.9 8.5.5 9.5.5 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>10.5.4 To reduce the adverse effects associated with introductions and movements of undesirable new species into and around Otago through:</p> <ul style="list-style-type: none"> (a) Promoting and educating about methods to reduce the spread of plant and animal pests; and (b) Being able to respond quickly to any new introduction or movement; and (c) Eradicating, where practicable, undesirable new species. 	<p>Both accidental and planned introductions of species into Otago can have adverse effects on existing flora and fauna. Accidental introductions of new species, such as Lagarosiphon to Otago's water bodies, have the potential to have lasting effects. Every person needs to be made aware of the potential for damage to Otago's primary productive base and natural ecosystems from the introduction of undesirable species. Where undesirable introductions do occur, there is a need to have an ability to be able to respond quickly and effectively in an effort to eliminate the threat posed by those introductions. Eradication, where possible, is the ultimate aim.</p>	<p>10.6.2 10.6.4 10.6.5 10.6.7 10.6.8 10.6.9 10.6.10 10.6.11 10.6.12 10.6.19 10.6.23</p>	<p>5.5.5 to 5.5.6 8.5.5 to 8.5.6 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

10.6 Methods

In order to achieve the outcomes of the policies, every agency with responsibilities under the Resource Management Act 1991 should:

- 10.6.1² Take into account Kai Tahu cultural values in the management of Otago's biota through:**
- (a) Using and recognising iwi resource management plans as a basis for consultation; and**
 - (b) Developing consultation protocols with iwi, runanga and hapu to provide for their input into the management of Otago's biota.**

The methods to be used by the Otago Regional Council include the following:

- 10.6.2 Develop and implement pest management strategies under the provisions of the Biosecurity legislation.**
- 10.6.3 Consider the development of policies and other means including rules where appropriate, within the Regional Plan: Land, Regional Plan: Water and Regional Plan: Coast to protect Otago's significant indigenous vegetation and significant habitat of indigenous fauna, trout and salmon.**
- 10.6.4 Consider including conditions on resource consents or consider declining such consents as necessary to protect Otago's significant indigenous vegetation and significant habitat of indigenous fauna, trout and salmon and/or minimise the threat of pest and weed invasion.**
- 10.6.5 Identify and protect Otago's significant indigenous vegetation and significant habitat of indigenous fauna, trout and salmon, in consultation with relevant agencies and with Otago's communities.**
- 10.6.6 Initiate, support and encourage research and monitoring programmes to provide information on Otago's biota diversity and condition and pest issues and solutions.**
- 10.6.7 Promote and encourage, where practicable, the retention, enhancement and re-establishment of indigenous vegetation and habitat within Otago.**
- 10.6.8 Consult with Otago's communities regarding the management of Otago's biota.**
- 10.6.9 Advocate to Central Government on biota management issues of importance to Otago.**
- 10.6.10 Recognise and encourage community groups that promote:**
 - (a) The effective management and control of plant and animal pests; and**
 - (b) The re-establishment of vegetative areas; and**
 - (c) The protection of significant indigenous vegetation and significant habitat of indigenous fauna, and trout and salmon.**
- 10.6.11 Promote and educate about methods to reduce the spread of plant and animal pests.**
- 10.6.12 Promote and encourage interagency liaison and cooperation and the development of protocols to ensure integrated and coordinated management of Otago's biota.**

² Superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty principles, Method 1.1, Method 5.1.4)

- 10.6.13** Consider and assess environmental impacts when developing means necessary to protect Otago's significant indigenous vegetation and significant habitat of indigenous fauna, trout and salmon and to effectively manage and control pests.
- 10.6.14** Use education programmes to improve community awareness and understanding of biota issues and sustainable management in Otago.
- 10.6.15** Provide information on the adverse effects associated with activities that impact on biota.
- 10.6.16** Promote Codes of Practice agreed to by industry, the Otago Regional Council, city and district councils and other interest groups as appropriate to avoid, remedy or mitigate the adverse effects of activities on Otago's biota.

Methods which may be used by Otago's territorial local authorities include the following:

- 10.6.17** Consider including conditions on resource consents or consider declining such consents as necessary to protect Otago's significant indigenous vegetation and significant habitat of indigenous fauna, trout and salmon.
- 10.6.18** Develop controls within district plans necessary to protect Otago's significant indigenous vegetation and significant habitat of indigenous fauna and of trout and salmon.
- 10.6.19** Meet their responsibilities as a landowner or occupier for the control of plant and animal pests.

- 10.6.20** Promote and encourage, where practicable, the retention, enhancement and re-establishment of indigenous vegetation and habitat within the district.

Central Government Agencies will continue to be asked by the Regional Council to:

- 10.6.21** Assist in the identification of Otago's significant indigenous ecosystems.
- 10.6.22** Assist in the management of Otago's plant and animal pests.
- 10.6.23** Meet their responsibilities as a landowner or occupier for the control of plant and animal pests.

Explanation and Principal Reasons for Adopting

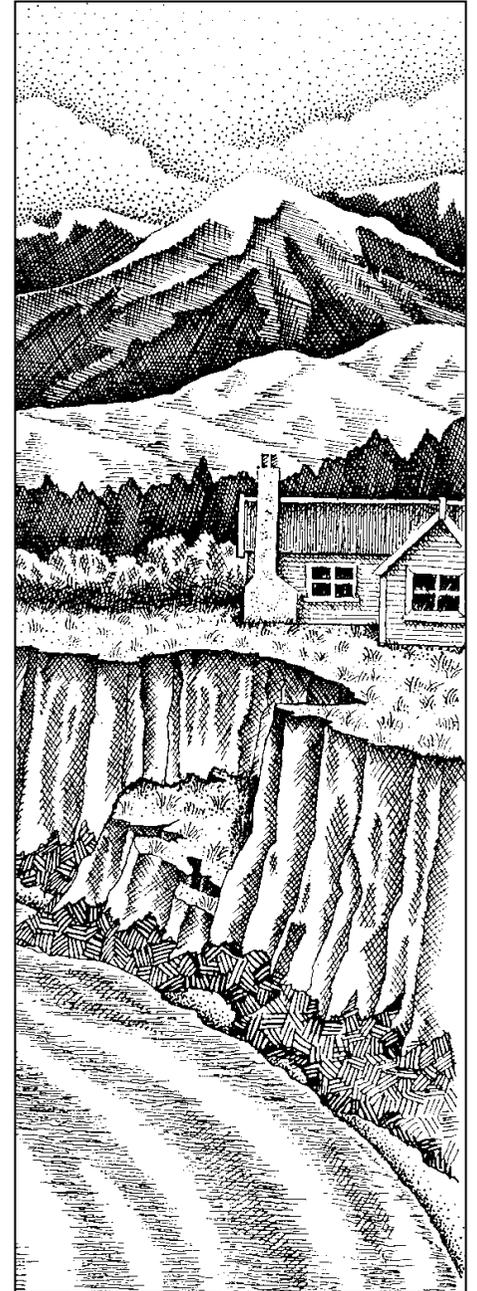
All of these methods are aimed at the sustainable management of Otago's resources, whether through the management of threats or through the protection of indigenous biota. The methods deal with threats to living resources, as well as biota threatening other natural and physical resources. The most important aspect of this is to do with prioritising and focusing efforts to deal with the significant threats. These efforts depend on how people perceive the significance or acceptability of the many changes that take place in Otago's biota. It is appropriate for the Regional Council to take a lead role in the establishment of such priorities and the coordination of research and monitoring to ensure effectiveness, as well as the clarification of the various roles of territorial local authorities, and regional and central government agencies. The Regional Council can take a lead role in the lobbying of Central Government initiatives that could affect regional biota.

10.7 Anticipated Environmental Results

The environmental results anticipated from the above policies and methods of implementation include:

- 10.7.1 Otago's people and communities benefit from having a healthy diversity of biota within the region.**
- 10.7.2 The management of Otago's biota takes into account the values of manawhenua.**
- 10.7.3 Otago's biodiversity is maintained or enhanced.**
- 10.7.4 Otago's significant ecosystems and endangered species are protected.**
- 10.7.5 The adverse effects of Otago's plant and animal pests are reduced or eliminated.**
- 10.7.6 The life-supporting capacity of Otago's ecological communities is safeguarded.**
- 10.7.7 Ecological, amenity and intrinsic values associated with Otago's ecosystems are protected.**

11 Natural Hazards



11.1 Introduction

Natural hazards are those naturally occurring events that threaten human life, property or other aspects of the environment. Human activities may aggravate or even cause the hazards (for example where inappropriate land management adversely affects stability or runoff characteristics) or they may have no effect.

Section 2 of the Resource Management Act 1991 defines natural hazards as:

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

The types of events or processes that give rise to natural hazards in Otago include the following.

- Atmospheric (weather effects such as floods, high winds, snowfalls and droughts, el Nino conditions or windborne smoke and large fires).
- Marine (tides, tsunami, wave action, storm surge, sea level rise).
- Seismic (crustal movement causing earthquakes).
- Land (unstable geology or fragile soils leading to instability or erosion and sediment release).
- Coastal processes (eg. sediment blocking a river mouth).
- Vegetation (insufficient ground cover leading to exposure of soils or excess dry matter providing conditions for a fire).
- Extra-terrestrial factors (eg. comets, meteorites).
- Solar conditions (eg. ultra-violet radiation).
- Noxious invasions (eg. diseases, pests, plants etc carried by wind or ocean currents).

They may occur in isolation from one another or interact and combine to create a greater hazard. They may also be visible from the outset or remain hidden until their effects are felt. The Abbotsford land slip of 1979 is an example of a natural hazard which resulted from a number of factors including underlying geology, weather effects and land disturbance.

Common natural hazards in Otago include floods, droughts and grassland fires. Floods are a very serious threat to Otago people and communities, and it is essential to avoid or mitigate the threat through appropriate means including defenses against water which need on-going maintenance. It is also important however to consider the adverse impacts of flood mitigation works on natural and physical resources and to avoid, remedy or mitigate these impacts.

It is the impact of the events or processes on human activities or on the Otago environment which creates a hazard situation. A rainstorm in Otago which results in flooding within the region is a hazard, whereas a rainstorm in a remote unvisited part of Fiordland is not perceived as a hazard. When the natural event affects something of value to us, it is thought of as a hazard. Human activities have the potential to aggravate and worsen the effect or magnitude of some natural events. For example, a Fiordland-type rainstorm on land no longer protected by the type of thick vegetation found in Fiordland could result in hundreds of years of soil establishment being washed away, destroying the economic base of a community.

Natural hazards are a factor to be considered in terms of all land use options, and are affected by the characteristics and behaviour of natural and physical resources. It is essential to ensure that recognition be given to the interactions that occur between human

land use activities and natural hazard occurrence when any plans are prepared that affect land use, such as district plans.

The risk of a natural hazard event or process can be assessed on how likely it is to occur and on its magnitude or size. An event of low probability but high impact (such as a tsunami in the densely populated South Dunedin area) may be more disastrous to Otago's well being than an event of high probability but low impact (such as a flood in a remote, high rainfall area). The ability to predict the occurrence of any particular event, combined with an understanding of its possible magnitude, helps to determine our response to it. Our response to the likelihood of a natural hazard occurring can take one of three forms:

1. We can avoid the hazard by separating the conflicting elements. An example of this would be the movement of people and buildings away from areas under threat of flooding or coastal erosion or to prohibit development in those areas.
2. We can mitigate and lessen the impact of the hazard by reducing its effects. An example of this would be the construction of floodbanks to contain floodwaters in times of high flow.
3. We can endure the event and clean up and restore afterwards. Examples of this would be the preparation of civil defence arrangements (civil defence and emergency services) by communities to help in responding to any event or people taking out individual insurance policies.

The choice an individual makes depends on how they perceive the hazard and how much they accept it or are prepared to tolerate it. Choice is very important in the consideration of the degree of risk people will accept. People build or farm in certain places because of the benefits involved. For example, flood-prone river and coastal plains are often the most fertile lands or the most convenient places for transport networks. Thus people make the

choice, weighing up the benefits of a certain place against the risk of being threatened by a natural hazard event. For example, a community decision was made that the West Otago township of Kelso had too high a degree of flood risk for any individual to remain, resulting in the community effectively relocating.

While the reasons for particular events and hazards may be well documented, they may not be understood with certainty. The hazard management problem for the region is in predicting, then preventing, controlling or avoiding the actual phenomenon. The method or combination of methods used will depend on the nature and extent of the risk and its magnitude and on the costs and benefits to the community. For example, weather-related events are able to be predicted to a degree by forecasters and the region is able to prepare itself for an event like the 1980 Taieri flood or a worsening of the dry conditions in North Otago. Predictions can be made about the probability and extent of damage from a landslip into Lake Dunstan or of a certain sized flood occurring in the next ten years. However, many of the gradual processes that result in risks to life, property and Otago's heritage may go undetected, unpredicted or unassessed.

11.2 Roles of Different Agencies

Under the Resource Management Act, responsibility for controlling the use, development or protection of land for the purposes of avoiding or mitigating natural hazards is jointly held by the Otago Regional Council and Otago's territorial authorities. Territorial local authorities are also responsible for subdivision approval. Land stability and the ability to protect that land from the consequences of land instability are matters that are considered by those authorities. At the same time, both the Otago Regional Council and Otago's territorial authorities have responsibilities under the civil defence legislation and a number of specific responsibilities provided for under other legislation including:

- The Soil Conservation and Rivers Control Act 1941. Regional Councils are responsible for conserving soil resources, for preventing damage by erosion and for providing flood protection. This may involve investigating, constructing, maintaining and reviewing river and flood control schemes, which protect communities from floods and soil conservation work to protect land from erosion hazards.
- The Building Act 1991. Territorial local authorities have to be able to provide a project information memorandum relating to a specific site, which contains details of any natural hazards affecting the site. This is also required under the Local Government Official Information and Meetings Act 1987 as a Land Information Memorandum. A "restrictive covenant" can also be registered on the land title, which can inform prospective buyers of a land instability problem.

Other agencies and groups are also involved in the planning for and response to natural hazards, including emergency services, the Electricity Corporation of New Zealand, the Red Cross and volunteer organisations. A coordinated and cooperative approach is required to ensure that Otago's communities are ready and able to respond to any natural hazard.

Section 62 (1) (ha) of the Resource Management Act requires that the Regional Policy Statement state the responsibilities of local authorities for the control of the use of land for the avoidance or mitigation of natural hazards. Where no responsibility is identified, the section states that it is the regional council who shall retain primary responsibility. Within the Otago Region, the following responsibilities for the control of the use of land will apply.

11.2.1 Natural Hazard Investigation

The Otago Regional Council will investigate and provide information to all agencies on regionally significant natural hazards such as flooding, droughts, coastal hazard zones, soil erosion and land instability problems. The Regional Council will make available information it holds relating to natural hazards.

Territorial local authorities are required to prepare information on site specific and localised natural hazards that may affect any component of Otago's built environment under the Building Act. They will be the first point of contact for initial public enquiries regarding individual sites or areas.

11.2.2 Natural Hazard Avoidance or Mitigation by Control of Land Use

Territorial Local Authorities

Each territorial local authority will be responsible for the development of objectives, policies and rules relating to the control of the use of land:

- That is affected by a natural hazard in its district, and

- Where the effect of development could be to exacerbate a natural hazard situation.

Means that may be used to achieve this include district planning methods such as special hazard zones or rules, general building or development controls or criteria, or designations; and by assisting with establishing responsibilities for controlling land use for natural hazard avoidance or mitigation.

Otago Regional Council

Within the Regional Plan: Land, the Otago Regional Council will develop objectives, policies, rules and other methods, as appropriate, relating to the control of the use of land for the avoidance or mitigation of natural hazards as follows:

- (i) The preparation of objectives and policies with respect to:
- hazard mitigation works which may have effects of regional significance;
 - land that is affected by:
 - inundation;
 - erosion;
 - sedimentation;
 - landslip or
 - subsidence;
- (ii) The preparation of objectives, policies and methods with respect to:
- hazard mitigation works which may impact on habitat values and natural character; and
 - any natural hazard issue crossing a territorial local authority boundary, or Mean High Water Springs;
- (iii) The preparation of objectives, policies, rules and other methods with respect to activities that may exacerbate:
- inundation;
 - erosion;
 - sedimentation;
 - landslip; or
 - subsidence.

Responsibilities for Land Use Controls Related to Natural Hazard Exacerbation

Determination of specific roles and responsibilities concerning the exacerbation of natural hazards will need to be carried out in response to each specific natural hazard, in order to ensure the most efficient and effective mechanisms are used. This may be facilitated through regional plans that address natural hazards, such as those for land, water and coast. The allocation of particular land use control responsibilities for the exacerbation of particular natural hazards will provide the opportunity to take into account factors which may include the following:

- the capability of the various local authorities;
- acceptability of responsibility;
- efficiency factors;
- the avoidance of duplication;
- the minimising of community costs;
- the scale of effects.

11.2.3 Natural Hazard Avoidance or Mitigation by Community Works

The Otago Regional Council will enable community responses to flood hazard where necessary, subject to the Resource Management Act's requirements. This may involve the Otago Regional Council carrying out works or services, subject to the Resource Management Act, to avoid, remedy or mitigate effects of natural hazards such as maintaining and reviewing river control schemes, involvement with the construction of new schemes, and assisting in the timely carrying out of river works.

11.2.4 Natural Hazard Response

The Otago Regional Council will prepare and update a regional civil defence plan in accordance with this Regional Policy Statement and civil defence legislation.

Territorial local authorities will prepare and update district civil defence plans and take full first-line responsibility for dealing with the impact of a disaster in their area, in accordance with this Regional Policy Statement and civil defence legislation.

11.3 Issues

	Explanation	Objective	Policies	See Also Other Issues
11.3.1¹ Natural hazards have the potential to adversely affect Otago's communities and resources.	Natural hazards can from time to time threaten the communities and natural resources of Otago. Natural hazards that have occurred in Otago in the past include adverse weather events such as droughts, floods and heavy snow falls, coastal erosion, landslips and other forms of instability, earthquakes and fires. The potential for natural hazards to occur must be recognised and understood in the management of Otago's communities and resources.	11.4.1 11.4.2 11.4.3	11.5.2 11.5.3 11.5.4 11.5.5 11.5.6 11.5.7	4.3.1 to 4.3.2 4.3.4 to 4.3.6 5.3.2 6.3.9 to 6.3.10 8.3.2 to 8.3.3 8.3.5 9.3.2 to 9.3.3 10.3.1 10.3.4 to 10.3.5 12.3.1 to 13.3.2 14.3.1 to 14.3.6 15.3.1
11.3.2² There is a need for improved public awareness of natural hazard risks, causes and response measures.	Self-reliance and preparedness would be improved if the public had a better understanding of natural hazard processes and events and the ways of dealing with them. A lack of such understanding can lead to a failure to recognise hazards and factors that could worsen them and to prepare adequately for them.	11.4.1	11.5.1 11.5.4 11.5.6 11.5.7	4.3.5 4.3.6 5.3.2 6.3.10 8.3.2 to 8.3.3 8.3.5 14.3.1 to 14.3.6 15.3.1
11.3.3³ The values and expectations of Otago's communities over acceptable levels of risk need to be incorporated into natural hazard planning and response.	Rather than relocate away from a known natural hazard (for example an area that is prone to flooding), some individuals may prefer to put up with some degree of risk associated with that particular hazard, accepting that they are never totally safe from it. This may be because of social, economic and cultural benefits and activities that can be pursued by the community in those places, which the individual or community feels outweigh the risks associated with the areas. Hazard management should take into account the level of risk that the individual or community is prepared to accept when considering hazard planning or response	11.4.1 11.4.2 11.4.3	11.5.1 11.5.6 11.5.7	4.3.1 to 4.3.2 4.3.5 to 4.3.6 6.3.10 8.3.2 8.3.3 8.3.5 9.3.1 to 9.3.3 14.3.1 to 14.3.6 15.3.1

¹ Superseded by PORPS 14 January 2019 (Issue 4.1)

² Superseded by PORPS 14 January 2019 (Issue 4.1)

³ Superseded by PORPS 14 January 2019 (Issue 4.1)

Issues	Explanation	Objectives	Policies	See Also Other Issues
11.3.4⁴ There are risks to existing developments which can only be dealt with through mitigation or response means.	measures. Decisions by individuals on where to locate their activities should take into account the potential cost for the community should a hazard event occur. Where a hazard situation is identified and a development such as a building or a farm is already in place, the means to deal with the problem involves such work as establishing or maintaining structures or vegetation to afford some protection or perhaps the taking out of insurance policies to offset losses. Alternatively the hazard can be avoided by physically moving the structure or activity out of its way.	11.4.1 11.4.2 11.4.3 11.4.4	11.5.1 11.5.2 11.5.4 11.5.5 11.5.6 11.5.7	4.3.5 4.3.6 6.3.10 8.3.2 to 8.3.3 8.3.5 10.3.1 12.3.1 14.3.1 to 14.3.6 15.3.1
11.3.5⁵ There are risks associated with new developments in hazard prone areas that should be avoided before the development is established.	New developments are often proposed with inadequate information on hazards, while some of the most desirable locations for development may occur in the most hazard-prone places. New subdivisions can avoid the effects of hazards by avoiding hazard prone areas completely or, if the benefits of a location outweigh the protection costs, by ensuring that buildings: - Are designed to be secure (for example ensuring floor heights are above flood level); or - Are relocatable so that they can be moved if threatened by a hazard, such as land movement or coastal inundation; or - Are provided with other protection systems (for example water storage dams for fighting forest fires). Alternatively, new developments may be built where adequate knowledge exists of the risk posed by the hazard, and where the developer accepts all risk of potential adverse effects on the development.	11.4.1 11.4.2 11.4.3	11.5.1 11.5.2 11.5.3 11.5.4 11.5.6	4.3.5 4.3.6 6.3.10 8.3.2 8.3.3 8.3.5 9.3.2 9.3.3 12.3.1 14.3.1 to 14.3.6 15.3.1
11.3.6⁶ The intensity and frequency of natural hazards can	Some activities which use Otago's natural and physical resources	11.4.1	11.5.2	4.3.5

⁴ Superseded by PORPS 14 January 2019 (Issue 4.1)

⁵ Superseded by PORPS 14 January 2019 (Issue 4.1)

Issues	Explanation	Objectives	Policies	See Also Other Issues
be increased through inappropriate human activities.	can result in the increased intensity and frequency of natural hazards. Examples of this include the effect of landuse activities on water retention characteristics of land areas which may worsen the downstream situation.	11.4.2 11.4.3 11.4.4	11.5.3 11.5.4 11.5.6	5.3.2 to 5.3.3 6.3.8 to 6.3.10 8.3.1 to 8.3.3 9.3.1 9.3.2 12.3.1 14.3.1 to 14.3.6 15.3.1
11.3.7⁷ Physical works for hazard mitigation and other hazard mitigation measures can have significant adverse effects on natural and physical resources.	In the past, protection against natural hazards, particularly flooding, has tended to focus on physical works and these works have in some instances had significant adverse effects on natural ecosystems and landscape values; for example, the destruction of the habitat of indigenous species and the loss of mahika kai and of the natural character of river systems through works such as channelling and stopbank construction. Although it is important to protect people, communities, and resources from the adverse effects of natural hazards, it is also important that the impacts of protection mechanisms be taken into account in order that they can be avoided, remedied or mitigated.	11.4.4	11.5.1 11.5.2	4.3.1 to 4.3.5 5.3.2 to 5.3.5 6.3.5 6.3.7 6.3.8 6.3.10 8.3.1 to 8.3.3 9.3.1 to 9.3.3 10.3.1 10.3.4 10.3.5 12.3.1 14.3.1 to 14.3.6 15.3.1

⁶ Superseded by PORPS 14 January 2019 (Issue 4.1)

⁷ Superseded by PORPS 14 January 2019 (Issue 4.1)

11.4 Objectives

	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
11.4.1⁸ To recognise and understand the significant natural hazards that threaten Otago's communities and features.	In natural hazard management there is first a need to identify and assess potential threats from hazards. Once identified planning and response mechanisms can be put in place to deal with their potential and actual adverse effects. Flood-plain mapping and coastal hazard and drought hazard assessment are examples of this type of identification process.	11.5.1 11.5.6 11.5.7	4.4.1 to 4.4.2 4.4.5 to 4.4.6 5.4.1 5.4.3 6.4.6 6.4.8 8.4.1 8.4.3 9.4.1 9.4.3 10.4.2 14.4.1 14.4.2 15.4.1
11.4.2⁹ To avoid or mitigate the adverse effects of natural hazards within Otago to acceptable levels.	The potential adverse effects of a natural hazard, once identified, may be able to be avoided or at least mitigated. The system of floodbanks in the lower Clutha and Taieri River areas are designed to avoid or mitigate the adverse effects of heavy rainfalls by ensuring that the waters do not flood adjacent land. Wherever practicable, natural hazards should be avoided or mitigated to levels acceptable to Otago's communities.	11.5.1 11.5.2 11.5.3 11.5.4 11.5.5 11.5.6 11.5.7	4.4.2 4.4.5 4.4.6 5.4.1 to 5.4.2 6.4.6 8.4.1 8.4.3 9.4.1 9.4.3 10.4.1 to 10.4.2 13.4.1 13.4.4 14.4.1 to 14.4.6 15.4.1
11.4.3¹⁰ To effectively and efficiently respond to natural hazards occurring within Otago.	Where an unacceptable risk cannot be reduced or avoided, preparations must be made to deal with the event should it occur. civil defence plans, local adverse climatic response plans and individual plans are ways of responding to a variety of natural	11.5.1 11.5.2 11.5.3 11.5.5	4.4.2 4.4.5 6.4.6 8.4.1 8.4.3

⁸ Superseded by PORPS 14 January 2019 (Objective 4.1 Risk that natural hazards pose to Otago's communities are minimised)

⁹ Superseded by PORPS 14 January 2019 (Objective 4.1 Risk that natural hazards pose to Otago's communities are minimised)

¹⁰ Superseded by PORPS 14 January 2019 (Objective 4.1 Risk that natural hazards pose to Otago's communities are minimised)

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
11.4.4¹¹ To avoid, remedy or mitigate the adverse effects of hazard mitigation measures on natural and physical resources.	hazards. The design of natural hazard protection measures should take into account the potential impact of those measures upon natural and physical resources, including ecological values, habitat and natural character, and seek to avoid, remedy or mitigate such impacts.	11.5.7 11.5.1 11.5.2	9.4.1 9.4.3 14.4.1 to 14.4.6 15.4.1 4.4.1 to 4.4.6 5.4.1 to 5.4.3 5.4.5 6.4.2 to 6.4.3 6.4.4 to 6.4.6 6.4.8 8.4.1 to 8.4.3 9.4.1 to 9.4.3 10.4.1 to 10.4.3 12.4.1 14.4.1 to 14.4.6 15.4.1

¹¹ Superseded by PORPS 14 January 2019 (Objective 4.1 Risk that natural hazards pose to Otago's communities are minimised)

11.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
11.5.1¹² To recognise and provide for Kai Tahu values in natural hazard planning and mitigation.	Kai Tahu have a role in the determination process for mitigating natural hazards. This role is consistent with the practice of kaitiakitanga and acknowledges Kai Tahu concern over the possible loss of cultural and spiritual sites from the occurrence of natural hazards, as well as from the effects of natural hazard avoidance or mitigation.	11.6.1 11.6.12 11.6.13 11.6.15 11.6.17 11.6.18	5.5.1 6.5.1 6.5.6 to 6.5.10 8.5.1 8.5.7 to 8.5.8 9.5.1 9.5.3 9.5.5 to 9.5.6 10.5.1 14.5.1 to 14.5.8 15.5.1 15.5.2
11.5.2¹³ To take action necessary to avoid or mitigate the unacceptable adverse effect of natural hazards and the responses to natural hazards on: (a) Human life; and (b) Infrastructure and property; and (c) Otago’s natural environment; and (d) Otago’s heritage sites.	The Resource Management Act requires local authorities to control landuse as necessary to guard the environment against the effects of natural hazards. This includes consideration of effects on new and existing developments and on places where people have chosen to locate in spite of a hazard, as well as on components of the natural environment and their intrinsic values.	11.6.2 11.6.3 11.6.4 11.6.5 11.6.6 11.6.7 11.6.8 11.6.9 11.6.10 11.6.11 11.6.12 11.6.13 11.6.14 11.6.15 11.6.16 11.6.17 11.6.18 11.6.19	5.5.1 to 5.5.3 5.5.5 to 5.5.6 6.5.6 to 6.5.9 8.5.4 8.5.7 to 8.5.8 9.5.1 to 9.5.2 9.5.4 to 9.5.6 10.5.1 to 10.5.2 12.5.2 13.5.2 14.5.1 to 14.5.8 15.5.1 15.5.2

¹² Superseded by PORPS 14 January 2019 (Policy 2.2.1 Kāi Tahu wellbeing)

¹³ Superseded by PORPS 14 January 2019 (Policy 4.1.5 Natural hazard risk, Policy 4.1.6 Minimising increase in natural hazard risk, Policy 4.1.7 Reducing existing natural hazard risk, Policy 4.1.8 Precautionary approach to natural hazard risk, Policy 4.1.10 Mitigating natural hazards)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
11.5.3¹⁴ To restrict development on sites or areas recognised as being prone to significant hazards, unless adequate mitigation can be provided.	Avoiding developments in hazard areas reduces the risks and costs associated with them. However, adequate geographical information databases which identify hazard areas are required so that communities and potential developers can be made aware of risks. Once identified, a variety of methods can be used to influence development in those areas or, through the use of Land Information Memoranda, adequately informed land owners can choose to accept responsibility for the natural hazard at their own risk.	11.6.20 11.6.21 11.6.22	6.5.8 6.5.9 8.5.4 8.5.7 to 8.5.8 9.5.1 to 9.5.5 12.5.2 13.5.2 14.5.1 to 14.5.8 15.5.1 15.5.2
11.5.4¹⁵ To avoid or mitigate the adverse effects of natural hazards within Otago through: (a) Analysing Otago’s natural hazards and identifying their location and potential risk; and (b) Promoting and encouraging means to avoid or mitigate natural hazards; and (c) Identifying and providing structures or	The type of mitigation measures may include; fireproofing, earthquake strengthening, raising the development on stilts, putting in pumps, drains, buffers, bunds, or floodbanks, or other mechanisms; the adequacy of which depends on the circumstances and the natural hazard involved.	11.6.1 11.6.2 11.6.3 11.6.4 11.6.5 11.6.6 11.6.7 11.6.8	6.5.6 to 6.5.9 9.5.1 to 9.5.6 8.5.7 to 8.5.8 10.5.2 14.5.1 to 14.5.8 15.5.1 15.5.2

¹⁴ Superseded by PORPS 14 January 2019 (Policy 4.1.6 Minimising increase in natural hazard risk)

¹⁵ Superseded by PORPS 14 January 2019 (Policy 4.1.1 Identifying natural hazards, Policy 4.1.2 Natural hazard likelihood, Policy 4.1.3 Natural hazard consequence, Policy 4.1.4 Assessing activities for natural hazard risk, Policy 4.1.6 Minimising increase in natural hazard risk, Policy 4.1.7 Reducing existing natural hazard risk, Policy 4.1.8 Precautionary approach to natural hazard risk, Policy 4.1.9 Protecting features and systems that provide hazard mitigation, Policy 4.1.10 Mitigating natural hazards, Policy 4.1.11 Hard protection structures)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>services to avoid or mitigate the natural hazard; and</p> <p>(d) Promoting and encouraging the use of natural processes where practicable to avoid or mitigate the natural hazard.</p>	<p>management techniques such as increasing soil organic content, shelter belts and shade trees, as well as the storage of water. The use of mitigation measures using natural systems such as tree planting is likely to have additional benefits such as improving aesthetic or wildlife values.</p>	<p>11.6.9 11.6.10 11.6.11 11.6.12 11.6.13 11.6.14 11.6.15 11.6.16 to 11.6.22</p>	
<p>11.5.5¹⁶ To provide a response, recovery and restoration capability to natural hazard events through:</p> <p>(a) Providing civil defence capabilities; and</p> <p>(b) Establishing procedures and responsibilities to ensure quick responses to any natural hazard event; and</p> <p>(c) Identifying agency responsibilities for assisting recovery during and after events; and</p> <p>(d) Developing recovery measures incorporated into civil defence plans.</p>	<p>Maintaining such a hazard response framework will ensure the smooth operation of services that would involve many different agencies and volunteer groups. For example, it is vital to reopen communication links such as roads without delay. Such a hazard response framework would need to include rescue and recovery plans for people and stock in the rural areas.</p>	<p>11.6.4 11.6.8 11.6.9 11.6.10 11.6.11 11.6.12 11.6.14 11.6.15 11.6.17 11.6.18 11.6.19</p>	<p>8.5.7 to 8.5.8 14.5.1 to 14.5.8 15.5.1 15.5.2</p>
<p>11.5.6¹⁷ To establish the level of natural hazard risk that threatened communities are willing to accept, through a consultative process.</p>	<p>To be effective, this policy requires a well informed community to make its own choices, which depends on accurate hazard information and two-way communication. Such consultation would provide knowledge for targeting of appropriate works.</p>	<p>11.6.1 11.6.2 11.6.4 11.6.10 11.6.11 11.6.12 11.6.13 11.6.17</p>	<p>6.5.9 8.5.7 to 8.5.8 9.5.1 9.5.5 to 9.5.6 14.5.1 to 14.5.8 15.5.1 15.5.2</p>

¹⁶ Superseded by PORPS 14 January 2019 (Policy 4.1.12 Lifeline utilities and facilities for essential or emergency services, Policy 4.1.13 Hazard mitigation measures, lifeline utilities, and essential and emergency services)

¹⁷ Superseded by PORPS 14 January 2019 (Policy 4.1.5 Natural hazard risk)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
11.5.7¹⁸ To encourage and where practicable support community-based responses to natural hazard situations.	All agencies with functions related to natural hazards should promote community-based responses to natural hazard situations, involving individual land owners and occupiers where possible. Education to promote awareness and self-reliance will help individuals and local communities recognise hazards and how their own activities may assist, worsen or even inadvertently create a hazard. Through this process a community can inform others about the degree to which they choose to accept a certain level of risk. Expertise from the agencies and from the individuals on the spot needs to be brought together to ensure all ways of reducing the effect of a hazard are investigated.	11.6.18 11.6.1 11.6.2 11.6.7 to 11.6.13 11.6.15 11.6.17 to 11.6.20	5.5.1 6.5.7 to 6.5.9 8.5.7 to 8.5.8 9.5.1 9.5.5 14.5.1 to 14.5.8 15.5.1 15.5.2

¹⁸ Superseded by PORPS 14 January 2019 (Policy 4.1.5 Natural Hazard Risk)

11.6 Methods

In order to achieve the outcomes of the policies, every agency with responsibilities under the Resource Management Act 1991 should:

- 11.6.1¹⁹ Take into account Kai Tahu cultural values in the management of Otago's natural hazards through:
- (a) Using and recognising iwi resource management plans as a basis for consultation; and
 - (b) Developing consultation protocols with iwi, runanga and hapu to provide for their input into the management of Otago's natural hazards.

The methods to be used by the Otago Regional Council include the following:

- 11.6.2 Identify and analyse the threat from regionally significant natural hazards, including hazards that cross territorial local authority or regional council boundaries, and make that information publicly available through the use of hazard registers.
- 11.6.3 Consider the development of policies and other means, including rules where appropriate, within the Regional Plan: Land, Regional Plan: Water and Regional Plan: Coast to avoid or mitigate natural hazards.
- 11.6.4 In consultation with territorial local authorities, determine specific roles and responsibilities for each natural hazard situation, in order to ensure the use of

the most efficient and effective mechanisms for avoidance or mitigation of the hazard.

- 11.6.5 Consider including conditions on resource consents or consider declining such consents as necessary to avoid or mitigate the threat of natural hazards.
- 11.6.6 Investigate, construct, maintain and review river and flood control schemes and coastal protection works which protect communities from flood and erosion hazards.
- 11.6.7 Promote and encourage the revegetation and the retention and enhancement of vegetative cover and the retention and enhancement of wetland areas, as natural methods of managing natural hazards.
- 11.6.8 Provide a flood warning capability where required within Otago.
- 11.6.9 Maintain and review as required communication channels for alerting those at risk from flooding.
- 11.6.10 Promote and encourage cooperation between agencies and groups involved in natural hazard planning and response and the development of protocols.
- 11.6.11 Initiate, support and encourage research and monitoring programmes to provide information on Otago's natural hazards.
- 11.6.12 Recognise and encourage community groups to develop community based responses to natural hazard situations.

¹⁹ Superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty principles, Method 1.1, Method 5.1.4)

11.6.13 Consult with Otago's communities regarding the management of Otago's natural hazards.

11.6.14 Advocate to Central Government on natural hazard issues of importance to Otago.

11.6.15 Promote and encourage interagency liaison and cooperation and the development of protocols and standards to achieve integrated and coordinated management of Otago's natural hazards.

11.6.16 Consider including conditions on resource consents or consider declining such consents as necessary to avoid, remedy or mitigate the adverse effects of works for hazard mitigation.

11.6.17 Use education programmes to improve community awareness and understanding of natural hazard issues and sustainable management in Otago.

11.6.18 Provide information on the adverse effects associated with natural hazards and their management.

11.6.19 Promote Codes of Practice agreed to by industry, the Otago Regional Council, city and district councils and other interest groups as appropriate to assist in the management of Otago's natural hazards.

Methods which may be used by Otago's territorial local authorities include the following:

11.6.20 Identify and analyse natural hazard threats related to particular sites or developments and make that information publicly available through the use of hazard registers. Compile this information from existing sources or where such information is unavailable for specific sites or developments, the

territorial local authority may require developers to supply this information.

11.6.21 Consider including conditions on resource consents or consider declining such consents as necessary to avoid or mitigate the threat of natural hazards.

11.6.22 Provide controls within district plans necessary to avoid or mitigate the threat of natural hazards.

Explanation and Principal Reasons for Adopting

This mix of methods relies on open consultation and the ready availability of clear information for landowners and potential developers. Much of the above is already implemented to a degree by the various agencies. The achievement of greater consistency will lend certainty to hazard management and improve efficiency. Money or effort would not be spent on work resulting in an unnecessarily high degree of protection. The use of mitigation measures using natural systems will have additional benefits such as to aesthetic or wildlife values.

Recovery measures must address arrangements for reopening communication networks when they are breached by a hazard event. For example, territorial local authorities and Transit New Zealand respond quickly to reopen roads they are responsible for. A reopened road is an essential prerequisite for subsequent recovery measures to be brought to those in need.

11.7 Anticipated Environmental Results

The environmental results anticipated from the above policies and methods of implementation include:

11.7.1 Human life, infrastructure, property, heritage sites and the natural environment are protected from natural hazard events to a level acceptable to the community.

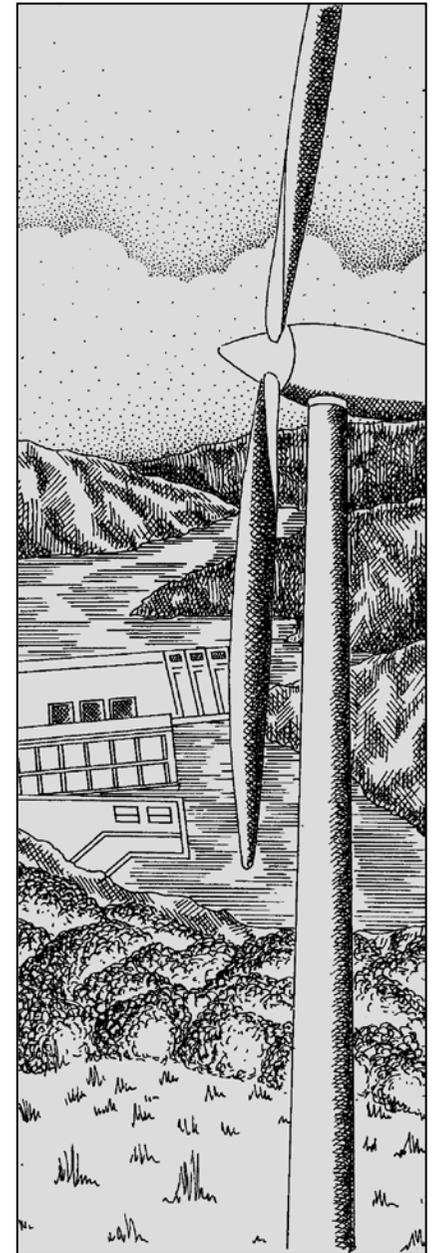
11.7.2 The planning for and response to Otago's natural hazards takes into account the values of manawhenua.

11.7.3 Structures and services established to deal with hazards are maintained and enhanced where necessary.

11.7.4 The awareness of Otago's communities is raised about the location, risk and likely effects of natural hazards.

11.7.5 Otago communities at risk from natural hazards have developed their own response plans.

12 Energy



12.1 Introduction

Otago is a hydro-electric power producing region and a major 'exporter' of electricity in New Zealand today. The two large existing hydro-electric schemes in the region, Roxburgh (320 MW) and Clyde (432 MW), combined with the large number of other medium and small size schemes, bring the region's total capacity to 859 MW. However, only partial exploitation of Otago's hydro-electric resources has occurred to date and subject to water allocation decisions, considerable potential remains for further development of the renewable water resource.

The Electricity Corporation of New Zealand (ECNZ) is conducting ongoing investigations into further stations at Lake Hawea outlet, Luggate and Queensberry on the upper Clutha River and at Tuapeka Mouth on the lower Clutha River. Electricity supply authorities and other developers may also have options for further hydro-electric development in the region. The potential total capacity of hydro-electric schemes in Otago is estimated at 2,222 MW, of which 1,020 MW is considered by the Ministry of Commerce to have "attractive" potential. As such, 13% of New Zealand's most "attractive" remaining hydro resource potential is located in Otago (see Figure 6).

Otago also has a range of other conventional energy resources which could offer future development opportunities (eg. the sub-bituminous coal and lignite fields at Kaitangata, St Bathans and Roxburgh). Major coal resources exist in the Otago region and this energy is important to local industry and consumers. However, less conventional energy sources such as biogas, solar, cogeneration and wind power are increasingly recognised as acceptable long-term energy sources which, for Otago, appear likely to offer more promising opportunities and lower associated environmental impacts (eg. the potential wind farm site of Rocklands in inland Otago).

Energy use is understood to be increasing in Otago with recent sales figures from the region's four electricity supply authorities showing steady increases. Demand patterns for non-renewable energy sources such as petrol are similarly growing. This is

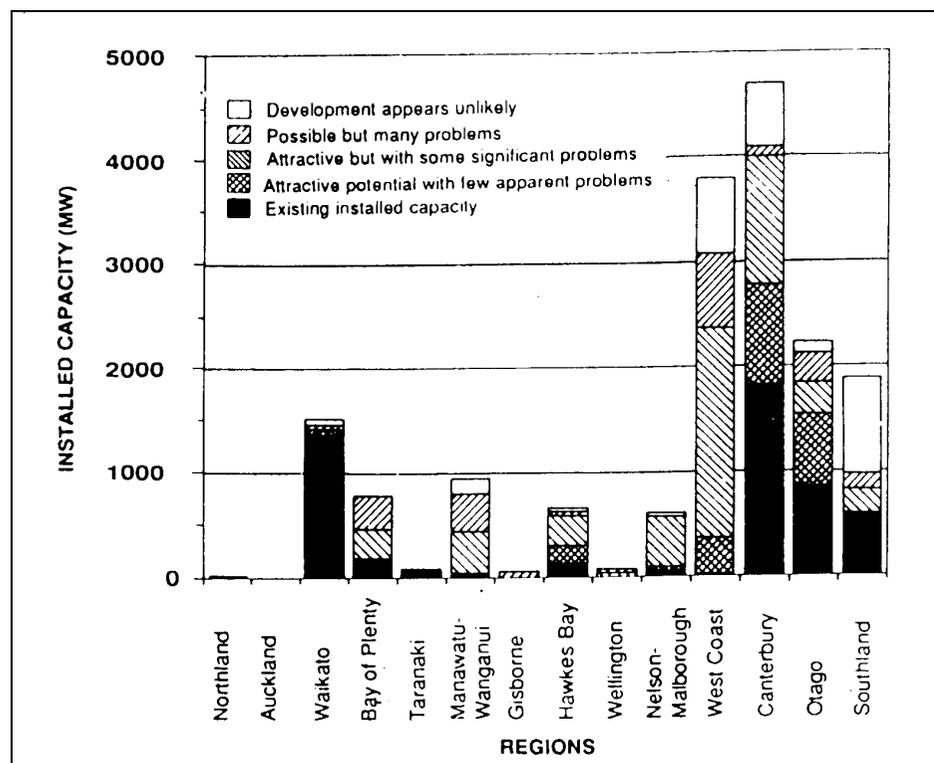


Figure 6 Existing and Potential Hydro-Electric Resources in New Zealand
(Source: Hydro Resources of New Zealand, Resource Information Report 7, Ministry of Commerce, Wellington, April 1990)

comparable with national trends in energy use which suggest that there has been a rising use of energy per unit of gross domestic product (ie. rising energy intensity). This is a direct result of investment in energy intensive industries such as tourism, meat and dairy processing, aluminium smelting, forestry and petrochemicals, and the substitution of energy for labour. This investment reflects the changes to our economy as we add more value to our primary products prior to export. The Parliamentary Commissioner for the Environment tabled a report in Parliament in 1992 which referred to New Zealand's present energy use as inefficient and unsustainable and as a problem which is getting worse. However, opportunities exist for improving the efficiency of energy use.

12.2 Roles of Different Agencies

The production and use of energy (including the development of energy resources) within New Zealand is largely determined by the free market. Central Government planning or control is minimal.

At the regional and local level, local authorities are responsible, under the Resource Management Act, for promoting the sustainable and efficient management of Otago's natural and physical resources. The Act defines natural and physical resources as including energy.

The powers available under the Resource Management Act to directly control the production and use of energy and the development of the region's energy resources, are limited. The adverse effects of energy production, use, transmission and distribution are considered, along with the effects of all activities utilising the region's resources, within appropriate chapters of this Regional Policy Statement, including manawhenua, land, water, air, coast and the built environment.

The roles of the various agencies are:

12.2.1 Central Government

The Energy and Resources Division of the Ministry of Commerce collects and collates information as required by statute and provides policy advice to Government on matters related to energy. It also undertakes energy forecasting.

The Energy Efficiency and Conservation Authority was established in June 1992 as an independent agency within the Ministry of Commerce. The Authority's role is to promote the conservation of energy resources. The Authority does not have a regulatory role.

12.2.2 Otago Regional Council

The Otago Regional Council has a responsibility to promote the sustainable and efficient management of the region's resources, including energy resources. As such, the Council is able to advocate for and educate and promote such things as clean renewable energy sources and energy efficient practices in order to ensure they have a central role in Otago's future.

The Regional Council is also responsible for considering the adverse effects of energy production, use, transmission and distribution on Otago's land, water, air, coastal and built environment resources. It does this through considering applications for resource consents to utilise those resources and through establishing policies and plans.

12.2.3 Territorial Local Authorities

Otago's territorial local authorities are also responsible for promoting the sustainable and efficient management of natural and physical resources and are therefore able to educate about, advocate and promote about the sustainable and efficient production and use of energy. They also manage landuses and are able to make decisions that result in the avoidance, remedy or mitigation of the adverse effects of energy production, use, transmission and distribution.

12.3 Issues

	Explanation	Objectives	Policies	See Also Other Issues
12.3.1 ¹	<p>The production, use, transmission and distribution of energy is often associated with undesirable environmental effects, including adverse effects on public health. At the extreme, nuclear power generation holds the risk of Chernobyl-type accidents. With hydro-electric developments, there is the risk of disasters similar to that of Longerone, Italy, where two thousand people were killed in 1962 when a mountainside fell into the Vaiont reservoir and flooded the valley.</p> <p>The more commonly cited adverse effects of hydro-electric power development include effects on the natural character of river systems, flora and fauna and local communities. Unmodified and unregulated rivers are a diminishing resource. Hydro development can interfere with or prevent other uses and values of a river, such as scenic values, fish use, wildlife habitats, recreational uses, irrigation or reticulation, tourism features and opportunities and manawhenua values. Sediment balances can be altered and ecological effects may extend to coastal environments. Rigorous environmental analysis is a component of any new energy project proposals and this assists in the sustainable management of affected land, water and other resources.</p> <p>The use of fossil fuels is associated with most air pollution (90% of carbon dioxide emissions in New Zealand are energy related), some solid waste contamination and water pollution incidents. Such pollution can adversely affect the public health of communities.</p> <p>Undesirable environmental effects are also associated with the development of less conventional power sources. Bacteriological</p>	12.4.1	12.5.1 12.5.4	4.3.1 to 4.3.6 5.3.2 5.3.5 5.3.7 6.3.2 to 6.3.5 6.3.7 to 6.3.8; 6.3.10 7.3.1 to 7.3.2 8.3.1 9.3.1 10.3.1 10.3.4 to 10.3.5 11.3.6 to 11.3.7 13.3.5 14.3.1 to 14.3.6 15.3.1

¹ Superseded by PORPS 14 January 2019 (Issue 4.4)

Issues	Explanation	Objective	Policies	See Also Other Issues
12.3.2² Otago's dependence on non-renewable energy resources is unsustainable in the long term.	and chemical pollution, climatic change and aesthetic and noise intrusion are possible effects.	12.4.2 12.4.3	12.5.2 12.5.4	4.3.5 6.3.2 to 6.3.4 7.3.1 to 7.3.2 9.3.1 to 9.3.3 14.3.1 to 14.3.6 15.3.1
12.3.3³ Wasteful and inefficient energy use occurs in Otago.	The amount of energy wasted in Otago, both in terms of domestic consumption and commercial and industrial use, can be reduced by adopting and improving energy efficient practices. There is a potential and willingness to achieve more efficient use of energy in Otago.	12.4.2	12.5.3 12.5.4	4.3.5 9.3.2 to 9.3.3 14.3.1 to 14.3.6 15.3.1
12.3.4 Long-term regional benefits from energy developments have not been fully realised in Otago.	The Otago community has borne a great deal of the flow-on environmental costs of hydro electric developments without necessarily being adequately compensated.	12.4.2	12.5.4	14.3.1 to 14.3.6 15.3.1

² Superseded by PORPS 14 January 2019 (Issue 4.4)

³ Superseded by PORPS 14 January 2019 (Issue 4.4)

12.4 Objectives

	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
12.4.1⁴ To avoid, remedy or mitigate the adverse effects on Otago's communities and environment resulting from the production and use of energy.	This objective recognises that the production and use of energy, and the development of Otago's energy resources, may cause adverse effects, and aims to allow for the avoidance, remedy (including compensation) or mitigation of such effects in order that the quality and life-supporting capacity of the environment is not compromised.	12.5.1 12.5.4	4.4.1 to 4.4.6 5.4.1 to 5.4.5 6.4.1 to 6.4.2 6.4.6 to 6.4.8 7.4.1 9.4.1 9.4.3 10.4.1 10.4.3 11.4.4 13.4.1 to 13.4.2 13.4.4 14.4.1 to 14.4.2 15.4.1
12.4.2⁵ To sustainably and efficiently produce and use energy taking into account community values and expectations.	This objective establishes a framework for the sustainable and efficient management of the region's natural energy assets and supports, where environmentally appropriate and economically viable, continued production, use and further development of these resources.	12.5.2 12.5.3 12.5.4	4.4.2 to 4.4.5 5.4.5 6.4.1 to 6.4.2 6.4.4 6.4.6 6.4.8 7.4.1 9.4.1 to 9.4.2 14.4.1 to 14.4.2 15.4.1
12.4.3⁶ To encourage use of renewable resources to produce energy.	Using greater amounts of energy from renewable energy resources lessens Otago's dependence on non renewable energy resources.	12.5.2 12.5.3 12.5.4	4.4.2 to 4.4.5 6.4.1 6.4.3 9.4.3 14.4.1 to 14.4.2 15.4.1

⁴ Superseded by PORPS 14 January 2019 (Objective 4.4 Energy resources and supplies are secure reliable and sustainable)

⁵ Superseded by PORPS 14 January 2019 (Objective 4.4 Energy resources and supplies are secure reliable and sustainable)

⁶ Superseded by PORPS 14 January 2019 (Objective 4.4 Energy resources and supplies are secure reliable and sustainable)

12.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
12.5.1 Provide for procedures to prohibit the production of nuclear power throughout the region.	Section 5 of the Resource Management Act requires that the life-supporting capacity of air, water, soil and ecosystems be safeguarded and that the adverse effects of activities be avoided, remedied or mitigated. In order to avoid any adverse effects associated with nuclear accidents and to protect the life-supporting capacity of Otago's resources, provision will be made for the production of nuclear power within Otago to be prohibited.	12.6.1 12.6.12 12.6.16	8.5.1 to 8.5.2 8.5.5 to 8.5.6 8.5.10 9.5.5 12.5.2 14.5.1 to 14.5.8 15.5.1 to 15.5.2
12.5.2 ⁷ To promote the sustainable management and use of energy through: <ul style="list-style-type: none"> (a) Encouraging energy production facilities that draw on the region's renewable energy resources; and (b) Encouraging the use of renewable energy resources, in a way that safeguards the life-supporting capacity of air, water, soil and ecosystems and avoids, remedies and mitigates adverse effects on the environment, as a replacement for non-renewable energy resources; and (c) Encouraging the sustainable development of Otago's renewable energy resources. 	This policy promotes sustainable and environmentally friendly energy production, use and development. It recognises that the sustainability of non-renewable energy sources can be assisted by reducing the region's relative dependence on finite energy resources and promotes the aim that the energy needs of future generations can be met by giving preference to energy sources that are less polluting and more sustainable by nature.	12.6.2 12.6.3 12.6.4 12.6.8 12.6.9 12.6.11	5.5.1 to 5.5.3 5.5.5 to 5.5.6 5.5.8 6.5.1 to 6.5.6 6.5.9 7.5.1 to 7.5.5 8.5.1 to 8.5.2 8.5.5 to 8.5.6 9.5.2 to 9.5.3 9.5.5 10.5.1 to 10.5.2 11.5.2 to 11.5.3 13.5.1 13.5.2 13.5.4 14.5.1 to 14.5.8 15.5.1 to 15.5.2
12.5.3 ⁸ To promote improved energy efficiency within Otago through: <ul style="list-style-type: none"> (a) Encouraging the use of energy efficient technology and architecture; and (b) Educating the public about energy efficiency; and (c) Encouraging energy efficiency in all industry 	This policy will ensure energy efficient concepts and practices are actively promoted and pursued in order to secure energy savings and to provide room for growth in energy consumption in the future.	12.6.4 12.6.5 12.6.6 12.6.7 12.6.8 12.6.9 12.6.11	9.5.2 to 9.5.3 9.5.5 14.5.1 to 14.5.8 15.5.1 to 15.5.2

⁷ Partially superseded by PORPS 14 January 2019 (Policy 4.4.1 Renewable electricity generation)

⁸ Superseded by PORPS 14 January 2019 (Policy 4.4.1 Renewable electricity generation, Policy 4.4.6 Energy efficient transport, Policy 4.3.1 Managing infrastructure activities)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>sectors; and (d) Encouraging energy efficient transport modes in Otago.</p>	<p>Arguments need to be raised at a political level, with parties such as the Minister of State Owned Enterprises and representatives of energy companies, that the region loses a great deal of the benefit that it should derive from its energy resources.</p>	<p>12.6.13 12.6.14 12.6.15 12.6.17 12.6.18 12.6.19</p>	<p>9.5.5 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
<p>12.5.4 To promote the securing of appropriate benefits for Otago’s communities from any energy developments within the region.</p>	<p>Arguments need to be raised at a political level, with parties such as the Minister of State Owned Enterprises and representatives of energy companies, that the region loses a great deal of the benefit that it should derive from its energy resources.</p>	<p>12.6.10</p>	<p>9.5.5 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>

12.6 Methods

The methods to be used by the Otago Regional Council include the following:

12.6.1 Make nuclear power generation a prohibited activity in relevant regional plans.

12.6.2⁹ Continue to give priority to the allocation of water to existing hydro-electric power generation systems in Otago except:

- (a) Where it is determined that the water is required for the needs of other significant values; and
- (b) Where these values cannot be provided for elsewhere in the locality.

12.6.3 Develop policies and strategies that encourage and promote the use and development of renewable energy sources.

12.6.4 Consider the use of renewable energy sources and the efficient use of energy within the transport sector through the Regional Land Transport Strategy.

12.6.5 Develop policies and strategies to promote the improved efficiency of energy use in Otago.

12.6.6 Educate about and promote energy efficient practices.

12.6.7 Encourage new energy intensive industries to undertake an energy efficiency assessment.

12.6.8 Initiate, support and encourage research and monitoring programmes to provide information on Otago's energy issues and solutions.

12.6.9 Promote and encourage interagency liaison and cooperation and the development of protocols to ensure integrated and coordinated management of Otago's energy resources.

12.6.10 Advocate with appropriate parties regarding the need for long-term regional benefits from energy developments and for adequate compensation for adverse effects caused by the development of energy resources.

12.6.11 Advocate to Central Government over the need for a national policy statement on energy and a sustainable energy management policy.

12.6.12 Consider inclusion of conditions on resource consents and consider declining such consents as necessary to avoid, remedy or mitigate the adverse effects of energy production.

12.6.13 Consult with Otago's communities regarding the management of Otago's energy resources.

12.6.14 Use education programmes to improve community awareness and understanding of energy issues and sustainable management of energy resources in Otago.

12.6.15 Recognise and encourage the role of community groups that promote sustainable management of energy resources.

⁹ Superseded by PORPS 14 January 2019 (Policy 4.4.3 Protecting existing renewable electricity generation)

Methods which may be used by Otago's territorial local authorities include the following:

12.6.16 Make nuclear power generation a prohibited activity in district plans.

12.6.17 Encourage the use of energy efficient technology and architecture.

12.6.18 Educate about and promote energy efficient practices.

12.6.19¹⁰ Consider energy efficiency requirements in the development of District Land Transport Programmes.

Explanation and Principal Reasons for Adopting

These methods allow for integrated and coordinated management of Otago's energy resources, incorporating the avoidance of adverse effects associated with nuclear power production; the promotion of the sustainable management, use and development of energy resources by providing for the continued allocation of water resources for existing hydro-electric schemes (in recognition of the contribution these schemes make to the nation's energy supplies) and by favouring renewable energy sources; the promotion of energy efficiency and energy savings; and the ability to further arguments that the region should receive increased benefit from the use of its energy resources.

¹⁰ Superseded by PORPS 14 January 2019 (AER 1.1)

12.7 Anticipated Environmental Results

The environmental results anticipated from the above policies and methods of implementation include:

12.7.1 Otago's communities are able to meet their present and reasonably foreseeable energy needs.

12.7.2¹¹ The management of Otago's energy resources takes into account manawhenua values.

12.7.3 Otago's energy resources (excluding minerals) are managed in a sustainable manner.

12.7.4 The adverse effects on the environment from energy production, use and development are avoided or mitigated.

12.7.5 Nuclear power is not generated in Otago.

12.7.6 There is a relative reduction in the demand for conventional non-renewable sources of energy and cost-effective renewable sources of energy are developed.

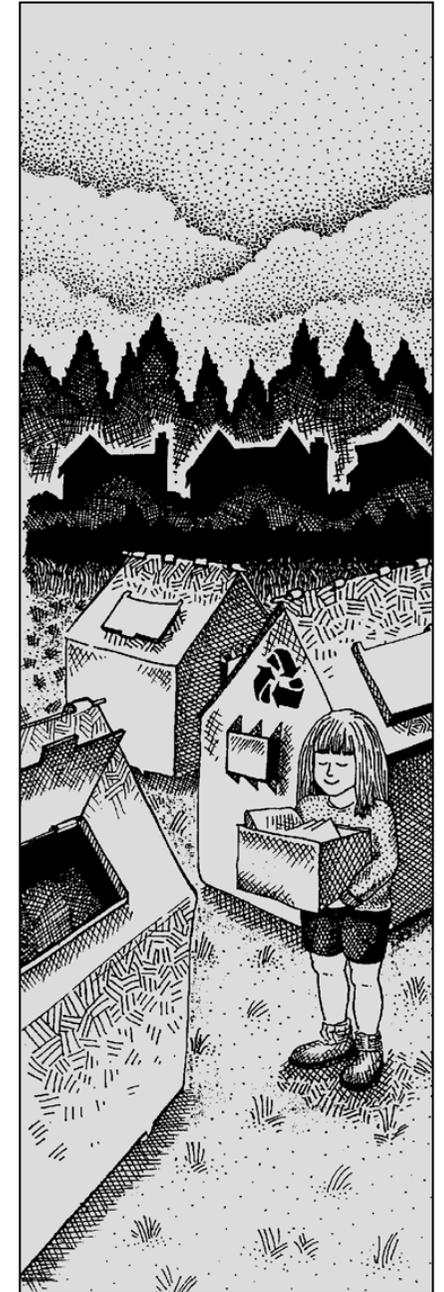
12.7.7 Energy efficient practices are adopted and improved throughout Otago.

12.7.8 Energy developments in Otago provide long-term regional benefits.

¹¹ Superseded by PORPS 14 January 2019 (AER 1.1)

13

Wastes and Hazardous Substances



13.1 Introduction

Waste is the material remaining after an integrated programme of reduction, reuse and recycling. Waste management is concerned with the way we deal with the wastes, from the time they are generated, until the time they are safely disposed of (the “waste stream”). In one sense, wastes are simply a resource that is not being used. In many instances, they can be reused and recycled, at which point they cease to be waste. There are three stages to the integrated management of the waste stream:

- The avoidance or reduction in the amount of waste generated;
- The reuse and recycling of wastes;
- Waste transportation, storage, treatment and disposal.

There is a growing public awareness of the need for integrated waste management, considering the waste stream through all its phases, the adverse effects associated with each phase and the management of the waste stream within the sustainability of the region's natural and physical resources. This is reflected in increasing pressure to make those that generate waste responsible for it throughout its lifetime, although this is beyond the powers of the Otago Regional Council under the Resource Management Act.

As New Zealand is a signatory to the Basel Convention, it has international responsibilities relating to the movement of wastes across its national boundaries. Regulations have been implemented to control the import and export of waste. There remains the need for greater clarity, coordination and planning between agencies to improve the management of waste on a national basis. The Hazardous Substances and New Organisms legislation will go some way to providing the clarity needed in respect of hazardous substances.

Manawhenua philosophy advocates the non-contamination of areas of mahika kai (food resources) and waahi tapu. This is especially important in terms of human toeka (human wastes). To eat food from areas used for the disposal of human wastes is culturally abhorrent. The spiritual nature of waahi tapu requires that they be free from wastes of any kind. The orderly management of wastes is vitally important.

The types of waste within Otago can be broadly divided into solid wastes, liquid wastes, gaseous wastes and hazardous substances, which are discharged onto land or into water or the air.

13.2 Roles of Different Agencies

In any discussion of waste management, it is important that the roles of the various agencies are understood. At present, the respective roles are unclear and, with respect to some waste issues, uncertain.

There are two broad areas of waste management that need to be considered: general waste management and the more specific hazardous substances management. Although hazardous substances themselves may not be a waste when they are created and used, the problems associated with their use and eventual disposal require consideration in this chapter of the Policy Statement.

A Regional Waste Management Technical Advisory Group was established to provide technical advice to the various bodies involved in waste management and to coordinate the development of cooperative management solutions.

13.2.1 Waste Management

The Minister for the Environment is able to set national policy, guidelines and standards and monitors regional, district and city councils achievements under the Act. The Ministry also provides advice and education.

The Otago Regional Council is responsible for the control and management of the effects from the discharge or disposal of waste, as it is classed as a contaminant. The Council considers applications for discharges of contaminants into water and air and onto land. It provides advice and education and monitors the effects of waste treatment and disposal within Otago. It is able to provide

an integrated regional overview of the management of the waste stream and manages and coordinates the cleanup of pollution spills.

The primary role of district and city councils is the provision of facilities for the collection, recycling and disposal of wastes. Private enterprises can also carry out such work. Territorial local authorities can also be called upon to undertake the operational aspects of waste spill cleanup.

13.2.2 Hazardous Substance Management

The management of hazardous substances is a very complex area. Hazardous substances are presently regulated under the Explosives Act 1957, administered by the Department of Labour, the Dangerous Goods Act 1974, administered by local authorities, the Toxic Substances Act 1979, administered by the Toxic Substances Board, and the Pesticides Act 1979, administered by the Pesticides Board. Some hazardous substances are also regulated under the Animal Remedies Act 1967, and administered by the Animal Remedies Board.

The importation of new organisms (that is, organisms of a kind not already present in New Zealand) is covered by the Biosecurity Act 1993. The development of genetically modified organisms is not covered by present legislation at all.

These statutes are being replaced by the Hazardous Substances and New Organisms Act. The aim of the Act is to provide a comprehensive and consistent approach to the management of all hazardous substances and new organisms. It establishes a new statutory body, the Environmental Risk Management Authority to assess and develop controls for the importation, manufacture, development, and release within New Zealand of hazardous substances and new organisms.

The new body was foreshadowed in Part XIII of the Resource Management Act 1991. That Part set up a body called the Hazards Control Commission. The body was never formally established and Part XIII of that Act never came into force.

Under the Resource Management Act, both district and regional councils have the responsibility for controlling the use of land related to hazardous substances. Section 62(1)(ha) of the Act requires that regional policy statements shall state 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 the prevention or mitigation of any adverse effects of the storage, use, disposal, and transportation of hazardous substances, and may state particular responsibilities for particular hazardous substances; but if no responsibilities for a hazardous substance are identified in the policy statement the regional council shall retain responsibility for the hazardous substance.

The respective responsibilities of the Regional Council and territorial local authorities within Otago are described in 13.2.3 below.

13.2.3 Responsibilities of local authorities within Otago for control of land use in the prevention or mitigation of the adverse effects of hazardous substances in terms of Section 62(1)(ha) of the Resource Management Act.

Territorial local authorities are to have responsibility within their own areas for the preparation of objectives, policies, and rules relating to the control of the use of land for the purpose of the prevention or mitigation of any adverse effects of the storage, use, disposal or transportation, with respect to all hazardous substances.

As appropriate, through a regional plan, the Regional Council will develop objectives, policies, rules and other methods relating to the use of land for the purpose of the prevention or mitigation of any adverse effects of the storage, use, disposal and transportation of hazardous substances regarding:

- the location of hazardous facilities or pipelines for the bulk conveyance of hazardous substances in relation to groundwater infiltration areas, or in close proximity to surface water resources, or in close proximity to the Coastal Marine Area, or on soils particularly valued for their primary productive capability;
- or where the actual or potential effects may be of regional significance.

13.3 Issues

	Explanation	Objectives	Policies	See Also Other Issues
13.3.1 ¹ There is a range of wastes produced in Otago, with only limited facilities available for dealing with them.	<p>The emphasis to date, when dealing with the range of wastes produced in Otago, has been on dealing with wastes at the end of the waste stream through providing disposal facilities. There is a notable lack of recycling facilities for the majority of waste produced, a lack of storage facilities for holding hazardous wastes and a lack of facilities which encourage the reuse of wastes that are produced. The types of waste produced in Otago which need to be considered throughout the waste stream include:</p> <ul style="list-style-type: none"> - Solid waste; - Liquid waste; - Air discharge; - Hazardous waste; - Medical waste; - Persistent waste; - Litter. 	<p>13.4.1 13.4.2 13.4.3 13.4.4</p>	<p>13.5.1 13.5.2 13.5.3 13.5.4 13.5.5 13.5.6 13.5.7 13.5.8 13.5.9 13.5.10</p>	<p>4.3.5 8.3.1 8.3.6 to 8.3.7 9.3.1 10.3.1 10.3.3 14.3.1 to 14.3.6 15.3.1</p>
13.3.2 ² Otago’s communities and environment can be adversely affected by hazardous wastes and substances.	<p>Hazardous substances are those substances that are flammable, explosive, reactive, toxic, corrosive, infectious, pathogenic, carcinogenic, mutagenic, bio-concentrative, radioactive or persistent in nature, which might pose a threat to, or adversely effect human, plant or animal health. Within Otago they are used for a variety of purposes, ranging from household chemicals to industrial process additives, including medical wastes, agricultural chemicals and industrial chemicals.</p> <p>At present there are no storage facilities for hazardous wastes that cannot be treated or dealt with in other ways. This has the potential to result in significant adverse effects on Otago’s communities and</p>	<p>13.4.1 13.4.4</p>	<p>13.5.1 13.5.2 13.5.3 13.5.4 13.5.5 13.5.6 13.5.7 13.5.8 13.5.9 13.5.10</p>	<p>4.3.1 to 4.3.6 5.3.2 5.3.3 5.3.5 6.3.4 to 6.3.8 7.3.1 8.3.1 8.3.6 to 8.3.8 10.3.1 10.3.4 10.3.5 11.3.1 14.3.1 to 14.3.6 15.3.1</p>

¹ Superseded by PORPS 14 January 2019 (Issue 4.6)

² Superseded by PORPS 14 January 2019 (Issue 4.6)

Issues	Explanation	Objectives	Policies	See Also Other Issues
13.3.3³ Waste reduction, recycling and disposal within Otago is managed in an uncoordinated, ad-hoc manner.	<p>resources, particularly if such wastes are disposed of inappropriately.</p> <p>Associated with the use of hazardous substances is a range of issues which include not only the possible effects of their disposal, but also the impacts of their use. These issues include:</p> <ul style="list-style-type: none"> - Adverse environmental effects of their disposal; - Adverse environmental effects of spills and the need for contingency plans; - Inappropriate storage methods; - Uncontrolled use; - The increasing transportation of hazardous substances within the region; - The need for greater information and increased education about hazardous substances. <p>The responsibility for the management and control of Otago's waste stream is split between a variety of agencies. Within the Otago region, the Otago Regional Council has a role in approving all new discharges to the environment (including discharges from sewage treatment works and landfills), while district and city councils are responsible for the collection, recycling and disposal of wastes. There is a need for greater clarity, coordination and planning between all agencies across the region to improve the way that waste is dealt with, from the time it is created to the time it is disposed of.</p>	<p>13.4.1 13.4.2 13.4.3 13.4.4</p>	<p>13.5.1 13.5.2 13.5.3 13.5.4 13.5.5 13.5.6 13.5.9</p>	<p>4.3.5 14.3.1 to 14.3.6 15.3.1</p>
13.3.4⁴ Illegal discharges can degrade Otago's environment.	<p>Illegal discharges have the potential to adversely effect Otago's environment through contamination of land and water resources and a lowering of intrinsic and amenity values. The Otago</p>	<p>13.4.1 13.4.4</p>	<p>13.5.2 13.5.3 13.5.4</p>	<p>4.3.1 to 4.3.5 5.3.2 5.3.3 5.3.5</p>

³ Superseded by PORPS 14 January 2019 (Issue 4.6)

⁴ Superseded by PORPS 14 January 2019 (Issue 4.6)

Issues	Explanation	Objectives	Policies	See Also Other Issues
13.3.5⁵ Non-point source discharges can degrade Otago's environmental quality.	Regional Council issues discharge permits which include limits on the nature and extent of the discharge in order to avoid, remedy or mitigate any adverse effect. Illegal discharges include those discharges which have a consent but which discharge material in excess of their authorisation, as well as those discharges for which a consent is required, but is not held. Monitoring of individual discharges, as well as monitoring of the receiving environment, is required to ensure compliance with any consent condition and to detect any pollution source.	13.4.1 13.4.4	13.5.5 13.5.7 13.5.8 13.5.10	6.3.4 to 6.3.8 7.3.1 7.3.2 8.3.1 8.3.6 to 8.3.8 9.3.1 10.3.1 10.3.4 10.3.5 14.3.1 to 14.3.6 15.3.1
13.3.6⁶ Waste disposal practices in some areas of Otago have resulted in contamination of the environment.	Non-point source discharges are discharges into the environment from a diffuse source, rather than from a single point such as a pipe, drain or chimney. They include water runoff from rural and urban areas following rain, agricultural chemical runoff and leachate from landfills. Non-point source discharges can have an insidious effect, slowly degrading environmental quality, particularly water quality. Their adverse effects include a degradation of aquatic ecosystems, a loss of scenic or recreational enjoyment, contamination of sediments and eutrophication of water bodies.	13.4.1 13.4.4	13.5.2 13.5.3 13.5.7 13.5.10	4.3.1 to 4.3.5 5.3.2 5.3.3 5.3.5 6.3.4 to 6.3.8 7.3.1 7.3.2 8.3.1 8.3.6 to 8.3.8 9.3.1 10.3.1 10.3.4 10.3.5
13.3.6⁶ Waste disposal practices in some areas of Otago have resulted in contamination of the environment.	Agencies with a responsibility for the management of the waste stream are only now becoming aware of the legacy which has been left by past disposal practices for a variety of wastes. In some cases the methods used and the sites where the wastes were deposited were inappropriate. Adverse environmental effects are now being experienced from some of those sites including: - Sites chemically contaminated by past uses such as timber processing plants and mining activities which have affected land, water and sediments;	13.4.1 13.4.4	13.5.4 13.5.7	4.3.1 to 4.3.5 5.3.3 5.3.5 6.3.4 to 6.3.8 8.3.1 9.3.1 10.3.1 10.3.4 10.3.5 14.3.1 to 14.3.6 15.3.1

⁵ Partially superseded by PORPS 14 January 2019 (Issue 5.4)

⁶ Superseded by PORPS 14 January 2019 (Issue 4.6)

Issues

Explanation

Objectives

Policies

**See Also
Other Issues**

- Old landfill sites;
- Old dumping sites and areas for hazardous materials.

13.4 Objectives

	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
<p>13.4.1⁷ To protect Otago’s communities, environment and natural resources from the adverse effects of the waste stream.</p>	<p>The disposal of wastes and illegal discharges can create many adverse effects which have the potential to damage the environment of Otago. There is a need to protect Otago’s environment from the actual and potential effects of all elements of the waste stream including non-point source discharges which lead to a lowering of water quality standards in Otago water bodies such as Otago Harbour, Lake Hayes, Lake Tuakitoto and the Kakanui River. The adverse effects can take many forms and include:</p> <ul style="list-style-type: none"> - Threats to ecosystem health and integrity; - Threats to human health; - Land contamination; - Ground water contamination; - Surface water pollution; - Air pollution; - Decreased amenity values; - Impact on mahika kai values. 	<p>13.5.1 13.5.2 13.5.3 13.5.4 13.5.5 13.5.6 13.5.7 13.5.8 13.5.9 13.5.10</p>	<p>4.4.1 to 4.4.6 5.4.1 5.4.2 6.4.1 to 6.4.5 6.4.8 7.4.1 8.4.1 to 8.4.2 8.4.4 to 8.4.5 9.4.1 to 9.4.3 10.4.1 10.4.3 11.4.2 12.4.1 14.4.1 14.4.2 15.4.1</p>
<p>13.4.2⁸ To encourage a reduction in the amount, range and type of waste generated in Otago.</p>	<p>The first step towards reducing the adverse effects of the waste stream on Otago’s communities and resources is to reduce the amount of waste produced. A reduction is required, as any growth in the region's economy will likely generate a greater overall volume of waste than is presently the case. If every individual and organisation reduces the amount of waste that they produce, the production of wastes across the region on a per capita basis should reduce, resulting in fewer adverse effects on Otago’s communities and resources.</p>	<p>13.5.1 13.5.2 13.5.3 13.5.4 13.5.6 13.5.9 13.5.10</p>	<p>4.4.5 12.4.1 14.4.1 14.4.2 15.4.1</p>
<p>13.4.3⁹ To encourage an increase in the reuse, recycling and recovery of wastes.</p>	<p>Reducing the disposal of wastes can be brought about through</p>	<p>13.5.1 13.5.2</p>	<p>4.4.5 14.4.1</p>

⁷ Superseded by PORPS 14 January 2019 (Objective 4.6 Hazardous substances, contaminated land and waste materials do not harm human health or the quality of the environment in Otago)

⁸ Superseded by PORPS 14 January 2019 (Objective 4.6 Hazardous substances, contaminated land and waste materials do not harm human health or the quality of the environment in Otago)

Objectives	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
<p>13.4.4¹⁰ To minimise the risks to people and the wider environment arising from existing contaminated sites, and the storage, use, transportation and disposal of hazardous substances.</p>	<p>increasing the amount of reuse, recycling and recovery of the wastes that are produced. Reducing the disposal of wastes through such practices should result in less adverse effects on Otago’s communities and resources and would make better use of wastes as a resource.</p>	<p>13.5.3 13.5.4 13.5.6 13.5.9</p>	<p>14.4.2 15.4.1</p>
<p>13.4.4¹⁰ To minimise the risks to people and the wider environment arising from existing contaminated sites, and the storage, use, transportation and disposal of hazardous substances.</p>	<p>Hazardous substances are widely used for a variety of purposes but, due to their nature, can also pose serious threats to the health of Otago’s communities and the wider environment. This can occur through the uncontrolled use of hazardous substances, their inappropriate storage or disposal and accidental spills. There is also potential for serious adverse effects where past site selection or waste disposal practices have resulted in the contamination of industrial and waste disposal sites. It is an important resource management objective for the region therefore that the risks associated with contaminated sites or the storage, use, transportation and disposal of hazardous substances be avoided, where possible, or otherwise remedied, particularly in the case of contaminated sites, or mitigated through appropriate management and technical practices.</p>	<p>13.5.1 13.5.4 13.5.5 13.5.6 15.5.7 13.5.8 13.5.10</p>	<p>4.4.1 to 4.4.6 5.4.2 6.4.2 6.4.5 6.4.8 7.4.1 8.4.2 8.4.4 9.4.1 to 9.4.3 10.4.1 to 10.4.3 11.4.2 12.4.1 14.4.1 14.4.2 15.4.1</p>

⁹ Superseded by PORPS 14 January 2019 (Objective 4.6 Hazardous substances, contaminated land and waste materials do not harm human health or the quality of the environment in Otago)

¹⁰ Superseded by PORPS 14 January 2019 (Objective 4.6 Hazardous substances, contaminated land and waste materials do not harm human health or the quality of the environment in Otago)

13.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>13.5.1¹¹ To recognise and provide for the relationship Kai Tahu have with natural and physical resources when managing Otago's waste stream through:</p> <p>(a) Providing for the management and disposal of Otago's waste stream in a manner that takes into account Kai Tahu cultural values; and</p> <p>(b) Working towards eliminating human wastes and other pollutants from entering Otago's waterways.</p>	<p>The disposal of wastes can have significant adverse effects on the cultural and spiritual relationship Kai Tahu have with Otago's natural and physical resources. This policy recognises the relationship of runanga and hapu to their places and resources of cultural importance, and provides for their role in the management of Otago's waste stream.</p> <p>Kai Tahu attitudes and traditions do not need to clash with the need to zone specific areas for the disposal of wastes, however such areas should be sited so as to prevent contamination of waahi tapu, taoka and mahika kai.</p>	<p>13.6.1</p> <p>13.6.2</p> <p>13.6.3</p> <p>13.6.6</p> <p>13.6.9</p> <p>13.6.10</p> <p>13.6.11</p> <p>13.6.12</p> <p>13.6.17</p> <p>13.6.18</p>	<p>5.5.1</p> <p>5.5.3</p> <p>5.5.5</p> <p>6.5.1</p> <p>6.5.5</p> <p>6.5.9</p> <p>7.5.1 to 7.5.4</p> <p>8.5.1</p> <p>8.5.5</p> <p>8.5.6</p> <p>9.5.1</p> <p>9.5.4</p> <p>9.5.5</p> <p>10.5.1</p> <p>10.5.2</p> <p>12.5.2</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1</p> <p>15.5.2</p>
		<p>13.5.2¹² To avoid, remedy or mitigate the adverse effects resulting from the disposal of solid wastes in Otago through:</p> <p>(a) Requiring that new landfills be located in appropriate areas taking account of landfill guidelines produced by the Ministry for the Environment; and</p> <p>(b) Requiring that safeguards be incorporated into landfill design to prevent adverse effects on the environment, taking account of landfill guidelines produced by the Ministry for the Environment; and</p> <p>(c) Encouraging a minimisation in the number of</p>	<p>The Ministry for the Environment has produced landfill guidelines, which include criteria for the siting and safety of landfills. Issues to be considered when siting new landfills include access, travel distances, travel flows, topography, geology, groundwater, surface hydrology, visibility, natural hazards and ecosystems. Safety considerations include waste categorisation, treatment requirements, inspections, sampling and analysis and litter, dust, odour, bird, pest, noise, fire, stormwater and leachate control. Adopting these guidelines will assist in ensuring that landfills do not adversely affect the environment. Minimising the total number of landfills in the region will ensure that the adverse effects associated with landfills are constrained to a minimal number of</p>

¹¹ Partially superseded by PORPS 14 January 2019 (Policy 2.2.1 Kāi Tahu wellbeing, Policy 5.4.1 Offensive or objectionable discharges)

¹² Superseded by PORPS 14 January 2019 (Policy 4.6.6 Waste management, Policy 4.6.7 Waste minimisation responses, Policy 4.6.8 Waste storage, recycling, recovery, treatment and disposal)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>landfills, consistent with environmental and community requirements; and</p> <p>(d) Minimising the amount and type of litter disposed of within Otago through:</p> <p>(i) Educating the public and promoting about the need to reduce littering; and</p> <p>(ii) Providing facilities for the collection and disposal of litter; and</p> <p>(e) Minimising the amount and types of solid waste generated within Otago by:</p> <p>(i) Educating waste generators about the need to reduce waste and methods of doing this;</p> <p>(ii) Encouraging waste audits; and</p> <p>(iii) Requiring justification for consents to dispose of solid waste.</p>	<p>differing sites. Recent efforts of territorial local authorities in the region have resulted in the establishment of more suitable solid waste disposal facilities and plans for additional facilities in the future. The most effective and efficient means of waste disposal should be encouraged.</p> <p>The casual tossing aside of litter adversely affects the visual and amenity values of Otago, particularly along transport routes, the coast and picnic and outdoor recreation sites. Reducing these adverse effects will require the entire Otago community to work at reducing the casual littering of the region. Providing collection facilities at suitable locations will assist in this.</p>	13.6.18	11.5.2 to 11.5.3 14.5.1 to 14.5.8 15.5.1 15.5.2
<p>13.5.3¹³ To avoid, remedy or mitigate the adverse effects resulting from the discharge of liquid wastes in Otago through:</p> <p>(a) Requiring, where practicable, the treatment of liquid wastes at the point where they are generated; and</p> <p>(b) Encouraging a reduction in the volume and concentration of liquid wastes within the waste stream by:</p> <p>(i) Educating waste generators about the need to reduce wastes, and methods of doing this;</p> <p>(ii) Encouraging waste audits; and</p>	<p>Waste minimisation and treatment at source prior to discharge into a centralised collection and treatment facility will ensure a reduction in the amount and strength of any liquid contaminant discharged into a centralised collection system. Liquid contaminant discharges into the environment from any source will have to meet the highest possible standards in order to minimise adverse effects on the receiving environment. The highest possible standard will depend on the communities' needs and on financial and technical constraints. Policies 6.5.5 and 8.5.6 in the water and coast chapters of this Regional Policy Statement establish criteria for the receiving waters that will have to be met by any discharge.</p>	13.6.1 13.6.2 13.6.3 13.6.5 13.6.6 13.6.7 13.6.8 13.6.12 13.6.13 13.6.14 13.6.15 13.6.16 13.6.17	5.5.3 5.5.5 6.5.1 6.5.5 6.5.6 6.5.9 8.5.1 8.5.4 to 8.5.6 9.5.4 9.5.5 10.5.1 10.5.2 12.5.1 14.5.1 to 14.5.8 15.5.1 15.5.2

¹³ Partially superseded by PORPS 14 January 2019 (Policy 5.4.1 Offensive or Objectionable discharges, Policy 4.6.6 Waste management, Policy 4.6.7 Waste minimisation responses, Policy 4.6.8 Waste storage, recycling, recovery, treatment and disposal)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>(iii) Requiring justification for consents to dispose of liquid waste; and</p> <p>(c) Encouraging a reduction in the volume and concentration of liquid wastes within the waste stream.</p>	<p>Hazardous substance use and the resultant hazardous wastes has the potential to severely impact on Otago's environment. Education and promotion is required to reduce the amount of hazardous material used and to ensure the safe handling, use, storage and transport of that material.</p>	13.6.18	
<p>13.5.4¹⁴ To avoid, remedy or mitigate the adverse effects resulting from hazardous substances within Otago through:</p> <p>(a) Educating about the need to handle, use, store and transport hazardous substances carefully and promoting safe and appropriate practices; and</p> <p>(b) Promoting a reduction in hazardous substance use and waste production; and</p> <p>(c) Requiring, as far as is practicable, the on-site treatment of hazardous wastes; and</p> <p>(d) Requiring, where treatment is not available, the safe storage or disposal of hazardous wastes; and</p> <p>(e) Encouraging the reuse of hazardous wastes; and</p> <p>(f) Supporting the creation of a facility for the treatment and disposal of hazardous wastes; and</p> <p>(g) Promoting the coordination of hazardous substances management between national, regional and territorial authorities.</p>	<p>A reduction in hazardous substance use and waste production is required, although any growth in the region's economy may require the use of hazardous substances. If every individual and organisation reduces the amount of hazardous substance used, the use of hazardous substances and the generation of hazardous wastes across the region on a per capita basis should reduce, resulting in less adverse effects on Otago's communities and resources. A reduction in hazardous substance use and waste production may result from activities such as promoting new technologies or products or by advocating a reduction in the amount of hazardous substance used.</p> <p>Where hazardous materials are used, the emphasis is on the treatment of any wastes as far as possible at source or the reuse of that waste, prior to the safe storage or disposal of the residue. A regional hazardous waste treatment and disposal facility is required within Otago to deal with the waste byproducts of our hazardous material use. In order to be able to better understand the amount of hazardous wastes produced and to minimise any adverse effects on</p>	<p>13.6.1</p> <p>13.6.2</p> <p>13.6.3</p> <p>13.6.5</p> <p>13.6.6</p> <p>13.6.6</p> <p>13.6.7</p> <p>13.6.8</p> <p>13.6.10</p> <p>13.6.12</p> <p>13.6.13</p> <p>13.6.14</p> <p>13.6.15</p> <p>13.6.16</p> <p>13.6.17</p> <p>13.6.18</p>	<p>5.5.3</p> <p>5.5.5</p> <p>6.5.1</p> <p>6.5.5</p> <p>6.5.6</p> <p>6.5.9</p> <p>7.5.2 to 7.5.3</p> <p>8.5.1</p> <p>8.5.2</p> <p>8.5.5</p> <p>8.5.6</p> <p>9.5.4</p> <p>10.5.1</p> <p>10.5.2</p> <p>12.5.2</p> <p>14.5.1 to 14.5.8</p> <p>15.5.1</p> <p>15.5.2</p>

¹⁴ Superseded by PORPS 14 January 2019 (Policy 4.6.1 Hazardous substances, Policy 4.6.2 Use, storage and disposal of hazardous substances, Policy 4.6.3 Hazardous substance collection, disposal and recycling)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>13.5.5¹⁵ To avoid, remedy or mitigate the adverse effects resulting from medical wastes within Otago through:</p> <p>(a) Requiring an acceptably safe level of treatment and disposal of medical wastes in an environmentally sustainable manner; and</p> <p>(b) Promoting the regional use of the best available technology.</p>	<p>the environment, data on the sources, types and fate of hazardous wastes is required.</p> <p>The medical wastes produced in Otago include contaminated wrappings, needles, glass, human organs and other associated material. There is little scope for reusing this material. Suitable treatment and disposal techniques are required to remove any threat of contamination and infection and to remove the concern over the disposal of needles, body organs and other material at municipal tips. Using the best available technology should ensure that the disposal of medical wastes does not cause any health risk or aesthetic concerns.</p>	<p>13.6.1 13.6.2 13.6.3 13.6.5 13.6.6 13.6.7 13.6.8 13.6.9 13.6.12 13.6.13 13.6.14 13.6.15 13.6.16 13.6.17 13.6.18</p>	<p>5.5.3 to 5.5.5 6.5.1 6.5.5 6.5.6 6.5.9 7.5.1 7.5.2 8.5.5 8.5.10 9.5.4 9.5.5 10.5.1 10.5.2 14.5.1 to 14.5.8 15.5.1 15.5.2</p>
<p>13.5.6¹⁶ To avoid, remedy or mitigate the adverse effects resulting from persistent non-biodegradable wastes within Otago through:</p> <p>(a) Encouraging the avoidance of the use of materials that persist in the environment when disposed of; and</p> <p>(b) Encouraging the reuse of items made from persistent materials; and</p> <p>(c) Encouraging the treatment of persistent wastes to reduce their effects on the environment.</p>	<p>Persistent wastes, such as plastic bags, can remain in the environment for many years. There is a need to reduce the amount of persistent wastes that we dispose of and find ways of treating such wastes to reduce their long-term effects. Avoiding the use of such materials or reusing them as much as possible, will reduce the amount of persistent wastes produced.</p>	<p>13.6.1 13.6.2 13.6.3 13.6.5 13.6.6 13.6.7 13.6.8 13.6.12 to 13.6.18</p>	<p>5.5.3 5.5.5 6.5.1 6.5.5 6.5.6 6.5.9 8.5.1 8.5.4 to 8.5.6 9.5.1 9.5.4 9.5.5 10.5.1 10.5.2 14.5.1 to 14.5.8 15.5.1</p>

¹⁵ Superseded by PORPS 14 January 2019 (Policy 4.6.8 Waste storage, recycling, recovery, treatment and disposal)

¹⁶ Superseded by PORPS 14 January 2019 (Policy 4.6.7 Waste minimisation responses)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>13.5.7¹⁷ To address the adverse effects of past waste disposal practices through:</p> <p>(a) Identifying sites of old landfills, hazardous substance dumps or contamination within Otago; and</p> <p>(b) Determining any adverse effects arising from those sites and requiring the remedying or mitigation of any adverse effects.</p>	<p>Because of their possible adverse effects, old landfill sites, areas and sites of hazard substances dumps, and chemically contaminated sites need to be identified and recorded within Otago. Once identified, monitoring and investigative work needs to be carried out to determine whether the sites are having an adverse effect on the environment. Adverse effects could include leachate contamination of water bodies, groundwater and land areas, residual chemical contamination of sites and unstable land. Where adverse effects are identified, remedial or mitigation works will be required to remove the threat to the environment. Remedial or mitigation works would be required of the person or body responsible for the contaminated site, where they can be identified.</p>	<p>13.6.1 13.6.2 13.6.4 13.6.6 13.6.7 13.6.8 13.6.11 13.6.12 13.6.13 13.6.14 13.6.15 13.6.16 13.6.17</p>	<p>15.5.2</p> <p>5.5.1 5.5.3 5.5.5 to 5.5.6 6.5.1 6.5.5 6.5.6 6.5.9 7.5.3 7.5.4 8.5.1 8.5.2 8.5.4 to 8.5.6 9.5.1 9.5.4 9.5.5 10.5.1 10.5.2 14.5.1 to 14.5.8 15.5.1 15.5.2</p>
<p>13.5.8¹⁸ To minimise the risk of spills of materials that will adversely affect the environment and to establish a capability to respond to any spill through:</p> <p>(a) Educating the public about the need to prevent spills; and</p> <p>(b) Ensuring contingency plans are in place to clean up the potential and actual effects of accidental spills, whether to land, air, the coast or water; and</p> <p>(c) Mitigating the adverse effects of any clean-up operation following a spill.</p>	<p>Educating individuals and groups about the adverse effects of accidental spills of materials such as petroleum products, hazardous materials and industrial agents and the need to minimise the risk of any such spills will reduce the threat to Otago's environment from accidental spills. Contingency plans will need to be in place to be able to respond quickly to any accidental spill. Careful consideration to the methods to be used to clean up a spill will be required to ensure that the clean-up does not create additional adverse effects on the environment.</p>	<p>13.6.4 13.6.5 13.6.6 13.6.7 13.6.8 13.6.9 13.6.12 13.6.13 13.6.14 13.6.15 13.6.16 13.6.17</p>	<p>5.5.1 5.5.3 5.5.5 6.5.1 6.5.5 6.5.6 6.5.9 7.5.1 7.5.2 8.5.1 8.5.5 8.5.6 9.5.1 9.5.4 9.5.5</p>

¹⁷ Superseded by PORPS 14 January 2019 (Policy 4.6.4 Identifying contaminated land, Policy 4.6.5 Managing contaminated land)

¹⁸ Partially superseded by PORPS 14 January 2019 (Policy 4.6.2 Use, storage and disposal of hazardous substances)

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>13.5.9¹⁹ To minimise the amount of waste generated at source in Otago and to maximise the opportunities for the reuse, recycling and recovery of materials from the waste stream through promoting and encouraging:</p> <p>(a) A reduction in the quantity of material entering the waste stream; and</p> <p>(b) Material and products that are reusable and the recycling of material and substances that cannot be reused; and</p> <p>(c) The recovery of resources from materials in the waste stream.</p>	<p>The reduction of material entering the waste stream has become an increasingly important issue in Otago because of the need to provide landfills, which require large areas of land and produce adverse environmental effects, to dispose of such waste and because of the non biodegradable nature of much waste, even when contained in a landfill. Waste minimisation includes a reduction in the rate of material being produced which is non biodegradable and will require landfill disposal, for example, through a reduction in packaging; the promotion of products and packaging that are reusable and their recycling where reuse is not an option; and the recovery of resources from materials in the waste stream. The principles of reduce, reuse, recycle and recover will extend the life of the region's landfills and place less pressure on the natural and social environment.</p>	<p>13.6.1 13.6.2 13.6.3 13.6.5 13.6.6 13.6.7 13.6.8 13.6.13 13.6.14 13.6.15 13.6.16 13.6.17</p>	<p>10.5.1 10.5.2 14.5.1 to 14.5.8 15.5.1 15.5.2</p> <p>6.5.9 8.5.5 9.5.4 9.5.5 10.5.1 10.5.2 14.5.1 to 14.5.8 15.5.1 15.5.2</p>
<p>13.5.10²⁰ To address the adverse effects of unauthorised discharges on the environment through:</p> <p>(a) Educating the public about the adverse effects of such discharges and the necessity to avoid them; and</p> <p>(b) Taking appropriate action in response to unauthorised discharge incidents.</p>	<p>All discharges have the potential for adverse impacts on the environment unless these can be avoided, remedied or mitigated. Transfer stations, landfills, and waste recycling facilities provide a means to control and minimise the adverse effects of waste discharges. Unauthorised discharges have the same potential for adverse impacts but the ability to avoid, remedy or mitigate them is circumvented. In some cases, such as oil spills or the discharge of milk into waterways, the adverse effects on the environment may be catastrophic. For this reason, unauthorised discharges are of major concern to the community and an offence against the Resource Management Act 1991. The Regional Council is empowered by the Act to take action in respect of unauthorised discharges but in</p>	<p>13.6.1 13.6.2 13.6.4 13.6.5 13.6.6 13.6.7 13.6.9 13.6.12 13.6.16 13.6.17</p>	<p>5.5.1 5.5.3 5.5.5 6.5.1 6.5.5 6.5.6 6.5.9 7.5.1 7.5.2 to 7.5.4 8.5.1 8.5.2 8.5.5 8.5.6 9.5.4 9.5.5</p>

¹⁹ Superseded by PORPS 14 January 2019 (Policy 4.6.7 Waste minimisation responses)

²⁰ Partially superseded by PORPS 14 January 2019 (Policy 5.4.1 Offensive or Objectionable discharges)

Policies

Explanation and Principal Reasons for Adopting

Methods

See Also Other Policies

addition to making provision for this, it will also seek to educate the public about the adverse effects of such discharges and the necessity to avoid them.

- 10.5.1
- 10.5.2
- 14.5.1 to 14.5.8
- 15.5.1
- 15.5.2

13.6 Methods

In order to achieve the outcomes of the policies, every agency with responsibilities under the Resource Management Act 1991 should:

13.6.1²¹ Take into account Kai Tahu cultural values in the management of Otago's waste stream through:

- (a) Using and recognising iwi resource management plans as a basis for consultation; and
- (b) Developing consultation protocols with iwi, runanga and hapu to provide for their input into the management of Otago's waste stream

The methods to be used by the Otago Regional Council include the following:

13.6.2 Develop policies and other means, including rules where appropriate, within the Regional Plan: Waste to avoid, remedy or mitigate the adverse effects of the region's wastes.

13.6.3 Consider including conditions on resource consents or consider declining such consents as necessary to avoid, remedy or mitigate the adverse effects of the discharge of wastes.

13.6.4 Develop contingency plans and a response capability to deal effectively and efficiently with accidental spills of environmentally damaging substances.

13.6.5 Promote and educate about:

- (a) The adverse effects of the waste stream.

- (b) The benefits of waste minimisation, reuse and recycling.
- (c) Hazardous substance storage, use, disposal and transportation.
- (d) The requirements of the Resource Management Act and regional policies and rules for the management of the waste stream.
- (e) Disposal and reuse processes for biodegradable waste.

13.6.6 Consult with Otago's communities regarding the management of Otago's waste stream.

13.6.7 Initiate, support and encourage research and monitoring programmes to provide information on Otago's waste issues and solutions.

13.6.8 Advocate to Central Government on waste management issues of importance to Otago.

13.6.9 Prevent uncontrolled and illegal disposal of waste by appropriate enforcement action.

13.6.10 Promote the establishment of a hazardous wastes facility for the safe treatment and disposal of hazardous wastes, including the provision of appropriate facilities for the long term storage of intractable wastes, in consultation with local authorities and other agencies.

13.6.11 Investigate old landfills, hazardous dumps or chemical contamination sites within Otago where the adverse effects associated with those sites are considered to be significant.

²¹ Superseded by PORPS 14 January 2019 (Policy 2.1.2 Treaty Principles, Method 1.1, Method 5.1.4)

13.6.12 Take enforcement action to address unauthorised waste management practices.

13.6.13 Recognise and encourage agencies and community groups that promote or undertake remedial works to restore contaminated sites or mitigate adverse effects arising from waste disposal.

13.6.14 Promote and encourage interagency liaison and cooperation and the development of protocols and standards to achieve integrated and coordinated management of Otago's waste stream.

13.6.15 Promote Codes of Practice and protocols agreed to by industry, the Otago Regional Council, city and district councils and other interest groups as appropriate to avoid, remedy or mitigate the adverse effects of the waste stream.

13.6.16 Provide information on the adverse effects associated with waste management activities.

Methods which may be used by Otago's territorial local authorities include the following:

13.6.17 Promote and educate about:

- (a) The adverse effects of the waste stream.**
- (b) The benefits of waste minimisation, reuse and recycling.**
- (c) Hazardous substances use, treatment, disposal and transportation.**
- (d) The requirements of the Resource Management Act.**
- (e) Disposal and reuse processes for biodegradable waste.**

13.6.18 Provide for treatment, storage and disposal facilities for wastes generated within their districts, including hazardous wastes that the territorial local authority is able to deal with.

Explanation and Principal Reasons for Adopting

The integrated management of all elements of Otago's waste stream is required to ensure a reduction in the adverse effects associated with it. A waste management strategy, considering all types of wastes and strategies for their reduction, reuse and recycling, as well as their disposal, is an important element of this integration. Any such strategy would be in the form of a regional plan under the Resource Management Act. Ensuring the Otago community is aware of its role in reducing the impacts of waste treatment and disposal should assist in reducing the amount of waste produced.

A contingency plan to deal with accidental spills of materials that could damage the environment and an ability to respond, is an important element in ensuring the mitigation and remedying of adverse effects associated with the accidental spilling of material.

The remaining policies should bring about a reduction in the adverse effects associated with the waste stream and an improvement in the overall environmental quality of the region.

13.7 Anticipated Environmental Results

The environmental results anticipated from the above policies and methods of implementation include:

13.7.1²² Otago's communities are able to meet their present and reasonably foreseeable needs for the use, transportation, storage and disposal of wastes.

13.7.2 The management of Otago's waste stream takes into account the values of manawhenua.

13.7.3 The adverse effects of waste disposal and treatment are avoided, remedied or mitigated.

13.7.4 There is a reduction in the amount of waste disposed of in Otago as a result of:

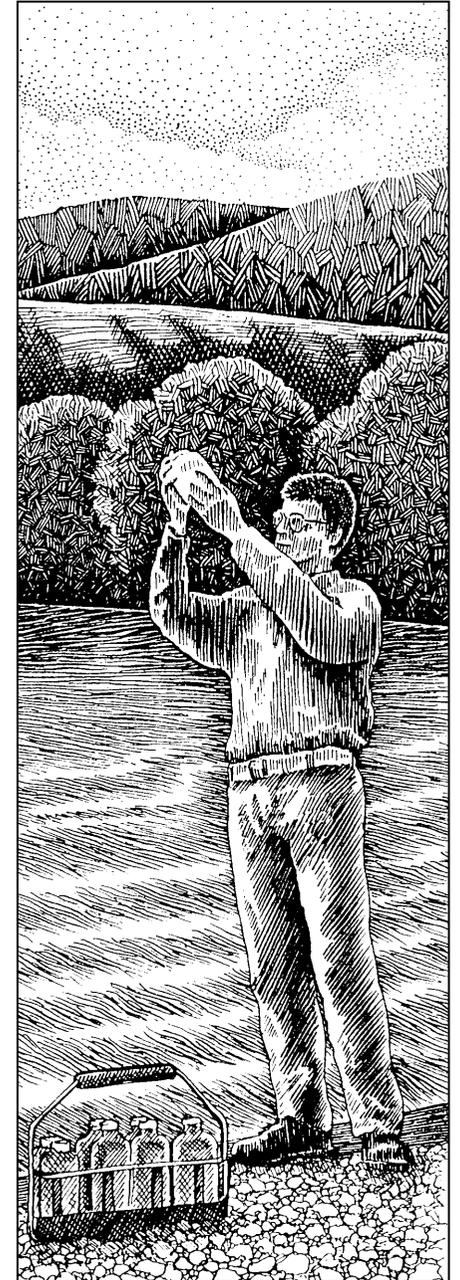
- (a) Less waste being produced; and
- (b) Increased amounts of material reuse and recycling; and
- (c) Increased treatment of wastes at source.

13.7.5 There is a reduction in the adverse effects of the handling, use, storage and transportation of hazardous substances and wastes in Otago as a result of:

- (a) A hazardous waste facility being established; and
- (b) Hazardous wastes being safely stored and treated; and
- (c) Less hazardous wastes being produced; and
- (d) An improved database on the sources, types and disposal of hazardous wastes; and
- (e) The minimisation of the effects of accidental spillage and discharge of hazardous substances within the region on the natural and physical resources of the region.

²² Superseded by PORPS 14 January 2019 (AER 1.1)

14 Monitoring



14.1 Introduction

The Resource Management Act requires all local authorities to gather information and to undertake or commission such research as is necessary to carry out effectively their functions under the Act (Section 35(1)). There is also a requirement for every local authority to monitor:

- (a) *The state of the whole or any part of the environment of its region or district to the extent that it is appropriate to enable the local authority to effectively carry out its functions under this Act; and*
- (b) *The suitability and effectiveness of any policy statement or plan for its region or district; and*
- (c) *The exercise of any functions, powers or duties delegated or transferred by it; and*
- (d) *The exercise of the resource consents that have effect in its region or district, as the case may be,-*

and take appropriate action (having regard to the methods available to it under this Act) where this is shown to be necessary. (Section 35(2) RMA)

Long-term monitoring of the components of the environment, such as water and air quality, water quantity and land condition, is one of the few objective indicators of environmental change available. As environmental change can occur over a relatively long time frame, the changes may not be easily visible or recognisable in the short term. However, environmental monitoring programmes should be able to identify the order and magnitude of those changes as they occur, allowing agencies to react appropriately. Monitoring of the environment provides an indicator of the state and health of the environment and provides a measure of any change resulting from either natural processes or human actions.

Monitoring the effectiveness of the policies, plans and processes of the Otago Regional Council and Otago's district and city councils will provide a measure of the success of whether those mechanisms have achieved the intended outcomes. Where the policies, plans or processes attempt to halt or avoid environmental degradation or to improve the health and state of the environment, monitoring will provide an objective assessment of their degree of success.

There are four broad types of monitoring considered within this policy statement:

(A) Environmental Monitoring

(i) Baseline Monitoring:

Monitoring of an ongoing nature designed to provide data on physical, chemical, biological, social, cultural and economic characteristics of the Otago region. This involves the planned and repeated measurement of variables (eg. pH, rainfall, animal numbers, issued building permits). This is often termed baseline monitoring - providing baseline information on the health and state of the environment. This acts as a basis for assessing changes or trends in the environment, either as the result of natural processes or human actions. Subsequent monitoring which identifies changes taking place may provide new baselines.

(ii) Impact Monitoring

Monitoring designed to identify the effects of particular activities on the environment or of particular environmental events is known as impact monitoring. Impact monitoring could include intensive monitoring of a resource to assess the impacts of changes in use, which can be either specific or cumulative.

(B) Compliance Monitoring:

Monitoring of resource consents to ensure that the conditions of the consents are being complied with.

(C) Process Monitoring:

Monitoring the effectiveness and suitability of policies, plans and processes of Otago's local authorities.

State of the environment monitoring and reporting is a term that can be used to describe the overall result of the regional monitoring programme, utilising the three broad types of monitoring undertaken in the region. State of the environment monitoring goes beyond the simple collection of environmental data. It involves the systematic analysis of key indicators of condition and trend (eg. area of land with severe erosion) to determine:

- The state of the environment in a particular area at a particular point in time;
- The nature of trends in that state over time; and
- The cause-effect relationship between human action and environmental conditions.

State of the environment reporting provides a picture of the region's environment at one point in time and allows for an assessment of change over time. It is an information system which is still in its infancy in New Zealand but it is becoming increasingly popular because of the opportunities it provides for improved environmental management. It is a system of data synthesis and analysis which has many benefits for Otago because it provides a measurable indicator of the effects of human activities on the environment, as well as a measurable indicator of the degree of success of policies, plans and processes.

14.2 Roles of Different Agencies

14.2.1 Central Government

Under the Resource Management Act, the Minister for the Environment has a responsibility to:

- Monitor the effect and implementation of the Act and any regulations, national policy statements or water conservation orders issued under it.
- Monitor the relationship between the functions, powers and duties of Central Government, regional councils and city and district councils under the Act and the functions, powers and duties of the Hazards Control Commission (to be established under Part XIII of the Act).

The Minister of Conservation has a role in monitoring the effect and implementation of the New Zealand Coastal Policy Statement and coastal permits issued by the Minister of Conservation.

14.2.2 Otago Regional Council

The Otago Regional Council has a role in monitoring the regional environment and the effectiveness of its policies, plans and processes.

14.2.3 Territorial Local Authorities

Otago's city and district councils have a role in monitoring the environment in their individual districts and the effectiveness of their own policies, plans and processes.

14.3 Issues

	Explanation	Objectives	Policies	See Also Other Issues
14.3.1 The assessment of the state of Otago’s environment requires that environmental variables be monitored.	To provide enough information on which to assess the state of Otago’s environment, there is a need to collect information on a variety of environmental variables.	14.4.1 14.4.2	14.5.1 14.5.4 14.5.5	All Issues Manawhenua Land /Water Air (except 7.3.2) /Coast Built Environment Biota /Natural Hazards Energy /Wastes Cross Boundary
14.3.2 Local authorities must review the suitability and effectiveness of the policies and plans issued for the Otago region and its districts.	<p>The Otago Regional Council has prepared this Regional Policy Statement and will prepare and release a Regional Coastal Plan and other regional plans under the provisions of the Resource Management Act. Otago’s city and district councils will similarly produce district plans for their districts. Monitoring the outcomes of those policies and plans will be required to ensure that they are suitable and effective in ensuring the integrated and sustainable management of Otago’s natural and physical resources.</p> <p>Regional policy statements, regional plans and district plans are required by the Act to state the environmental results anticipated from the implementation of their policies and methods (Sections 62(g), 67(g) and 75(g) respectively). The intended outcomes from this Regional Policy Statement are expressed as “anticipated environmental results” at the end of each chapter. They are the intended results from the policies and methods contained within the document. Monitoring of this policy statement and all other policies and plans within the region, will need to provide a measure as to the degree of success of the policies and methods in achieving those anticipated environmental results.</p>	14.4.1 14.4.2	14.5.1 14.5.2 14.5.4 14.5.5	All Issues Manawhenua Land /Water Air (except 7.3.2) /Coast Built Environment Biota /Natural Hazards Energy /Wastes Cross Boundary

Issues	Explanation	Objectives	Policies	See Also Other Issues
14.3.3 There are difficulties in assessing the cumulative effects of resource consents within Otago.	<p>Local authorities issue different types of resource consents. The Otago Regional Council issues water permits (for the taking of water), discharge permits (for the discharge of contaminants), coastal permits (for activities in the coastal marine area) and in some cases landuse consents (for regionally significant land issues). Otago's city and district councils issue landuse consents (for the use of the land) and subdivision consents (for subdivisions of land). Conditions are typically included in a resource consent to minimise any adverse effects associated with the use permitted.</p> <p>As well as monitoring the effects of a single activity, monitoring will also need to consider the combined effects of all activities within the environment. This is more difficult to assess and is often overlooked. Over time the cumulative effect of all activities may have an adverse effect on the environment which may not have been predicted in the consideration of individual consents.</p>	14.4.1 14.4.2	14.5.3 14.5.4 14.5.5	<p>All Issues Manawhenua Land /Water Air (except 7.3.2) /Coast Built Environment Biota /Natural Hazards Energy /Wastes Cross Boundary</p>
14.3.4 There is a lack of information about many of Otago's natural and physical resources.	<p>The sustainable management of natural and physical resources depends upon there being sufficient information on which to make decisions. A lack of information on those resources constrains the Council from carrying out its resource management functions. The collection of relevant data through monitoring is therefore an important component in ensuring the continuing sustainability of Otago's natural and physical resources.</p>			<p>All Issues Manawhenua Land /Water Air (except 7.3.2) /Coast Built Environment Biota /Natural Hazards Energy /Wastes Cross Boundary</p>
14.3.5 Accurate, reliable and comparable data is generally not available for all of Otago.	<p>A variety of environmental data has been collected over past years by a variety of agencies and groups. In many cases, data that has been collected on the same environmental parameter is not comparable because of differing techniques that have been used or because insufficient rigour has been applied to its collection and analysis.</p>	14.4.1 14.4.2	14.5.1 14.5.3 14.5.6 14.5.8	<p>All Issues Manawhenua Land /Water Air (except 7.3.2) /Coast Built Environment</p>

Issues	Explanation	Objectives	Policies	See Also Other Issues
14.3.6 There are gaps in the current regional environmental monitoring programme.	<p>Various environmental monitoring programmes have been initiated by the local authorities within Otago over the years, as needs have arisen. The majority of the monitoring work has been on an ad-hoc basis, resulting in a lack of coordination, both within and between local authorities. Duplication of effort in the collection of some data also results from this lack of coordination.</p> <p>The current regional environmental monitoring programme largely reflects the previous requirements of the various authorities that preceded the local government reorganisation in 1989. The definition of “environment” under the Resource Management Act and the functions of local authorities have changed from the previous legislation. The new environmental monitoring concept needs to be clearly established and the rationale for and value of, carrying out particular monitoring activities must be part of an integrated package which considers all of Otago’s environment.</p>	<p>14.4.1 14.4.2</p>	<p>14.5.1 14.5.4 14.5.5</p>	<p>Biota /Natural Hazards Energy /Wastes Cross Boundary</p> <p>All Issues Manawhenua Land /Water Air (except 7.3.2) /Coast Built Environment Biota /Natural Hazards Energy /Wastes Cross Boundary</p>

14.4 Objectives

	Explanation and Principal Reasons for Adopting	Policies	See Also Other Objectives
14.4.1 To undertake or commission cost effective regional monitoring as is necessary to provide timely, accurate and reliable data, to assess the state of Otago's environment.	The statutory requirement for undertaking monitoring of the environment and of local authority activities is provided by Section 35 of the Resource Management Act. In addition to undertaking its own monitoring, the Regional Council can make use of information gathered by other agencies and individuals, including resource users carrying out self monitoring.	14.5.1 14.5.3 14.5.4 14.5.5 14.5.6 14.5.8	All Objectives: Manawhenua /Land /Water Air /Coast /Built Environment Biota /Natural Hazards /Energy Wastes /Cross Boundary
14.4.2 To monitor the required elements of Otago's environment necessary to review the suitability and effectiveness of the Regional Policy Statement, Regional Coastal Plan, any other regional plan and any district plan within the region.	Monitoring of the environment is necessary to provide an assessment of the policies and plans of Otago's local authorities. In particular monitoring enables local authorities to: <ul style="list-style-type: none"> - Identify issues that may need to be addressed. - Assist in the setting of priorities. - Assist in the development of policies, plans and methods to address those issues. - Be able to measure their success in addressing the issue identified. - Be able to measure the processes used to manage Otago's natural and physical resources. 	14.5.1 14.5.2 14.5.4 14.5.5	All Objectives: Manawhenua /Land /Water Air /Coast /Built Environment Biota /Natural Hazards /Energy Wastes /Cross Boundary

14.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
14.5.1	To identify the region’s monitoring needs and to prioritise the monitoring that is necessary to meet those needs.		All Policies: Manawhenua /Land /Water /Air Coast /Built Environment /Biota Natural Hazards /Energy /Wastes Cross Boundary
14.5.2	To increase the knowledge and understanding of Otago’s natural and physical resources, and issues associated with these resources and their solutions, through initiating, supporting and encouraging research and monitoring programmes.		All Policies: Manawhenua /Land /Water /Air Coast /Built Environment /Biota Natural Hazards /Energy /Wastes Cross Boundary
14.5.3	To identify and systematically collect and analyse information about Otago’s environment as required to identify significant environmental issues.		All Policies: Manawhenua /Land /Water Air /Coast /Built Environment Biota /Natural Hazards /Energy Wastes /Cross Boundary
	<p>Although Sections 35 and 62 of the Resource Management Act 1991 require that the Council undertake monitoring, it is good practice that monitoring needs and priorities be identified in the development of a monitoring framework or strategy for the region. Direction for annual planning will also be provided.</p> <p>The knowledge held on Otago’s natural and physical resources and issues associated with their use, development and protection is, in some cases, limited. To achieve a greater understanding and to allow for better management, information needs to be actively gathered on the natural and physical resources of the region, and associated issues, and shared with the information. This information can then be used to monitor and review objectives and policies and to promote sustainable practices.</p> <p>Monitoring is required in order to better understand Otago’s environment. Because change in many variables can occur gradually over a long time, there is a need to continue monitoring of variables on an ongoing and continuous basis. One-off or short-term monitoring is inadequate for identifying longer term changes. Such monitoring should consider the need for physical, chemical, biological, social and cultural data to be collected.</p> <p>Key variables also need to be identified on which to base a state of the environment report for the Otago region. State of the environment reporting provides a measure of change in Otago’s environment and the effects of human activities.</p> <p>A number of different agencies and community groups collect information on Otago’s environment. It is important that the availability of this information is recognised, as its use will assist in identifying significant environmental issues.</p>	<p>14.6.1</p> <p>14.6.2</p> <p>14.6.3</p> <p>14.6.4</p> <p>14.6.5</p> <p>14.6.6</p>	

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
<p>14.5.4 To monitor policies and plans to assess their suitability and effectiveness, and to undertake regular reviews where necessary either:</p> <p>(a) In response to statutory requirements; or</p> <p>(b) Where monitoring has indicated it is necessary to bring about improved environmental conditions or improved effectiveness of policies and /or plans; or</p> <p>(c) In response to changes in community attitudes.</p>	<p>Policies and plans prepared within Otago under the Resource Management Act must be assessed as to their suitability and effectiveness. The anticipated environmental results of those policies and plans will be monitored to determine the extent to which the results are achieved. Where environmental degradation is identified through the monitoring process or where it becomes obvious that current policies and plans are not having the desired result, those policies and plans will be reviewed and amended to bring about improved environmental condition. Liaison with the community is an important means of determining the effectiveness of plans and policies and whether a response or adjustment is necessary. Expectations within the community in relation to environmental outcomes and management techniques may also change and need to be reflected in the provisions of the Regional Policy Statement or Regional Plans.</p>	<p>14.6.1 14.6.2 14.6.3 14.6.4</p>	<p>All Policies: Manawhenua /Land /Water/ Air /Coast /Built Environment Biota /Natural Hazards /Energy Wastes /Cross Boundary</p>
<p>14.5.5 To monitor, as required, the effects associated with the exercise of resource consents to provide for the review of the appropriateness of the issue, terms and conditions of resource consents.</p>	<p>While an assessment is made of the likely impacts of an activity when considering the issuing of a consent for it, monitoring of the actual effects arising from the activity will be required at times. This will be required to ensure that the effects of the activity are not having an unacceptable adverse effect on the environment. Such monitoring data will be used in the review of the appropriateness of any aspect of the consent issued in order to minimise any adverse effects.</p> <p>Monitoring will also need to consider an assessment of the cumulative effect of all activities within a catchment or area in order to be able to fully assess the likely adverse effects arising from a new activity. The additional cumulative effect of a new activity needs to be considered in addition to its direct effects.</p>	<p>14.6.1 14.6.2 14.6.3 14.6.4</p>	<p>All Policies: Manawhenua /Land /Water/ Air /Coast /Built Environment Biota /Natural Hazards /Energy Wastes /Cross Boundary</p>

Policies	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
14.5.6 To require that data for monitoring purposes are collected and analysed in a defensible manner, where necessary.	In many cases, for collected data to be of value to the regional monitoring network, they must be of a standard capable of withstanding scrutiny, both in the manner in which they were collected and in the way in which they were analysed. Examples of such data include water quality and quantity information and contaminant levels within air and water discharges. Data of this type, which is not defensible, are of little value.	14.6.1 14.6.2 14.6.3 14.6.4	All Policies: Manawhenua /Land /Water/ Air /Coast /Built Environment Biota /Natural Hazards /Energy Wastes /Cross Boundary
14.5.7 To promote and encourage self monitoring as part of responsible environmental management.	Self monitoring, with external auditing, has benefits in terms of increasing the efficiency and effectiveness of resource consent monitoring. It also has benefits in terms of improving participants' perceptions of environmental effects of their actions allowing them to remedy potential problems, before there is major environmental damage and action must be taken by external agencies.	14.6.4	All Policies: Manawhenua /Land /Water/ Air Coast /Built Environment /Biota Natural Hazards /Energy/ Wastes Cross Boundary
14.5.8 To promote the collection of data that are comparable regionally, nationally, and over periods of time, when undertaking monitoring within Otago.	Standard data collection techniques should be used to ensure that, where possible, data collected by differing sources are comparable.	14.6.1 14.6.2 14.6.3 14.6.4 14.6.5 14.6.6	All Policies: Manawhenua /Land /Water Air /Coast /Built Environment Biota /Natural Hazards Energy/ Wastes /Cross Boundary

14.6 Methods

The methods to be used by the Otago Regional Council include the following:

- 14.6.1 Develop a systematic monitoring framework including the analysis of baseline data to guide monitoring procedures and requirements, including the establishment of monitoring priorities, and to implement reporting procedures.
- 14.6.2 Establish and implement, where necessary, data collection and analysis procedures, including the identification of key physical, chemical, biological, social and cultural variables.
- 14.6.3 To undertake monitoring, data collection and research in conjunction with relevant data collection agencies and in consultation with the community and to have regard to other data collection programmes and techniques when developing a monitoring framework for Otago.
- 14.6.4 To assist in the identification of opportunities for self monitoring programmes and to support self monitoring initiatives.

Methods which may be used by Otago's territorial local authorities include the following:

- 14.6.5 Establish and implement, where necessary, data collection and analysis procedures in conjunction with the Otago Regional Council and other data collection agencies within Otago.
- 14.6.6 Collect environmental data comparable to data being collected by other agencies.

Explanation and Principal Reasons for Adopting

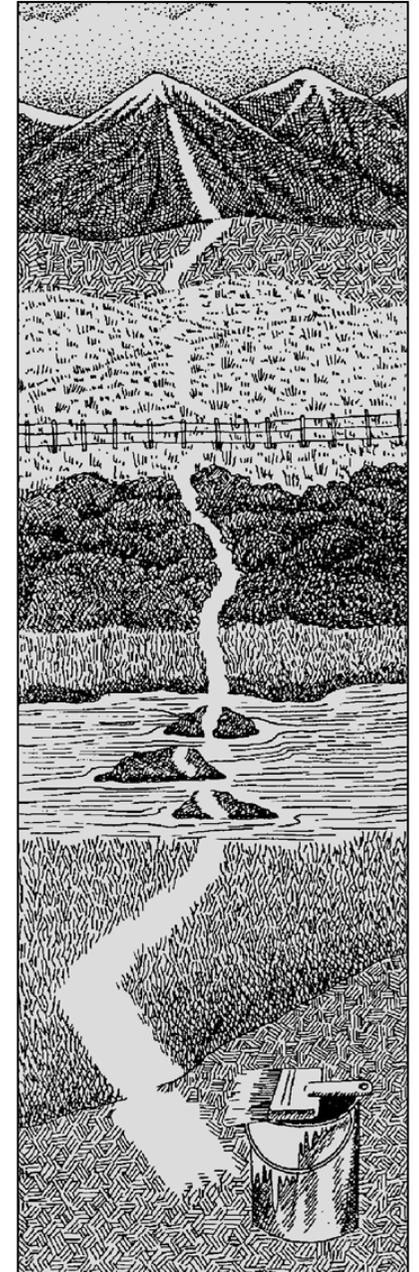
Monitoring the environment of Otago and policies and plans developed by local authorities under the Resource Management Act will ensure the integrated and sustainable management of the region's environment. This requires the monitoring of key environmental indicators, which will be identified through the relevant plans and in response to the anticipated environmental results in the Regional Policy Statement, and is the responsibility of all local authorities in Otago.

14.7 Anticipated Environmental Results

The environmental results anticipated from the above policies and methods of implementation include:

- 14.7.1 There is an improved understanding of Otago's natural and physical environment.**
- 14.7.2 Changes in environmental conditions are monitored over time.**
- 14.7.3 The extent of knowledge and public understanding of Otago's environmental issues and solutions is enhanced.**
- 14.7.4 Information is available to identify when it is necessary to review policies and plans.**
- 14.7.5 Policies and plans are reviewed in response to changes in community attitudes towards environmental management.**

15 Cross Boundary Issues



15.1 Introduction

The effects of an activity or natural process are not always constrained to the area in which they originate. In some cases, the effects may not even be noticeable in the immediate area but may only be felt in other areas. For example, the discharge of air contaminants may have minimal localised effect given the nature of the prevailing wind currents. However communities within the path of the prevailing wind will be subjected to the adverse effects associated with the air discharge.

Where those effects cross administrative boundaries into an adjacent district or region, they are termed cross boundary issues. Other examples of cross boundary issues which can have an effect on adjacent administrative areas within Otago and between the Otago, Southland, Canterbury and West Coast regions include:

- The effects of landuses on communities downstream;
- The movement of contaminated water and the extent of groundwater resources;
- The effects of land activities on the adjacent coastal marine area, and the effects of coastal processes on coastal land;
- The region's land transport network and the movement of road and rail traffic both across the region and between other regions;
- Network utilities, such as telecommunications and radio communications both across the region and between regions;
- The effects of animal and plant pests;
- The effects of weather events including flooding, droughts and snow;
- The downstream effects of the damming of rivers for the generation of electricity;
- The discharge of contaminants into the air or water or onto land;
- The monitoring of environmental variables across the region and across the country.

All of the resource issues considered within this Policy Statement experience some form of cross boundary issue.

In such cases, the community or area that is affected generally has little or no control over that activity because it occurs outside their administrative area. Recognition of the actual and potential transfer of adverse effects between areas is required to enable the sustainable management of the entire region. Establishing processes between local authorities in order to deal with those cross boundary issues is required.

15.2 Roles of Different Agencies

All agencies exercising functions, powers or duties under the Resource Management Act have a responsibility to consider cross boundary issues.

15.2.1 Central Government

The Minister for the Environment has the ability to develop national policy statements for, amongst other things, anything which affects or potentially affects more than one region. The Minister of Conservation has to prepare the New Zealand Coastal Policy Statement, a national policy statement that covers the coastal environment, which states policies for the use of the entire coastal space.

15.2.2 Otago Regional Council

The Otago Regional Council must show the processes it will use to deal with issues which cross local authority boundaries and issues between territorial authorities or between regions in this Policy Statement and any regional plan it develops.

15.2.3 Territorial Local Authorities

Otago's city and district councils must show the processes they will use to deal with issues which cross territorial boundaries.

15.3 Issue

	Explanation	Objective	Policies	See Also Other Issues
<p>15.3.1¹ Activities or processes originating from outside a district or region can adversely affect that district or region.</p>	<p>The effects of an activity or natural process are not always constrained to the area in which it originates. Where those effects cross administrative boundaries into an adjacent district or region, they are termed cross boundary issues. In such cases, the community or area that is affected generally has little or no control over that activity because it occurs outside their administrative area. Recognition of the actual and potential transfer of adverse effects between areas is required in order to sustainably manage the entire region. Establishing processes between local authorities in order to deal with those cross boundary issues is required.</p> <p>The significant cross boundary resource issues associated with elements of Otago’s environment are identified in the individual chapters of this Policy Statement.</p>	<p>15.4.1</p>	<p>15.5.1 15.5.2</p>	<p>All Issues: Manawhenua / Land /Water Air /Coast Built Environment Biota /Natural Hazards Energy /Wastes Monitoring and Review</p>

¹ Superseded by PORPS 14 January 2019 (Issue 1.2)

15.4 Objective

15.4.1² To ensure that cross boundary issues are identified, agreed to and are dealt with in an efficient and effective manner.

Explanation and Principal Reasons for Adopting

Agreement between authorities on what the important cross boundary issues are is required before they can be addressed. Once identified, they need to be dealt with to ensure that the adverse effects of those issues are avoided, remedied or mitigated.

Policies

**15.5.1
15.5.2**

See Also Other Objectives

**All Objectives:
Manawhenua /Land /Water
Air /Coast /Built Environment
Biota /Natural Hazards /Energy
Wastes /Monitoring And
Review**

² Superseded by PORPS 14 January 2019 (Objective 1.2)

15.5 Policies

	Explanation and Principal Reasons for Adopting	Methods	See Also Other Policies
15.5.1³ To establish and maintain effective processes for identifying and dealing with cross boundary issues.	Because issues that cross administrative boundaries are beyond the control of the affected local authority, processes are required that provide for effective communication and consultation between the affected authority and the authority where the activity or process originates. The aim of the processes is to avoid, remedy or mitigate the adverse effects associated with the cross boundary issue. The issue may involve an activity which crosses the boundary line, and the area that the activity occurs in, or which it has an effect over.	15.6.1 15.6.2 15.6.3 15.6.4	All Policies: Manawhenua /Land /Water Air /Coast /Built Environment Biota /Natural Hazards /Energy Wastes /Monitoring And Review
15.5.2⁴ To encourage coordinated planning of activities among agencies.	Coordination of effort and planning between local authorities will help in minimising the adverse effects of cross boundary issues. It is important for managing activities such as road transport and telecommunications services which require consistency of treatment across boundaries.	15.6.1 15.6.2 15.6.3 15.6.4	All Policies: Manawhenua /Land /Water Air /Coast /Built Environment Biota /Natural Hazards /Energy Wastes /Monitoring And Review

³ Superseded by PORPS 14 January 2019 (Policy 1.2.1 Integrated resource management)

⁴ Superseded by PORPS 14 January 2019 (Policy 1.2.1 Integrated resource management)

15.6 Methods

In order to achieve the outcomes of the policies, every agency with responsibilities under the Resource Management Act 1991 should where appropriate:

15.6.1 Promote and encourage the development of protocols with adjacent territorial local authorities and regional councils for resolving cross boundary issues.

15.6.2 Consult with all agencies having responsibilities for the sustainable management of aspects of Otago's environment.

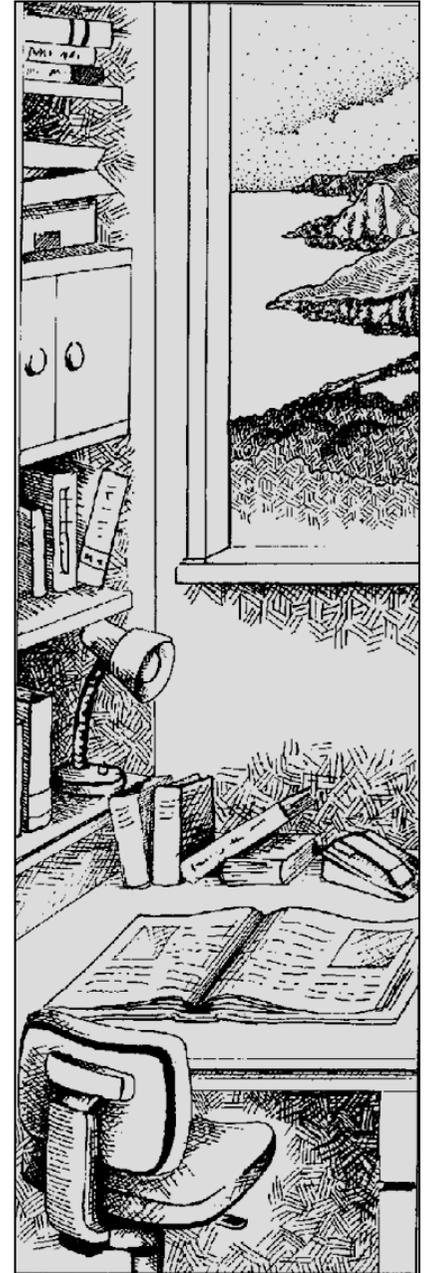
15.6.3 Promote and encourage joint working groups, joint council committees and other joint approaches between appropriate territorial local authorities and regional councils to consider cross boundary issues.

15.6.4 Combine with appropriate territorial local authorities and regional councils in jointly processing resource consent applications that cross administrative boundaries.

Explanation and Principal Reasons for Adopting

Processes to resolve cross boundary issues will be based on consultation and communication between Otago's local authorities and with adjacent local authorities. Various approaches employing joint groups, committees or other means can be used to facilitate the consideration and decision making between different authorities over issues that cross their boundaries.

Appendices



Appendix A: Maori Terms and Phrases

Atua	God	Papakaika	Settlement
Hapu	Subtribe, extended whanau	Papatipu	Maori land
Hukawai	Melt water	Papatipu Whenua	Ancestral lands
Inaka	Whitebait, colour of whitebait as in pounamu	Papatuanuku	Earth Mother
Inaka pounamu	Pale greenstone	Pingao	Fibrous plant used for weaving
Iwi	Tribe	Rahui	Restrictions
Kai Tahu	Descendants of Tahu, the tribe	Rakinui	Sky Father
Kai Tahu whanui	The large family of Kai Tahu	Rangatiratanga	Chieftainship or authority
Kaitiaki	Guardians	Repo Raupo	Wetlands, and swamps
Kaitiakitanga	Guardianship	Runanga	Local representative groups or community system of organisation
Kohatu	Stone	Tane	Deity of the forests
Kohatu Taoka	Treasured stone resources	Tangaroa	Deity of the sea
Kohanga	Reseeding areas for shellfish	Taoka	All things highly prized, including treasures, property, a resource or resources or even a person (same as taonga)
Koiwi Tangata	Unidentified Maori skeletal remains	Taoka raranga	Prized cultural resource used in weaving, flax, pingao
Koputai	Traditional name for Port Chalmers	Tapu	Sacred
Kotahitanga	Oneness	Tauraka Waka	Canoe landing sites
Mahika Kai	Places where food is procured or produced	Te Waipounamu	A traditional name for the South Island
Mahika mataitai	Places where sea food has been traditionally gathered	Te Waka O Aoraki	One of the earliest names applied to the South Island
Mana	Authority or influence or prestige	Ti Kouka	Cabbage trees
Manawhenua	Those with rangatiratanga for a particular area of land or district	Tikanga Maori	The correct way of doing things, according to custom
Manuhaea	Lake Hawea (site of settlement)	Timatanga	Creation tradition related to “in the beginning of time”
Marae	Courtyard or meeting place	Tuaki	Cockle
Mauka	Mountains	Tuhituhi Nehera	Rock drawing sites
Mauri	Life force	Tupapaku	Human corpse
Muru	Confiscate		
Otakou	Kaitahu settlement on Otago Peninsula		
Otepoti	Dunedin		
Pa	Village or fortified village		
Pa Tawhito	Ancient Pa sites		

Turangawaewae	Place of belonging through ancestral rights, linked to land
Urupa	Burial places
Utu	Cost
Waahi Ana	Important cave areas.
Waahi Kohatu	Rock formations
Waahi Rakau	Areas of important trees
Waahi Raranga	Sources of weaving material
Waahi	Place
Waahi Paripari	Cliff areas
Waahi Taoka	Treasured resources
Waahi Tapu	Sacred places
Waahi Tohu	Locators and their names within the landscape
Wai	Water
Wai ki tai	Coastal waters
Wai ki uta	Inland waters
Wai Kino	Polluted water
Wai Maori	Important fresh water areas
Wai Mataitai	Important estuarine waters
Wai Mate	Poor quality water
Wai Puna	Springs
Wai Tohi	Ceremonial use
Wai whakaheke	
tupapaku	Places where water burial was practised
Waiora	Area of water used for healing
Wairua	Life principle
Whakaheke	Cast away
Whakapapa	Genealogy or family tree
Whakatauki	Proverb
Whanau	Family
Whanui	Large or extended
Whenua	Land
Whenua Papakaika	Settlements on Maori land
Whenua Papatipu	Ancestral land

Appendix B: Glossary

Terms marked with an * are terms defined by Section 2 of the Resource Management Act 1991.

Abstraction

In relation to a water body means the taking of water from that water body.

Aesthetic Value

A value associated with the visual quality or the appreciation of the inherent visual quality of an element in the built or natural environment.

Agenda 21

The published outcomes of the United Nations Conference on Environment and Development held in Rio De Janeiro, Brazil, between 3-14 June 1992.

Alluvial Material

Silt, sand, gravel and boulder material deposited by flowing water on flood plains and in river beds as a result of alluvial processes.

Air

The mixture of gases enveloping the earth and forming the atmosphere.

Ambient

In the context of air quality, it refers to the surrounding air or atmosphere.

Amenity Values*

Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

Anticipated Environmental Result

The intended result or outcome on the environment as a consequence of implementing the policies and methods.

Archaeological Site

Any place that

(a) Either

- (i) Was associated with human activity that occurred before 1900; or
- (ii) Is a site of the wreck of any vessel where that wreck occurred before 1900; and

(b) Is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand.

Best Practicable Option*

In relation to a discharge of a contaminant or an emission of noise, means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to:

- (a) The nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects; and
- (b) The financial implications, and the effects on the environment, of that option when compared with other options; and
- (c) The current state of technical knowledge and the likelihood that the option can be successfully applied.

Biodiversity

The variability among living organisms from all sources including, among other things, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems.

Biogas

Energy produced by the anaerobic digestion of organic material, which can be used as a fuel.

Biological Control

The use of living organisms as agents for the active management of other organisms.

Biota

All living components of the environment, excluding humans.

Board of Enquiry*

A board of inquiry appointed under section 146 to consider an application for a resource consent or a board of enquiry appointed under section 46.

Built Environment

Those man-made facilities and structures, including urban environments and their associated amenity values, that are utilised by Otago's communities for their social, economic and cultural well being, and the relationships that exist between them.

Catchment

The total area from which a single water body collects surface and subsurface runoff.

Coastal Environment

The coastal marine area, as well as land and river components within which activities directly affect, or are affected by, matters occurring in the coastal marine area.

Coastal Marine Area*

The foreshore, seabed and coastal water, and the air space above the water

- (a) Of which the seaward boundary is the outer limits of the territorial sea.
- (b) Of which the landward boundary is the line of mean high water springs, except that where that line crosses a river, the landward boundary at that point shall be whichever is the lesser of:
 - (i) One kilometre upstream from the mouth of the river; or
 - (ii) The point upstream that is calculated by multiplying the width of the river mouth by 5.

Cogeneration

The simultaneous or sequential production of two or more forms of useful energy from a single primary energy source.

Conditions*

In relation to plans and resource consents, includes terms, standards, restrictions, and prohibitions.

Consultation

See Section 1.12.

Contaminant*

Includes any substance (including gases, liquids, solids and micro-organisms) or energy (excluding noise) or heat, that either by itself or in combination with the same, similar, or other substances, energy or heat:

- (a) When discharged into water, changes or is likely to change the physical, chemical or biological condition of water; or
- (b) When discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged.

Discharge*

Includes emit, deposit and allow to escape.

Ecosystem

A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.

Effect

Section 3 of the Resource Management Act defines the term effect as including:

- (a) Any positive or adverse effect; and
- (b) Any temporary or permanent effect; and
- (c) Any past, present, or future effect; and
- (d) Any cumulative effect which arises over time or in combination with other effects - regardless of the scale, intensity, duration or frequency of the effect, and also includes -
- (e) Any potential effect of high probability; and
- (f) Any potential effect of low probability which has a high potential impact.

Energy Conservation

Reducing energy use in order to conserve the source from which the energy was produced.

Energy Efficiency

Producing the desired energy result in the most effective and efficient way with application of the best available technology.

Environment*

Includes:

- (a) Ecosystems and their constituent parts, including people and communities; and
- (b) All natural and physical resources; and
- (c) Amenity values; and

- (d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters.

Erosion

The processes of the wearing away of the land surface by natural agents and the transport of the material that results.

Estuary

A broad tidal area associated with a river where there is a mixing of saline and fresh water.

Eutrophication

Process by which water (usually freshwater) becomes rich in nutrients, causing excessive plant growth which kills animal life by deprivation of oxygen.

Fauna

All the animal life of a given place or time.

Flora

All the plant life of a given place or time.

Foreshore*

Any land covered and uncovered by the flow and ebb of the tide at mean spring tides and, in relation to any such land that forms part of the bed of a river, does not include any area that is not part of the coastal marine area.

Fresh Water*

All water except coastal water and geothermal water.

Greenhouse Gases

Gases in the earth's lower atmosphere (eg. CO₂ methane, nitrous oxide) that cause the global "greenhouse" effect. This is a natural effect that traps heat in the atmosphere near the earth's surface.

Groundwater

Water that occupies or moves through pores, cavities, cracks and other spaces in crustal rocks.

Habitat

The place or type of site where an organism or ecological community naturally occurs.

Hazardous Substances

Any substance:

(a) With one or more of the following intrinsic properties:

- (i) Explosives;
- (ii) Flammability;
- (iii) A capacity to oxidise;
- (iv) Corrosiveness;
- (v) Toxicity (both acute and chronic);
- (vi) Ecotoxicity, with or without bioaccumulation; or

(b) Which on contact with air or water (other than air or water where the temperature or pressure has been artificially increased or decreased) generates a substance with any one or more of the properties specified in paragraph (a) of this definition.

Healthy Communities

The concept of healthy communities refers to the health promotion action guidelines from the Ottawa Charter. This was developed at the first International Conference on Health Promotion held in Ottawa in 1986 under the auspices of the World Health Organisation.

Heritage Site

Any place or object of special cultural, architectural, historical, scientific, ecological or other interest, or of special significance to the tangata whenua for spiritual, cultural or historical reason.

High Class Soils

Soils that are capable of being used intensively to produce a wide variety of plants including horticultural crops. This definition requires good soil and other resource features that in combination are capable of producing a wide range of crops. It does not include areas that may be suited to one or two specialist crops, largely due to the climate rather than soil quality.

Indigenous Species

A native species of New Zealand.

Infrastructure

Those built structures necessary for operating and supplying essential utilities and services to the community including, but not limited to, facilities for the distribution or transmission of natural or manufactured fuel, telecommunications and radiocommunications facilities, facilities for the transmission and distribution of electricity, facilities for the distribution of water for supply purposes, drainage and sewage reticulation schemes, facilities for land, air or rail transport, and airport facilities (including approach control facilities).

Instream Values

Those uses or values of rivers and streams that are derived from within the river system itself and include those associated with freshwater ecology and recreational, scenic, aesthetic, intrinsic and educational uses.

Intractable Wastes

Substances which cannot be treated by physical, chemical, or biological means, or for which treatment is possible but impractical because of incompletely developed technology, cost or danger, or because the technology does not yet exist in New Zealand.

Intrinsic Values*

In relation to ecosystems, means those aspects of ecosystems and their constituent parts which have value in their own right, including:

- (a) Their biological and genetic diversity; and
- (b) The essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience.

Issue

A matter of concern to the region's community regarding activities affecting some aspect of natural and physical resources and the environment of the region. These matters are addressed in the Regional Policy Statement as either significant resource management issues of the region or as resource management issues of significance to iwi.

Iwi Resource Management Plans

Such plans provide iwi with the vehicle to express their resource management needs and expectations, and how authorities may help achieve these needs. They are a basis from which consultation can occur. Regional and territorial authorities must have regard to relevant planning documents prepared or recognised by iwi authorities.

Iwi Authority*

The authority which represents an iwi and which is recognised by that iwi as having authority to do so.
(Note that the Te Runanga o Ngai Tahu Act 1996 granted iwi authority status for Te Runanga o Ngai Tahu.)

Kaitiakitanga*

The exercise of guardianship; and, in relation to a resource, includes the ethic of stewardship based on the nature of the resource itself.

Lake*

A body of fresh water which is entirely or nearly surrounded by land.

Land*

Includes land covered by water and the air space above land.

Land Drainage

The act of taking off or diverting water from the land by artificial channels, pipes or other means.

Landuse Capability Classes

Landuse Capability classes define land units based on their capacity for permanent sustained production. This capacity depends largely on the physical qualities of the soil and the environment. Such factors include altitude, slope, geology, soil type, vegetation, and erosion. The Land Resource Inventory worksheets were prepared by the former Ministry of Works and Development and published by the former National Water and Soil Conservation Organisation (NWASCO).

Landfill

A waste disposal site used for the controlled deposit of solid wastes onto or into the land.

Landscape Feature

Any portion of land that, because of its character, physical form, cultural associations, intrinsic or amenity value or other value, or visual appeal, is regarded as of special interest by the community.

Leachate

Liquid effluent from Landfills.

Local Authority

A term that collectively describes regional councils, city councils, and district councils.

Mean High Water Springs (MHWS)

The average line of spring high tide.

Method of Implementation

The practical action by which a policy is implemented.

MW

Megawatt or one million watts. One megawatt is enough power to supply the peak electricity needs of roughly 500 houses.

Natural and Physical Resources*

Includes land, water, air, soil, minerals and energy, all forms of plants and animals (whether native to New Zealand or introduced), and all structures.

Natural Hazard*

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

Noise*

Includes vibration.

Non-point Source Discharge

Runoff or leachate from land, onto or into land, air, a water body or the sea.

Objective

The desired result, end state, situation or condition that is aimed for.

Ozone Layer

Layer of gaseous ozone in the stratosphere that protects life on Earth by filtering out harmful, ultra violet radiation from the sun.

Person*

Includes the Crown, a corporation sole, and also a body of persons, whether corporate or unincorporate.

Point Source Discharge

A discharge from a specific and identifiable source, onto or into land, air, a water body or the sea.

Policy

The course of action to achieve the objective.

Policy Statement*

A regional policy statement.

Primary Production

The unprocessed product of any form of farming, forestry, aquaculture, viticulture, horticulture etc, and any collection or harvesting of wildlife.

Regional Land Transport Strategy

A document prepared by the Regional Council under the Transit New Zealand Amendment Act 1992.

Riparian Margins

A strip of land adjacent to a water body which is frequently moist, and which generally extends from the perceived change in contour of the flood plain to the water body itself.

River*

A continually or intermittently flowing body of fresh water; and includes a stream and modified watercourse; but does not include any artificial watercourse (including an irrigation canal, water supply race, canal for the supply of water for electricity power generation, and farm drainage canal).

Soil Degradation

A change in soil properties that causes a long-term decline of productivity. Includes soil erosion, chemical contamination, and physical and biological changes to topsoil and subsoil, and topsoil compaction, loss of permeability, loss of fertility, increasing acidity, loss of organic matter and declining biological activity.

Structure*

Any building, equipment, device, or other facility made by people and which is fixed to land; and includes any raft.

Territorial Local Authority

A term that collectively describes city councils and district councils, but not regional councils.

The Act

In this Regional Policy Statement, reference to “the Act” means the Resource Management Act 1991.

Unauthorised Practices

Those practices that do not have the necessary resource consent, are not provided for by a regional or district plan, or are in breach of any resource consent condition.

Water Body*

Fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area.

Wetland*

Includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions.

Appendix C: Part II of the Resource Management Act 1991

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.

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.

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.

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).

Partially Operative Otago Regional Policy Statement 2019



Mō tātou, ā, mō kā uri ā muri ake nei

**For us and for the generations
that come after us**

2019

Partially Operative Otago Regional Policy Statement 2019

Approval

The Otago Regional Council by resolution dated 12 December 2018, approved and made operative the Partially Operative Otago Regional Policy Statement 2019 contained herein*, pursuant to the powers and authorities vested in it by the First Schedule of the Resource Management Act 1991.

This approval becomes operative on 14 January 2019.

The common seal of the Otago Regional Council was hereto affixed in the presence of:

Stephen Woodhead
Chairman

Gretchen Robertson
Deputy Chairwoman

**The following provisions are the subject of court proceedings and are not made operative:*

- *All provisions and explanatory material in chapter 3: Otago has high quality natural resources and ecosystems*
- *Issue 5.3*
- *Policy 5.3.4 Mineral and petroleum exploration extraction and processing*
- *Policy 5.4.6 Offsetting for indigenous biological diversity*
- *Policy 5.4.8 Adverse effects from mineral and petroleum exploration extraction and processing*
- *Method 2.1.3*
- *Method 2.2.6*
- *Method 3.1.3 a., g., h., and i.*
- *Method 3.1.6*
- *Method 3.1.10*
- *Method 3.1.12*
- *Method 4.1.3*
- *Method 4.1.4*
- *Method 4.1.9*
- *Method 4.2.1 to 4.2.7*
- *Method 5.1.2*

- *Method 5.2 Research*
- *Method 5.3 State of Environment Reporting*
- *Method 5.4.2*
- *Method 6.5.1 a.v.*
- *Method 6.9 Waste and hazardous substances*
- *Method 7.1.1*
- *Method 7.1.3*
- *Method 8: Funding*
- *Method 9.1.5 a. and f.*
- *Method 9.2.1*
- *Method 9.2.2*
- *Method 9.2.3*
- *Method 9.2.4*
- *AER 3.1*
- *AER 3.2*
- *AER 3.3*
- *AER 3.4*
- *AER 3.5*
- *AER 3.6*
- *Schedule 3*
- *Schedule 4*
- *Glossary: Biodiversity offsets*
- *Glossary: Highly valued natural features, landscapes and seascapes*
- *Glossary: Wetland*

Chairman's Foreword

*If your time to you is worth savin'
Then you better start swimmin' or you'll sink like a stone
For the times they are a-changin'
- Bob Dylan, 1963*

One of Dylan's critics said the classic "The Times They Are A-Changin'" was out of date as soon as it was written. Time shows otherwise; the pace of change only increases year by year.

This partially operative Otago Regional Policy Statement will help Otago keep pace. Regional policy statements are significant planning tools; overarching documents that provide direction to district plans and other resource management plans. This is a key document for creating a sustainable and prosperous future together.

The first Regional Policy Statement for Otago has been operative since 1998. A lot has changed in that time. Technology has fundamentally changed the way the world operates, in ways both exciting and confronting. Population growth, the state of our water, and climate change are poised to impact on the things we most treasure about life in Otago.

Over the last five years, along with Otago's takata whenua, local communities and stakeholders, this second Otago Regional Policy Statement has been crafted to fit today's Otago and a joint vision for the future.

Throughout the process, the proposed Otago Regional Policy Statement has retained a point of difference from other similar documents around New Zealand. The unique 5 chapter structure puts Otago's distinctive, beautiful, and valuable natural resources at the root of all we do, and recognises the golden thread of kaitiakitaka woven through all resource management. Integration is placed front and centre as the keystone for sustainable management that meets our many and varied needs and aspirations.

We've been through submissions, deliberations, and appeals; despite this, some parts of the proposed Otago Regional Policy Statement review are still unsettled. However, there are also some significant parts that have been agreed on. We want to act now, so that tomorrow's Otago is being shaped by the voices of today's communities.

So, we're taking the step of making the proposed Otago Regional Policy Statement partially operative. This means that we will live with some of the new and some of the old for a while, until the remaining parts of the proposed Statement are agreed.

This lets our most recent thinking about managing Otago's resources be part of district and regional plan processes, and begin to shape Otago's future. In my foreword to the notified version of the proposed Otago Regional Policy Statement, I said we want to look beyond the problems we face in resource management to the kind of Otago our community want, and will be proud to pass on to those who come after us. There's no better time to start than now.

Thank you to the staff, councillors, stakeholders and community members who have been involved with bringing the proposed Otago Regional Policy Statement to this point. It's time to start swimmin'.

Stephen Woodhead
Chairman
Otago Regional Council

Contents

Chairman’s Foreword.....	i
PART A Introduction.....	1
Overview.....	1
The Otago Region	1
Statutory Framework Diagram	2
Map of Otago.....	3
Kai Tahu – The Treaty Partner	4
Principles of the Treaty.....	4
Partnership	4
Expression of Te Tiriti o Waitangi	4
Kai Tahu	5
Mana Whenua in Otago.....	7
RPS Framework.....	8
Part A: Introduction	9
Part B: Objectives and Policies	9
Part C: Implementation	9
Part D: Schedules and Appendices	9
Part B Chapter 1 Resource management in Otago is integrated.....	10
Chapter overview.....	10
Objective 1.1 Otago’s resources are used sustainably to promote economic, social, and cultural wellbeing for its people and communities	11
Issue	11
Policy 1.1.1 Economic Wellbeing.....	11
Policy 1.1.2 Social and cultural wellbeing and health and safety.....	11
Principal Reasons and Explanation	12
Objective 1.2 Recognise and provide for the integrated management of natural and physical resources to support the wellbeing of people and communities in Otago	13
Issue	13
Policy 1.2.1 Integrated resource management	13
Principal Reasons and Explanation.....	14
Part B Chapter 2 Kāi Tahu Values and interests are recognised and Kaitiakitaka is expressed	15
Chapter Overview	15
Objective 2.1 The principles of Te Tiriti o Waitangi are taken into account in resource management processes and decisions	16
Issue	16
Policy 2.1.1 Treaty Obligations	16
Policy 2.1.2 Treaty Principles.....	16
Principal Reasons and Explanation	17
Objective 2.2 Kāi Tahu values, interests and customary resources are recognised and provided for.....	18
Issue	18

Policy 2.2.1 Kāi Tahu wellbeing	18
Policy 2.2.2 Recognising sites of cultural significance	18
Policy 2.2.3 Wāhi tūpuna and associated sites	19
Policy 2.2.4 Sustainable use of Māori land	19
Principal Reasons and Explanation	20
Part B Chapter 4 Communities in Otago are resilient, safe and healthy	21
Chapter Overview	21
Objective 4.1 Risks that natural hazards pose to Otago’s communities are minimised	24
Issue	24
Policy 4.1.1 Identifying natural hazards.....	24
Policy 4.1.2 Natural hazard likelihood	24
Policy 4.1.3 Natural hazard consequence.....	25
Policy 4.1.4 Assessing activities for natural hazard risk.....	25
Policy 4.1.5 Natural hazard risk	26
Policy 4.1.6 Minimising increase in natural hazard risk.....	27
Policy 4.1.7 Reducing existing natural hazard risk.....	28
Policy 4.1.8 Precautionary approach to natural hazard risk.....	28
Policy 4.1.9 Protecting features and systems that provide hazard mitigation.....	29
Policy 4.1.10 Mitigating natural hazards	29
Policy 4.1.11 Hard protection structures.....	30
Policy 4.1.12 Lifeline utilities and facilities for essential or emergency services	30
Policy 4.1.13 Hazard mitigation measures, lifeline utilities, and essential and emergency services	30
Principal Reasons and Explanation	31
Objective 4.2 Otago’s communities are prepared for and able to adapt to the effects of climate change.....	32
Issue	32
Policy 4.2.1 Sea level rise	32
Policy 4.2.2 Climate change	32
Principal Reasons and Explanation	33
Objective 4.3 Infrastructure is managed and developed in a sustainable way	34
Issue	34
Policy 4.3.1 Managing infrastructure activities	34
Policy 4.3.2 Nationally and regionally significant infrastructure	35
Policy 4.3.3 Functional needs of infrastructure that has national or regional significance	35
Policy 4.3.4 Adverse effects of nationally and regionally significant infrastructure	35
Policy 4.3.5 Protecting infrastructure with national or regional significance	36
Policy 4.3.6 The National Grid	37
Principal Reasons and Explanation	38
Objective 4.4 Energy resources and supplies are secure, reliable and sustainable	39
Issue	39
Policy 4.4.1 Renewable electricity generation	39
Policy 4.4.2 Small and community scale renewable electricity generation	39

Policy 4.4.3 Protecting existing renewable electricity generation	40
Policy 4.4.4 Efficient transport of electricity	40
Policy 4.4.5 Electricity distribution infrastructure	40
Policy 4.4.6 Energy efficient transport	41
Policy 4.4.7 Fuels	42
Principal Reasons and Explanation	42
Objective 4.5 Urban growth and development is well designed, occurs in a strategic and coordinated way, and integrates effectively with adjoining urban and rural environments.....	43
Issue	43
Policy 4.5.1 Providing for urban growth and development	43
Policy 4.5.2 Integrating infrastructure with land use	44
Policy 4.5.3 Urban design	45
Policy 4.5.4 Low impact design.....	45
Policy 4.5.5 Warmer buildings.....	46
Policy 4.5.6 Designing for public access	46
Principal Reasons and Explanation.....	46
Objective 4.6 Hazardous substances, contaminated land and waste materials do not harm human health or the quality of the environment in Otago	47
Issue	47
Policy 4.6.1 Hazardous substances.....	47
Policy 4.6.2 Use, storage and disposal of hazardous substances	47
Policy 4.6.3 Hazardous substance collection, disposal and recycling.....	48
Policy 4.6.4 Identifying contaminated land.....	48
Policy 4.6.5 Managing contaminated land	48
Policy 4.6.6 Waste management.....	49
Policy 4.6.7 Waste minimisation responses	49
Policy 4.6.8 Waste storage, recycling, recovery, treatment and disposal.....	49
Policy 4.6.9 New Contaminated land.....	50
Principal Reasons and Explanation	50
Part B Chapter 5 People are able to use and enjoy Otago’s natural and built environment	52
Chapter Overview	52
Objective 5.1 Public access to areas of value to the community is maintained or enhanced	54
Issue	54
Policy 5.1.1 Public Access	54
Principal Reasons and Explanation.....	54
Objective 5.2 Historic heritage resources are recognised and contribute to the region’s character and sense of identity.....	56
Issue	56
Policy 5.2.1 Recognising historic heritage	56
Policy 5.2.2 Identifying historic heritage	56
Policy 5.2.3 Managing historic heritage	57
Principal Reasons and Explanation.....	57
Objective 5.3 Sufficient land is managed and protected for economic production.....	58

Policy 5.3.1 Rural activities	58
Policy 5.3.2 Distribution of commercial activities	58
Policy 5.3.3 Industrial land.....	59
Policy 5.3.5 Tourism and outdoor recreation.....	59
Principal Reasons and Explanation	59
Objective 5.4 Adverse effects of using and enjoying Otago’s natural and physical resources are minimised	60
Issue	60
Policy 5.4.1 Offensive or objectionable discharges	60
Policy 5.4.2 Adaptive management approach.....	60
Policy 5.4.3 Precautionary approach to adverse effects	61
Policy 5.4.4 Emission standards.....	61
Policy 5.4.5 Pest plants and animals.....	61
Policy 5.4.7 Offsetting for air quality	62
Policy 5.4.9 Activities in the Coastal Marine Area	62
Policy 5.4.10 Managing land use change in dry catchments.....	63
Principal Reasons and Explanation	63
Part C Implementation	65
Roles and Responsibilities.....	65
Methods.....	66
Method 1: Kāi Tahu Relationships	66
Method 2: Regional, City and District Council Relationships	66
Method 3: Regional Plans	67
Method 4: City and District Plans	69
Method 5: Research, Monitoring and Reporting.....	72
Method 6: Non-RMA Strategies and Plans	73
Method 7: Education and Information.....	74
Method 9: Advocacy and Facilitation	75
Monitoring Procedures and Anticipated Environmental Results	77
Monitoring procedures.....	77
Anticipated Environmental Results	77
Part D Schedules and Appendices.....	80
Schedule 1 Kāi Tahu values & interests	80
Schedule 1A Kāi Tahu values	80
Schedule 1B Interests specific to particular papatipu rūnaka.....	83
Schedule 1C Wāhi tupuna.....	86
Schedule 1D Māori land reserves	89
Schedule 2 Statutory acknowledgement areas	94
Schedule 5 Criteria for the identification of historic heritage values.....	95
Schedule 6 Housing capacity	97
Appendix 1 Te Tiriti o Waitangi.....	98
Glossary	100
User Index	110

Abbreviations

AER	Anticipated Environmental Result
ORC	Otago Regional Council
RMA	Resource Management Act 1991
RPS	Regional Policy Statement
Treaty	Te Tiriti o Waitangi

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 the sustainable integrated management of resources, identifying regionally significant issues, the objectives and policies that direct how natural and physical resources are to be managed and setting out how this will be implemented by the region's local authorities.

The RPS gives effect to the RMA and higher order planning documents, and takes into account relevant iwi authority planning documents. Regional and district plans must give effect to the RPS, as illustrated in the Statutory Framework Diagram.

The RPS has been developed to identify 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 provides for the values of all resources, people and communities. The RPS guides how these values are to be balanced in the sustainable management of natural and physical resources.

The Otago Region

Otago is 12% of New Zealand's land area and at about 32,000 km² is the second largest region in New Zealand. It stretches 480 km 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 wide 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 dry 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. Māori archaeological sites, hydro lakes, tailings and bridges from the gold rush era, pastoral landscapes, and historical architecture all provide evidence of long, rich and varied human occupation.

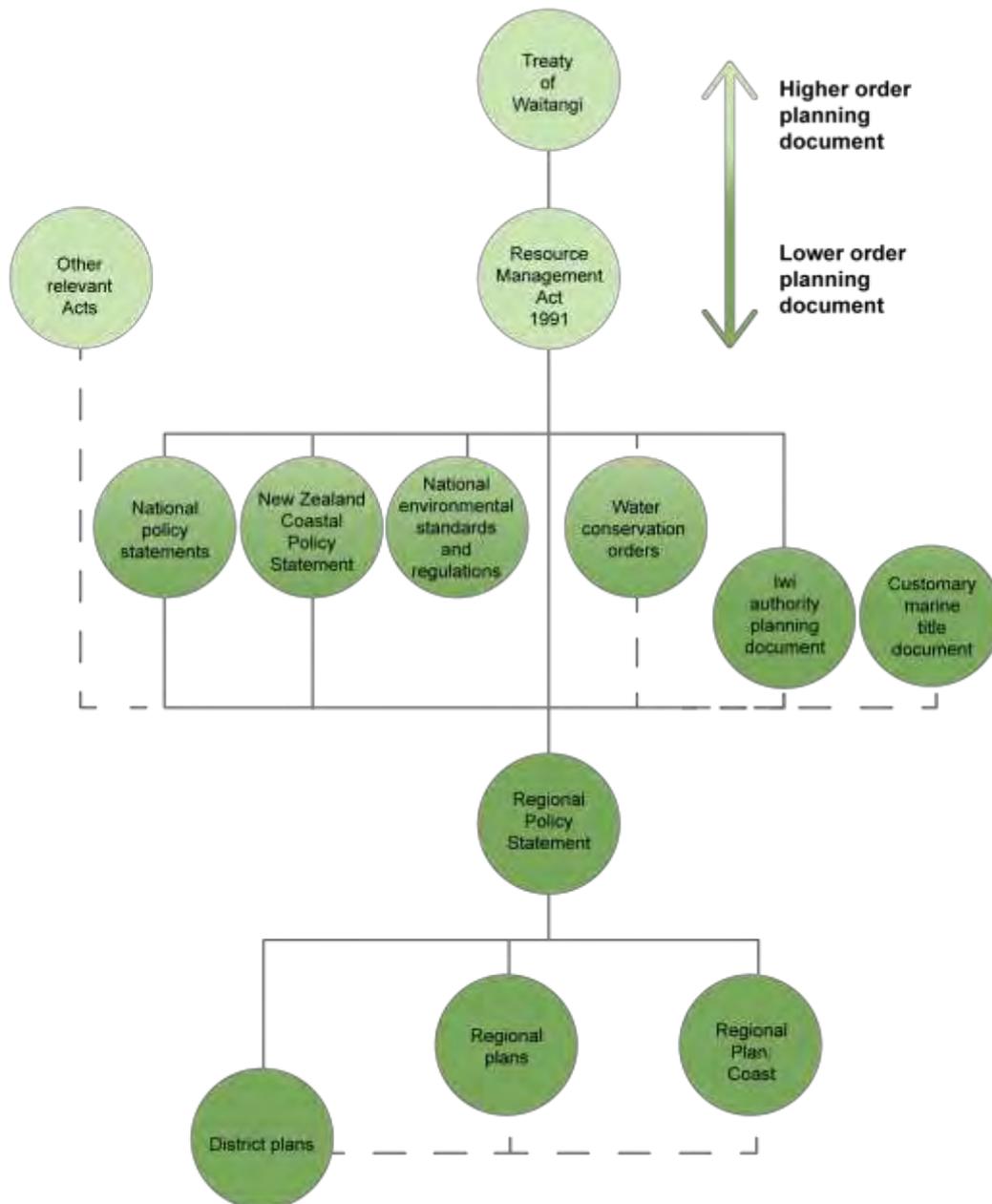
Introduced species have become a valued part of the environment in some cases, and troublesome pests in others.

Agriculture is the basis of Otago's economic development and continues to be a major source of revenue, as does mining for gold and other minerals and education. Tourism now provides more

than a quarter of Otago's Gross Domestic Product which is the highest proportion for any region in New Zealand.

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

Statutory Framework Diagram



Map of Otago



Otago comprises five territorial authorities: Dunedin City Council, and Clutha, Central Otago, Queenstown Lakes and Waitaki District Councils. Waitaki District straddles both the Otago and Canterbury regions. The region includes the coastal environment offshore to 12 nautical miles.

Kāi Tahu¹ – The Treaty Partner

Te Tiriti o Waitangi, the Treaty of Waitangi, is the founding document for New Zealand, the basis upon which the partnership between Māori and the Crown was established. The Kāi Tahu rākatira Karetai and Korako signed the Treaty at Pukekura, Tairaroa 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 tribe and the Crown irrevocably to a mutual agreement which imposed responsibilities on both signatories.

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 rākatirataka/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 rākatira, should prevail if there is ambiguity.

Partnership

The 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. Partnership between the ORC and Kāi Tahu embodies the principles of the Treaty of Waitangi in decision making and local environmental management.

Expression of Te Tiriti o Waitangi

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

Matters of particular interest to Kāi Tahu include:

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 Ngāi 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.

- Recognising the rights and interests of Kāi Tahu to be involved in natural and resource management processes.
- 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.

Kāi Tahu²

Kāi Tahu are takata whenua of the Otago region. Waitaha were the first people of Te Waipounamu, the South Island. Led by Rākaihautū, they explored and settled Te Waipounamu, and their exploits are reflected in enduring place names and histories across the motu. Waitaha were followed by the arrival of Kāti Māmoe and finally Kāi Tahu. 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.

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).

Te Rūnanga o Ngāi Tahu encourages consultation with the papatipu rūnaka and takes into account the views of nga rūnaka when determining its own position. The four Otago rūnaka are Te Rūnanga o Moeraki, Kati Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Otakou, and Hokonui Rūnanga.

The interests of these rūnaka are given in more detail in Schedule 1B. They share an interest in South Otago and the inland lakes and mountains with the Southland papatipu rimaka.

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

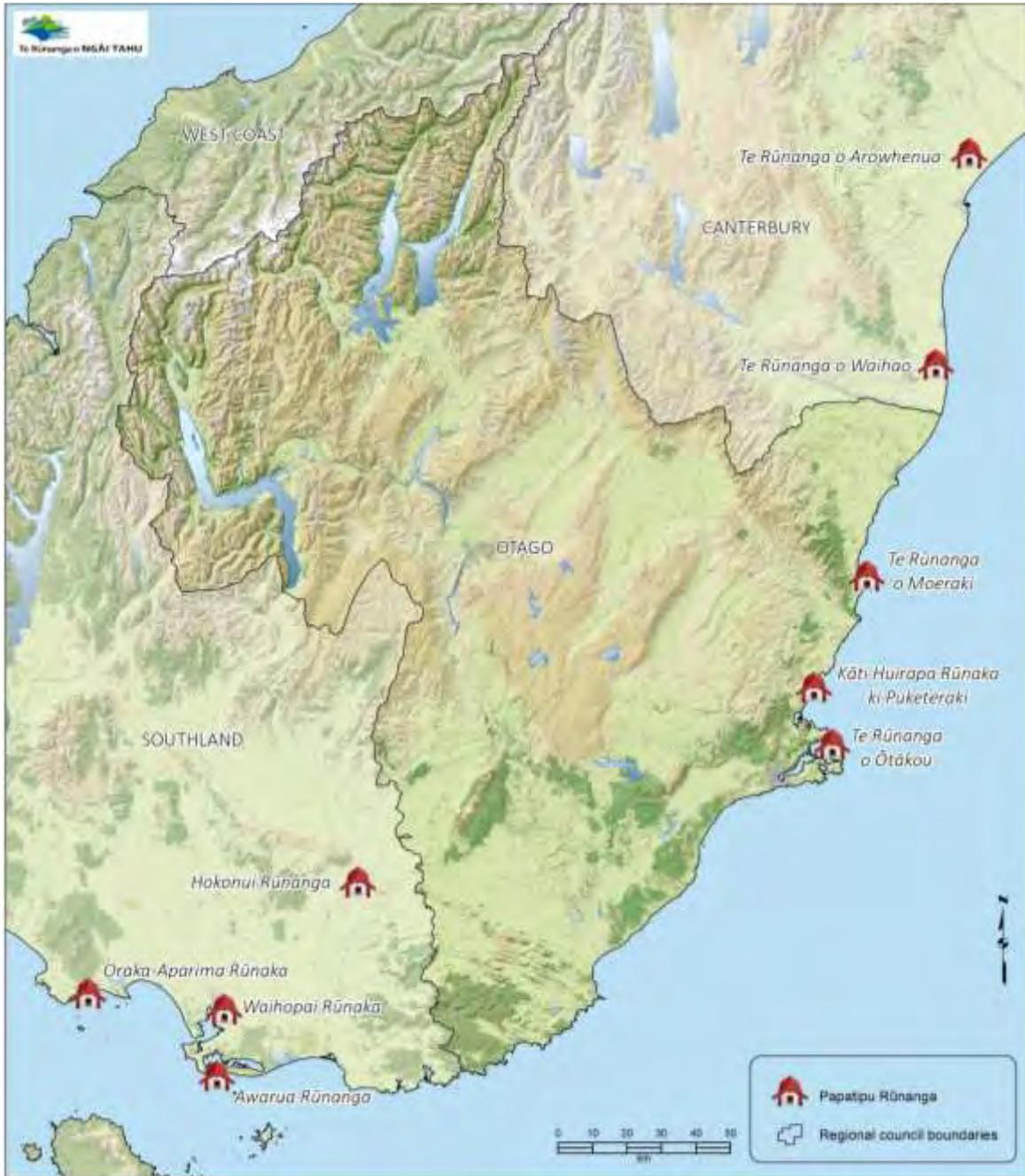
² Changed by Environment Court consent order – 28 June 2018

Otago is also home to Māori from other iwi, hapū, and 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 takata whenua.

In 1998, the Ngāi Tahu Claims Settlement Act 1998 was enacted to settle historical Ngāi Tahu claims against the Crown. This Act identifies some taoka species, establishes tōpuni, statutory acknowledgements, dual place names and nohoaka sites. These 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 papatipu rūnaka consultancy services, Kāi Tahu Ki Otago Ltd, representing the Otago rūnaka, and Te Ao Marama Inc, representing the Southland rūnaka, provide a first point of contact and facilitate Kāi Tahu engagement in resource management processes.

Mana whenua in Otago

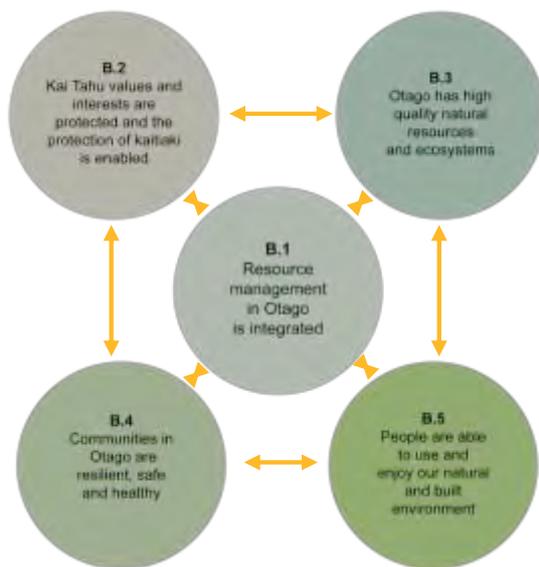


RPS Framework

Part A: Introduction

Overview
The Otago Region
Kāi Tahu – The Treaty Partner
RPS Framework

Part B: Objectives and Policies



Each chapter is ordered as follows:
Introduction
Objective
Related issue
Policies
Methods
Principal Reasons and Explanations

Part C: Implementation

Roles and responsibilities
Methods
Anticipated Environmental Results

Part D: Schedules and Appendices

Schedules 1 – 6
Appendix
Glossary
User Index

Five outcomes are sought in managing the region's natural and physical resources.

All provisions of the RPS must be considered together. The outcomes inter-relate, and no hierarchy exists between them.

These outcomes provide the framework for sustainable, integrated management of resource use for us and for the generations that come after us - *Mō tātou, ā, mō kā uri ā muri ake nei*.

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

Part A: Introduction

This explains the RPS context and purpose.

Part B: Objectives and Policies

The five outcomes form the chapter headings of Part B: Objectives and Policies.

Objectives and policies are set out under each chapter, together with the relevant regionally significant issues being addressed and general implementation methods. Schedules provide further detail for specific policies.

The five outcomes are:

1. Resource management in Otago is integrated
2. Kāi Tahu values, and interests are recognised and kaitiakitaka is expressed
3. Otago has high quality natural resources and ecosystems
4. Communities in Otago are resilient, safe and healthy
5. People are able to use and enjoy our natural and built environment

Part C: Implementation

Part C: Implementation details the methods and procedures that will be used by local authorities to give effect to the objectives and policies of the RPS. This includes identifying the division of roles and responsibilities under the RMA, as well as monitoring, reporting and other methods to achieve the objectives of the RPS.

This section also contains the anticipated environmental results from implementing the RPS policies and methods.

Part D: Schedules and Appendices

The schedules provide additional detail supporting RPS policies. The Appendix provides the wording of Te Tiriti o Waitangi in Te Reo and English. A glossary and user index are provided for ease of use.

PART B Chapter 1 Resource management in Otago is integrated

This first chapter recognises that the different parts of the natural and physical environment are interconnected. The integrated management of natural and physical resources and human values is essential to safeguard the life-supporting capacity of the environment and enable the social, cultural, and economic wellbeing of all people and communities.

Chapter overview:

Objective 1.1³

Otago's resources are used sustainably to promote economic, social, and cultural wellbeing for its people and communities Page

Policy 1.1.1⁴ Economic wellbeing 11

Policy 1.1.2⁵ Social and cultural wellbeing and health and safety 11

Objective 1.2⁶

Recognise and provide for the integrated management of natural and physical resources to support the wellbeing of people and communities in Otago. Page

Policy 1.2.1⁷ Integrated resource management 13

³ Changed by Environment Court consent order – 28 June 2018

⁴ Changed by Environment Court consent order – 28 June 2018

⁵ Changed by Environment Court consent order – 28 June 2018

⁶ Changed by Environment Court consent order – 28 June 2018

⁷ Changed by Environment Court consent order – 28 June 2018

Objective 1.1⁸ Otago’s resources are used sustainably to promote economic, social, and cultural wellbeing for its people and communities

Issue

The social and economic wellbeing of Otago’s communities depends on use and development of natural and physical resources.

Loss or degradation of resources can diminish their intrinsic values and constrains opportunities for use and development now and into the future.

Some of Otago’s resources are nationally or regionally important for their natural values and economic potential and so warrant careful management.

Policy 1.1.1⁹ Economic wellbeing

Provide for the economic wellbeing of Otago’s people and communities by enabling the resilient and sustainable use and development of natural and physical resources.

Method 2: **Regional, City and District Council Relationships**
Method 2.1, Method 2.2

Method 3: **Regional Plans**
Method 3.1

Method 4: **City and District Plans**
Method 4.1

Policy 1.1.2¹⁰ Social and cultural wellbeing and health and safety

Provide for the social and cultural wellbeing and health and safety of Otago’s people and communities when undertaking the subdivision, use, development and protection of natural and physical resources by all of the following:

- a) Recognising and providing for Kāi Tahu values;
- b) Taking into account the values of other cultures;
- c) Taking into account the diverse needs of Otago’s people and communities;
- d) Avoiding significant adverse effects of activities on human health;
- e) Promoting community resilience and the need to secure resources for the reasonable needs for human wellbeing;

⁸ Changed by Environment Court consent order – 28 June 2018

⁹ Changed by Environment Court consent order – 28 June 2018

¹⁰ Changed by Environment Court consent order – 28 June 2018

f) Promoting good quality and accessible infrastructure and public services.

Method 1: Kāi Tahu Relationships
Method 1.1, Method 1.2

Method 2: Regional, City and District Council Relationships
Method 2.1, Method 2.2

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

Method 9: Advocacy and Facilitation
Method 9.1.2 g

Principal Reasons and Explanation

Sustainable management under the RMA includes enabling social, economic and cultural wellbeing for present and future generations. Resource management decisions need to recognise that individual and community wellbeing depends on use, development and protection of natural and physical resources.

Objective 1.2¹¹ Recognise and provide for the integrated management of natural and physical resources to support the wellbeing of people and communities in Otago

Issue:

Natural and physical resources are interconnected, complex and should be managed in an integrated, sustainable, consistent and effective way because the use of one resource may adversely affect another. Inefficient and ineffective responses or unexpected adverse effects can occur when activities affecting a resource are undertaken by different resource users, governed by different legislation, or administered by different local authorities. Plans need to address diverse and conflicting interests.

Policy 1.2.1¹² Integrated resource management

Achieve integrated management of Otago's natural and physical resources, by all of the following:

- a) Coordinating the management of interconnected natural and physical resources;
- b) Taking into account the impacts of management of one natural or physical resource on the values of another, or on the environment;
- c) Recognising that the value and function of a natural or physical resource may extend beyond the immediate, or directly adjacent, area of interest;
- d) Ensuring that resource management approaches across administrative boundaries are consistent and complementary;
- e) Ensuring that effects of activities on the whole of a natural or physical resource are considered when that resource is managed as subunits.
- f) Managing adverse effects of activities to give effect to the objectives and policies of the Regional Policy Statement.
- g) Promoting healthy ecosystems and ecosystem services;
- h) Promoting methods that reduce or negate the risk of exceeding sustainable resource limits.

Method 2: Regional, City and District Council Relationships

Method 2.1, Method 2.2

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1

Method 9: Advocacy and Facilitation

¹¹ Changed by Environment Court consent order – 28 June 2018

¹² Changed by Environment Court consent order – 28 June 2018

Method 9.2

Principal Reasons and Explanation:

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

The management of natural and physical resources needs to be integrated to ensure that resource management decisions are consistent, take account of the linkages between all parts of the environment and recognise and provide for the diversity of different interests and values associated with resources.

PART B Chapter 2 Kāi Tahu values and interests are recognised and kaitiakitaka is expressed

He taura whiri kotahi mai anō te kopunga tai nō i 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 that the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga, is recognised and provided for and that the principles of the Treaty of Waitangi are taken into account. In the spirit of this partnership, and the Treaty principles, the RPS seeks to create the terms for engaging with Kāi Tahu closely in resource management.

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

Chapter overview:

Objective 2.1		
The principles of Te Tiriti o Waitangi are taken into account in resource management processes and decisions.		Page
Policy 2.1.1	Treaty obligations	16
Policy 2.1.2	Treaty principles	16
Objective 2.2		
Kāi Tahu values, interests and customary resources are recognised and provided for.		Page
Policy 2.2.1	Kāi Tahu wellbeing	18
Policy 2.2.2	Recognising sites of cultural significance	18
Policy 2.2.3	Wāhi tūpuna and associated sites	19
Policy 2.2.4	Sustainable use of Māori land	19

Objective 2.1 The principles of Te Tiriti o Waitangi are taken into account in resource management processes and decisions

Issue:

The principles of Te Tiriti o Waitangi are broad concepts that need further exploration when applied to specific circumstances.

Effective planning tools and processes are required to give effect to the Treaty relationship between Kāi Tahu and local authorities in accordance with Part 2 of the RMA

Policy 2.1.1 Treaty obligations

Promote awareness and understanding of the obligations of local authorities in regard to the principles of Te Tiriti o Waitangi, tikaka Māori and kaupapa Māori.

Method 1: Kāi Tahu Relationships

Method 1.1, Method 1.2, Method 1.3, Method 1.4

Policy 2.1.2 Treaty principles

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

- a) Recognising Kāi Tahu's status as a Treaty partner; and
- b) Involving Kāi Tahu in resource management processes implementation;
- c) Taking into account Kāi Tahu values in resource management decision-making processes and implementation;
- d) Recognising and providing for the relationship of Kāi Tahu's culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taoka;
- e) Ensuring Kāi Tahu have the ability to:
 - i. Identify their relationship with their ancestral lands, water, sites, wāhi tapu, and other taoka;
 - ii. Determine how best to express that relationship;
- f) Having particular regard to the exercise of kaitiakitaka;
- g) Ensuring that district and regional plans:
 - i. Give effect to the Ngāi Tahu Claims Settlement Act 1998;
 - ii. Recognise and provide for statutory acknowledgement areas in Schedule 2;
 - iii. Provide for other areas in Otago that are recognised as significant to Kāi Tahu;
- h) Taking into account iwi management plans.

Method 1: Kāi Tahu Relationships

Method 1.1, Method 1.2, Method 1.3, Method 1.4

Method 2: Regional, City and District Council Relationships

Method 2.2.4

Method 3:	Regional Plans Method 3.1.1, Method 3.1.2
Method 4:	City and District Plans Method 4.1.11, Method 4.1.12, Method 4.1.14, Method 4.2.3, Method 4.2.5, Method 4.2.9
Method 5:	Research, Monitoring and Reporting Method 5.1.4
Method 8:	Funding Method 8.1

Principal Reasons and Explanation:

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, with particular regard to kaitiakitaka.

Local authorities need to incorporate these principles into their decision making to ensure they are properly applied, and to account for the effects of resource management decisions on Kāi Tahu values, including those described in iwi resource management plans.

Section 8 of the RMA requires local authorities to take into account the principles of Te Tiriti o Waitangi. Deliberate measures need to be taken to ensure the principles are properly understood and taken into account. The principles are broadly expressed, so a measure of flexibility is needed.

In particular exercising kaitiakitaka requires the ability to participate in resource management processes and implementation.

A partnership approach which involves Kāi Tahu and considers their values and interests in decision making processes, enables the principles, including kaitiakitaka, to be taken into account in an appropriately flexible way.

Objective 2.2 Kāi Tahu values, interests and customary resources are recognised and provided for

Issue:

The mauri and wairua of some places, sites, resources and the values of cultural, spiritual or historic significance to Kāi Tahu have often been destroyed or degraded.

In some instances it has been difficult for Kāi Tahu to use and develop Māori land for the purposes for which it was originally granted.

Policy 2.2.1¹³ Kāi Tahu wellbeing

Manage the natural environment to support Kāi Tahu wellbeing by all of the following:

- a) Recognising and providing for their customary uses and cultural values in Schedules 1A and B; and,
- b) Safe-guarding the life-supporting capacity of natural resources.

Method 1: Kāi Tahu Relationships
Method 1.1, Method 1.2, Method 1.3, Method 1.4

Method 2: Regional, City and District Council Relationships
Method 2.2.4

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1, Method 4.2

Policy 2.2.2¹⁴ Recognising sites of cultural significance

Recognise and provide for the protection of wāhi tūpuna, by all of the following:

- a) Avoiding significant adverse effects on those values that contribute to the identified wāhi tūpuna being significant;
- b) Avoiding, remedying, or mitigating other adverse effects on the identified wāhi tūpuna;
- c) Managing the identified wāhi tūpuna sites in a culturally appropriate manner.

Method 1: Kāi Tahu Relationships
Method 1.1, Method 1.2, Method 1.2.1, Method 1.3, Method 1.4

¹³ Changed by Environment Court consent order – 28 June 2018

¹⁴ Changed by Environment Court consent order – 28 June 2018

Method 2: Regional, City and District Council Relationships
Method 2.2.4, Method 2.2.2

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1, Method 4.2

Method 5: Research, Monitoring and Reporting
Method 5.1.4

Policy 2.2.3 Wāhi tūpuna and associated sites

Enable Kāi Tahu relationships with wāhi tūpuna by all of the following:

- a) Recognising that relationships between sites of cultural significance are an important element of wāhi tūpuna;
- b) Recognising and using traditional place names.

Method 2: Regional, City and District Council Relationships
Method 2.2.4

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1, Method 4.2

Method 9: Advocacy and Facilitation
Method 9.2.8 b.

Policy 2.2.4 Sustainable use of Māori land

Enable Kāi Tahu to protect, develop and use land and resources 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) Avoiding, remedying or mitigating other adverse effects.

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1.12

Principal Reasons and Explanation:

In managing natural and physical resources, local authorities need to recognise Kāi Tahu values, take into account Kāi Tahu plans, and the exercise of their customary rights.

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.

The exercise of kaitiakitaka requires a healthy, functioning natural environment, and recognition of values and sites of significance.

PART B Chapter 4 Communities in Otago are resilient, safe and healthy

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

Ensuring communities develop in a way which helps to prepare for, respond, recover, and adapt to disruptions will help make communities resilient. The sustainable management of renewable energy sources, the use of hazardous substances, and management of waste materials will, in the long term, also help ensure communities' resilience.

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

Chapter overview:

Objective 4.1		
Risk that natural hazards pose to Otago's communities are minimised.		Page
Policy 4.1.1	Identifying natural hazards	24
Policy 4.1.2	Natural hazard likelihood	24
Policy 4.1.3	Natural hazard consequence	25
Policy 4.1.4	Assessing activities for natural hazard risk	25
Policy 4.1.5	Natural hazard risk	26
Policy 4.1.6	Minimising increase in natural hazard risk	27
Policy 4.1.7	Reducing existing natural hazard risk	28
Policy 4.1.8	Precautionary approach to natural hazard risk	28
Policy 4.1.9	Protecting features and systems that provide hazard mitigation	29
Policy 4.1.10	Mitigating natural hazards	29
Policy 4.1.11	Hard protection structures	30
Policy 4.1.12	Lifeline utilities and facilities for essential or emergency services	30
Policy 4.1.13	Hazard mitigation measures, lifeline utilities, and essential and emergency services	30
Objective 4.2		
Otago's communities are prepared for and able to adapt to the effects of climate change.		Page
Policy 4.2.1	Sea level rise	32

Policy 4.2.2	Climate change	32
Objective 4.3		
Infrastructure is managed and developed in a sustainable way.		Page
Policy 4.3.1	Managing infrastructure activities	34
Policy 4.3.2	Nationally and regionally significant infrastructure	35
Policy 4.3.3	Functional needs of infrastructure that has national or regional significance	35
Policy 4.3.4	Adverse effects of nationally and regionally significant infrastructure	35
Policy 4.3.5	Protecting infrastructure with national or regional significance	36
Policy 4.3.6	The National Grid	37
Objective 4.4		
Energy resources and supplies are secure, reliable and sustainable.		Page
Policy 4.4.1	Renewable electricity generation	39
Policy 4.4.2	Small and community scale renewable electricity generation	39
Policy 4.4.3	Protecting existing renewable electricity generation	40
Policy 4.4.4	Efficient transport of electricity	40
Policy 4.4.5	Electricity distribution infrastructure	40
Policy 4.4.6	Energy efficient transport	41
Policy 4.4.7	Fuels	42
Objective 4.5		
Urban growth and development is well designed, occurs in a strategic and coordinated way, and integrates effectively with adjoining urban and rural environments.		Page
Policy 4.5.1	Providing for urban growth and development	43
Policy 4.5.2	Integrating infrastructure with land use	44
Policy 4.5.3	Urban design	45
Policy 4.5.4	Low impact design	45
Policy 4.5.5	Warmer buildings	46
Policy 4.5.6	Designing for public access	46
Objective 4.6		
Hazardous substances, contaminated land and waste materials do not harm human health or the quality of the environment in Otago.		Page
Policy 4.6.1	Hazardous substances	47

Policy 4.6.2	Use, storage and disposal of hazardous substances	47
Policy 4.6.3	Hazardous substance collection, disposal and recycling	48
Policy 4.6.4	Identifying contaminated land	48
Policy 4.6.5	Managing contaminated land	48
Policy 4.6.6	Waste management	49
Policy 4.6.7	Waste minimisation responses	49
Policy 4.6.8	Waste storage, recycling, recovery, treatment and disposal	49
Policy 4.6.9	New Contaminated land	50

Objective 4.1 Risks that natural hazards pose to Otago's communities are minimised

Issue:¹⁵

Natural hazard events, such as flooding and earthquakes, have the potential to injure people and damage property. Natural hazards may be exacerbated by the effects of climate change, which include sea level rise, and greater frequency and intensity of extreme weather events.

It is sometimes difficult and costly for a community to recover from a hazard event.

Policy 4.1.1 Identifying natural hazards

Identify natural hazards that may adversely affect Otago's communities, including hazards of low likelihood and high consequence by considering all of the following:

- 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 2.1, Method 2.2, Method 2.3

Method 4: City and District Plans
Method 4.1.2, Method 4.2.8

Method 5: Research, Monitoring and Reporting
Method 5.2.1, Method 5.2.2

Method 7: Education and Information
Method 7.1.1, Method 7.1.2, Method 7.1.3

Policy 4.1.2 Natural hazard likelihood

Using the best available information, assess the likelihood of natural hazard events occurring, over no less than 100 years.

Method 2: Regional, City and District Council Relationships
Method 2.1, Method 2.2, Method 2.3

¹⁵ Changed by Environment Court consent order – 28 June 2018

Method 3: Regional Plans
Method 3.1.13, Method 3.2.1

Method 4: City and District Plans
Method 4.1.2, Method 4.2.1, Method 4.2.8

Method 5: Research, Monitoring and Reporting
Method 5.2.1, Method 5.2.2

Policy 4.1.3 Natural hazard consequence

Assess the consequences of natural hazard events, by considering all of the following:

- a) The nature of activities in the area;
- b) Individual and community vulnerability;
- c) Impacts on individual and community health and safety;
- d) Impacts on social, cultural and economic wellbeing;
- e) Impacts 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 2.1, Method 2.2, Method 2.3

Method 3: Regional Plans
Method 3.1.13, Method 3.2.1

Method 4: City and District Plans
Method 4.1.2, Method 4.2.1, Method 4.2.8

Method 5: Research, Monitoring and Reporting
Method 5.2.1, Method 5.2.2

Policy 4.1.4¹⁶ Assessing activities for natural hazard risk

Assess activities for natural hazard risk to people, property and communities, by considering all of the following:

- a) The natural hazard risk identified, including residual risk;
- b) Any measures to avoid, remedy or mitigate those risks, including relocation and recovery methods;

¹⁶ Changed by Environment Court consent order – 28 June 2018

- c) The long-term viability and affordability of those measures;
- d) Flow-on effects of the risk to other activities, individuals and communities;
- 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 2.1, Method 2.2, Method 2.3

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1.2, Method 4.2.8

Method 5: Research, Monitoring and Reporting

Method 5.2.1, Method 5.2.2

Method 6: Non RMA Strategies and Plans

Method 6.1.1

Method 7: Education and Information

Method 7.1.1, Method 7.1.2, Method 7.1.3

Policy 4.1.5¹⁷ Natural hazard risk

Manage natural hazard risk to people, property and communities, with particular regard to all of the following:

- a) The risk posed, considering the likelihood and consequences of natural hazard events;
- b) The implications of residual risk;
- 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;
- d) Sensitivity of activities to risk;
- e) The need to encourage system resilience;
- f) The social costs of recovery.

Method 2: Regional, City and District Council Relationships

Method 2.1, Method 2.2, Method 2.3

Method 3: Regional Plans

Method 3.1

¹⁷ Changed by Environment Court consent order – 28 June 2018

- Method 4: City and District Plans**
Method 4.1.2, Method 4.2.8
- Method 6: Non RMA Strategies and Plans**
Method 6.1.1
- Method 7: Education and Information**
Method 7.1.1, Method 7.1.2, Method 7.1.3
- Method 9: Advocacy and Facilitation**
Method 9.1.2, Method 9.1.3, Method 9.2.1

Policy 4.1.6¹⁸ Minimising increase in natural hazard risk

Minimise natural hazard risk to people, communities, property and other aspects of the environment by:

- a) Avoiding activities that result in significant risk from natural hazard;
- b) Enabling activities that result in no or low residual risk from natural hazard;
- c) Avoiding activities that increase risk in areas potentially affected by coastal hazards over at least the next 100 years;
- d) Encouraging the location of infrastructure away from areas of hazard risk where practicable;
- e) Minimising any other risk from natural hazard.

- Method 2: Regional, City and District Council Relationships**
Method 2.1, Method 2.2, Method 2.3
- Method 3: Regional Plans**
Method 3.1
- Method 4: City and District Plans**
Method 4.1.2, Method 4.2.8
- Method 6: Non RMA Strategies and Plans**
Method 6.1.1
- Method 7: Education and Information**
Method 7.1.1, Method 7.1.2, Method 7.1.3
- Method 9: Advocacy and Facilitation**
Method 9.1.2, Method 9.1.3, Method 9.2.1

¹⁸ Changed by Environment Court consent order – 28 June 2018

Policy 4.1.7¹⁹ Reducing existing natural hazard risk

Reduce existing natural hazard risk to people and communities, including by all of the following:

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

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1.2

Method 6: Non RMA Strategies and Plans

Method 6.1.1

Method 7: Education and Information

Method 7.1.1, Method 7.1.2, Method 7.1.3

Method 9: Advocacy and Facilitation

Method 9.1.2, Method 9.1.3, Method 9.2.1

Policy 4.1.8 Precautionary approach to natural hazard risk

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

¹⁹ Changed by Environment Court consent order – 28 June 2018

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1.2

Policy 4.1.9 Protecting features and systems that provide hazard mitigation

Avoid, remedy or mitigate adverse effects on natural or modified features and systems, that contribute to mitigating the effects of both natural hazards and climate change.

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1.2

Policy 4.1.10²⁰ Mitigating natural hazards

Give preference to risk management approaches that reduce the need for hard protection structures or similar engineering interventions, and provide for hard protection structures only when all of the following apply:

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

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1.2

Method 7: Education and Information
Method 7.1.1, Method 7.1.2

Method 9: Advocacy and Facilitation
Method 9.1.2, Method 9.1.3, Method 9.2.1

²⁰ Changed by Environment Court consent order – 28 June 2018

Policy 4.1.11 Hard protection structures

Enable the location of hard protection structures or similar engineering interventions on public land only when either or both of the following apply:

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

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1.2

Method 7: Education and Information
Method 7.1.1, Method 7.1.2

Policy 4.1.12 Lifeline utilities and facilities for essential or emergency services

Locate and 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 9: Advocacy and Facilitation
Method 9.2.3, Method 9.2.4

Policy 4.1.13²¹ Hazard mitigation measures, lifeline utilities, and essential and emergency services

Protect the functional needs of hazard mitigation measures, lifeline utilities, and essential or emergency services, including by all of the following:

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

²¹ Changed by Environment Court consent order – 28 June 2018

- Method 2: Regional, City and District Council Relationships**
Method 2.1, Method 2.2, Method 2.3
- Method 3: Regional Plans**
Method 3.1
- Method 4: City and District Plans**
Method 4.1.2, Method 4.2.8
- Method 6: Non RMA Strategies and Plans**
Method 6.1.1
- Method 9: Advocacy and Facilitation**
Method 9.2.3, Method 9.2.4

Principal Reasons and Explanation:

While many of these events are beyond the control of people and communities, there is a need to reduce their potential impacts on people's safety, health and wellbeing.

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

Natural hazard risks can also be exacerbated by inappropriate subdivision, use and development. Natural hazards should be identified and managed appropriately, so the risk of avoidable social and economic harm to communities is reduced as much as possible.

Objective 4.2²² Otago’s communities are prepared for and able to adapt to the effects of climate change

Issue:

Climate change is creating environmental and economic outcomes that negatively affect the sustainability of natural and physical resources. These include higher sea levels, increased frequency of natural hazard events, and changing distribution of plants and animals. There is significant uncertainty over the rate and scale of change.

National and international policy frameworks have set objectives and guidance for New Zealand to proactively work toward reducing the rate of global warming.

Policy 4.2.1²³ 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) 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, or the most up-to-date national or regional guidance on likely sea level rise.

Method 2: Regional, City and District Council Relationships
Method 2.1, Method 2.2

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

Policy 4.2.2²⁴ Climate change

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

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

²² Changed by Environment Court consent order – 28 June 2018

²³ Changed by Environment Court consent order – 28 June 2018

²⁴ Changed by Environment Court consent order – 28 June 2018

d) Encouraging system resilience.

Method 2: Regional, City and District Council Relationships
Method 2.1, Method 2.2

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

Method 5: Research, Monitoring and Reporting
Method 5.2.1 g. and j.

Method 6: Non RMA Strategies and Plans
Method 6.1.1

Method 7: Education and Information
Method 7.1.1, Method 7.1.2

Method 9: Advocacy and Facilitation
Method 9.1.2, Method 9.1.3

Principal Reasons and Explanation:

Communities need consistent guidance on sea level rise, extreme weather events, and all other adverse effects of climate change to manage those adverse effects.

Climate change is bringing higher sea levels and is increasing the frequency and severity of climate related natural hazards including flooding, landslips, erosion and drought. 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. There may be other adverse effects from climate change that are not yet known. A precautionary approach is required where there is scientific uncertainty.

The effects of climate change will result in social, environmental and economic costs, and in some circumstances benefits. It is prudent that these changes be planned for now, so that the impacts can be reduced.

Objective 4.3 Infrastructure is managed and developed in a sustainable way

Issue:²⁵

Social and economic wellbeing depends on having adequate infrastructure. Failing to provide for its functional needs can result in adverse effects.

Aging and sub-standard infrastructure can present a risk to the community by threatening community resilience and can constrain new infrastructure solutions.

Activities locating in proximity to infrastructure may lead to reverse sensitivity effects on that infrastructure.

Infrastructure may adversely affect other lawfully established activities.

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

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

Policy 4.3.1²⁶ Managing infrastructure activities

Recognise and provide for infrastructure by all of the following:

- a) Protecting and providing for the functional needs of lifeline utilities and essential or emergency services;
- b) Increasing the ability of communities to respond and adapt to emergencies, and disruptive or natural hazard events;
- c) Improving efficiency of natural and physical resource use;
- d) Minimising adverse effects on existing land uses, and natural and physical resources;
- e) Managing other activities to ensure the functional needs of infrastructure are not compromised.

Policies 4.3.2 – 4.3.6 regarding infrastructure that has regional or national significance prevail where there is a conflict with policy 4.3.1.

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1

²⁵ Changed by Environment Court consent order – 6 July 2018

²⁶ Changed by Environment Court consent order – 6 July 2018

Policy 4.3.2²⁷ Nationally and regionally significant infrastructure

Recognise the national and regional significance of all of the following infrastructure:

- a) Renewable electricity generation activities, where they supply the National Grid or local distribution network;
- b) National Grid;
- c) Electricity sub-transmission infrastructure;
- d) Telecommunication and radiocommunication facilities;
- e) Roads classified as being of national or regional importance;
- f) Ports and airports and associated navigation infrastructure;
- g) Defence facilities;
- h) Rail infrastructure;
- i) Municipal infrastructure.

Method 2: Regional, City and District Council Relationships
Method 2.1, Method 2.2

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1, Method 4.1.17, 4.1.18

Method 6: Non RMA Strategies and Plans
Method 6.3.1

Policy 4.3.3²⁸ Functional needs of infrastructure that has national or regional significance

Provide for the functional needs of infrastructure that has regional or national significance, including safety.

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

Policy 4.3.4 Adverse effects of nationally and regionally significant infrastructure

Manage adverse effects of infrastructure that has national or regional significance, by:

- a) Giving preference to avoiding its location in all of the following:
-

²⁷ Changed by Environment Court consent order – 6 July 2018

²⁸ Changed by Environment Court consent order – 6 July 2018

- i. Areas of significant indigenous vegetation and significant habitats of indigenous fauna in the coastal environment;
 - ii. Outstanding natural character in the coastal environment;
 - iii. Outstanding natural features and natural landscapes, including seascapes, in the coastal environment;
 - iv. Areas of significant indigenous vegetation and significant habitats of indigenous fauna beyond the coastal environment;
 - v. Outstanding natural character in areas beyond the coastal environment;
 - vi. Outstanding natural features and landscapes beyond the coastal environment;
 - vii. Outstanding water bodies or wetlands;
 - viii. Places or areas containing historic heritage of regional or national significance;
- b) Where it is not practicable to avoid locating in the areas listed in a) above because of the functional needs of that infrastructure:
- i. Avoid adverse effects on the values that contribute to the significant or outstanding nature of a) i-iii;
 - ii. Avoid significant adverse effects on natural character and natural landscapes in all other areas of the coastal environment
 - iii. Avoid, remedy or mitigate, as necessary, adverse effects in order to maintain the outstanding or significant nature of a) iv-viii;
- c) Avoid, remedy or mitigate, as necessary, adverse effects on highly valued natural features, landscapes and seascapes. in order to maintain their high values;
- d) Avoiding, remedying or mitigating other adverse effects;
- e) Considering offsetting for residual adverse effects on indigenous biological diversity.

Where there is a conflict, Policy 4.3.4 prevails over the policies under Objectives 3.2 (except for policy 3.2.12), 5.2 and Policy 4.3.1.

Method 2: Regional, City and District Council Relationships
Method 2.1, Method 2.2

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

Method 6: Non RMA Strategies and Plans
Method 6.3.1

Method 9: Advocacy and Facilitation
Method 9.1.2

Policy 4.3.5 Protecting infrastructure with national or regional significance

Protect infrastructure with national or regional significance, by all of the following:

- a) Restricting the establishment of activities that may result in reverse sensitivity effects;
- b) Avoiding significant adverse effects on the functional needs of such infrastructure;
- c) Avoiding, remedying or mitigating other adverse effects on the functional needs of such infrastructure;
- d) Protecting infrastructure corridors from activities that are incompatible with the anticipated effects of that infrastructure, now and for the future.

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1, Method 4.1.18

Policy 4.3.6²⁹ The National Grid

Provide for the National Grid by:

- a) Managing activities to the extent reasonably possible to avoid reverse sensitivity effects on the National Grid; and
- b) Identifying corridors for the existing National Grid within which activities and development will be managed to the extent reasonably possible to ensure that the functional needs of the National Grid are not compromised; and
- c) Not allowing existing activities in the identified corridors to intensify in a way that increases their incompatibility with existing National Grid infrastructure.
- d) Manage the adverse effects of new National Grid infrastructure by all of the following:
 - i. recognising there may be some areas in the coastal environment where avoidance of adverse effects is required to protect the identified special values of those areas.
 - ii. seeking to avoid adverse effects on the values of the following:
 - a. Areas of significant indigenous vegetation and significant habitats of indigenous fauna;
 - b. Outstanding natural features, landscapes and seascapes;
 - c. Areas of outstanding natural character;
 - d. Outstanding water bodies or wetlands;
 - e. Places or areas containing historic heritage of regional or national significance.
 - iii. Where it is not practicable to avoid adverse effects on the values of the areas listed in d) ii. above because of the functional needs of the National Grid, remedy or mitigate adverse effects on those values;
 - iv. Avoiding, remedying or mitigating other adverse effects;
 - v. Consider offsetting for residual adverse effects on indigenous biological diversity.

Where there is a conflict, Policy 4.3.6 prevails over the policies under Objectives 3.1, 3.2, 4.3 and 5.2, and over policy 5.4.9.

²⁹ Changed by Environment Court consent order – 6 July 2018

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1

Principal Reasons and Explanation:

It is essential for the economy and the wellbeing and health and safety of communities, that people are serviced by the right infrastructure at the right time and that infrastructure operates efficiently and effectively.

Some infrastructure such as roads, water supply, waste water and storm water is provided by local authorities. Other infrastructure such as energy generation and network utility operation is managed by state owned enterprises, requiring authorities and private companies.

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

It is important to recognise the benefits of this infrastructure to the economy and to community resilience, in addition to managing any adverse effects on natural resources.

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

Objective 4.4³⁰ Energy resources and supplies are secure, reliable 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.

Policy 4.4.1³¹ Renewable electricity generation

Provide for renewable electricity generation activities, by all of the following:

- a) Recognising the benefits associated with those activities;
- b) Recognising the functional needs of those activities;
- c) Recognising the importance of the resource needs of those activities;
- d) Promoting the efficient use of existing structures or facilities; and
- e) Providing for activities associated with the investigation, ~~and~~ identification, and development of potential renewable electricity generation sites and sources.

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1

Method 7: Education and Information

Method 7.1.4

Method 9: Advocacy and Facilitation

Method 9.2.3

Policy 4.4.2 Small and community scale renewable electricity generation

Promote small and community scale renewable electricity generation activities that both:

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

Method 7: Education and Information

Method 7.1.4

Method 9: Advocacy and Facilitation

³⁰ Changed by Environment Court consent order – 28 June 2018

³¹ Changed by Environment Court consent order – 28 June 2018

Method 9.2.3

Policy 4.4.3³² Protecting existing renewable electricity generation

Protect the generation output of existing nationally or regionally significant renewable electricity generation activities, by all of the following:

- a) Recognising their functional needs, including resource needs;
- b) Avoiding, to the extent reasonably practicable, reverse sensitivity effects on their functional needs;
- c) Avoiding, remedying or mitigating adverse effects from other activities on them; except when sub-clause d) applies;
- d) Having particular regard to avoiding, remedying or mitigating adverse effects from new water takes on those which do not have a specified water allocation volume.

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

Policy 4.4.4³³ Efficient transport of electricity

Enable electricity transmission and distribution infrastructure activities that achieve all of the following:

- a) Maintenance or improvement of the security and reliability of electricity supply;
- b) Enhancement of the safety, efficiency and effectiveness of the infrastructure; and
- c) Avoidance, remediation or mitigation of adverse effects from that activity.

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

Policy 4.4.5³⁴ Electricity distribution infrastructure

Recognise and provide for electricity distribution infrastructure, by all of the following:

- a) Recognising the functional needs of electricity distribution activities;
- b) Restricting the establishment of activities that may result in reverse sensitivity effects;
- c) Avoiding, remedying or mitigating adverse effects from other activities on the functional needs of that infrastructure;

³² Changed by Environment Court consent order – 28 June 2018

³³ Changed by Environment Court consent order – 28 June 2018

³⁴ Changed by Environment Court consent order – 28 June 2018

- d) Minimising adverse effects of new and upgraded electricity distribution infrastructure on existing land uses;
- e) Identifying significant electricity distribution infrastructure and managing effects of potentially incompatible activities through methods such as corridors.

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1, 4.1.19

Method 9: Advocacy and Facilitation
Method 9.1

Policy 4.4.6³⁵ Energy efficient transport

Enable energy efficient and sustainable transport for Otago’s communities, by all of the following:

- a) Encouraging the development of compact and well integrated urban areas, to reduce travel needs within those areas;
- b) Ensuring that transport infrastructure in urban areas has good connectivity, both within new urban areas and between new and existing urban areas, by all of the following:
 - i. Placing a high priority on walking, cycling, and public transport, where appropriate;
 - ii. Maximising pedestrian and cycling networks connectivity, and integration with public transport;
 - 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 both:
 - i. Increase freight efficiency; and
 - ii. Foster the uptake of new technologies for more efficient energy uses, and renewable or lower emission transport fuels.
- d) Fostering uptake of public transportation through provision of safe, reliable and well sheltered alternatives to private transport.

Method 2: Regional, City and District Council Relationships
Method 2.1, Method 2.2

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

³⁵ Changed by Environment Court consent order – 28 June 2018

Method 6: Non RMA Strategies and Plans
Method 6.3

Method 9: Advocacy and Facilitation
Method 9.1, Method 9.2.2

Policy 4.4.7³⁶ Fuels

Recognise and provide for reliable and resilient fuel supply chain infrastructure to meet community fuel needs, including facilities for the transition to a lower-carbon future.

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

Principal Reasons and Explanation:

There is a need to encourage renewable energy generation, encourage sustainable energy use and improve energy resilience.

People's social and economic wellbeing, and their health and safety, is dependent on their energy needs being met by a sustainable, reliable and secure supply of energy. Communities rely on a range of renewable energy sources such as hydro, wind and solar generation and non-renewable sources such as oil, gas and coal.

More efficient energy uses, and a greater diversity of energy sources have the potential to increase community resilience while increasing the ability to sustain economic development.

In particular, more efficient or alternative transport fuels, in addition to better planning for access and public transport will provide for a more sustainable and resilient transport system.

³⁶ Changed by Environment Court consent order – 28 June 2018

Objective 4.5³⁷ Urban growth and development is well designed, occurs in a strategic and coordinated way, and integrates effectively with adjoining urban and rural environments

Issue:

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

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

Urban development has not always had regard for the local environment or the needs of the community.

Policy 4.5.1³⁸ Providing for urban growth and development

Provide for urban growth and development in a strategic and co-ordinated way, including by:

- a) Ensuring future urban growth areas are in accordance with any future development strategy for that district.
- b) Monitoring supply and demand of residential, commercial and industrial zoned land;
- c) Ensuring that there is sufficient housing and business land development capacity available in Otago;
- d) Setting minimum targets for sufficient, feasible capacity for housing in high growth urban areas in Schedule 6
- e) Coordinating the development and the extension of urban areas with infrastructure development programmes, to provide infrastructure in an efficient and effective way.
- f) Having particular regard to:
 - i. Providing for rural production activities by minimising adverse effects on significant soils and activities which sustain food production;
 - ii. Minimising competing demands for natural resources;
 - iii. Maintaining high and outstanding natural character in the coastal environment; outstanding natural features, landscapes, and seascapes; and areas of significant indigenous vegetation and significant habitats of indigenous fauna;
 - iv. Maintaining important cultural or historic heritage values;
 - v. Avoiding land with significant risk from natural hazards;
- g) Ensuring efficient use of land;

³⁷ Changed by Environment Court consent order – 28 June 2018

³⁸ Changed by Environment Court consent order – 28 June 2018

- h) Restricting urban growth and development to areas that avoid reverse sensitivity effects unless those effects can be adequately managed;
- i) Requiring the use of low or no emission heating systems where ambient air quality is:
 - i. Below standards for human health; or
 - ii. Vulnerable to degradation given the local climatic and geographical context;
- j) Consolidating existing coastal settlements and coastal urban areas where this will contribute to avoiding or mitigating sprawling or sporadic patterns of settlement and urban growth.

Method 2: Regional, City and District Council Relationships

Method 2.1, Method 2.2

Method 4: City and District Plans

Method 4.1.6, Method 4.1.13, Method 4.2.4, Method 4.2.7, Method 4.2.10

Method 5: Research, Monitoring and Reporting

Method 5.2.3

Method 6: Non RMA Strategies and Plans

Method 6.2

Policy 4.5.2 Integrating infrastructure with land use

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

- a) Recognising and providing for the functional needs of infrastructure;
- b) Locating and designing infrastructure to take into account all of the following:
 - i. Actual and reasonably foreseeable land use change;
 - ii. The current population and projected demographic changes;
 - iii. Actual and reasonably foreseeable change in supply of, and demand for, infrastructure services;
 - iv. Natural and physical resource constraints;
 - v. Effects on the values of natural and physical resources;
 - vi. Co-dependence with other infrastructure;
 - vii. The effects of climate change on the long-term viability of that infrastructure;
 - viii. Natural hazard risk.
- c) Coordinating the design and development of infrastructure with land use change in growth and redevelopment planning.

Method 2: Regional, City and District Council Relationships

Method 2.1, Method 2.2

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1, Method 4.2.4

Method 6: Non RMA Strategies and Plans
Method 6.3.1

Method 7: Education and Information
Method 7.1.4

Method 9: Advocacy and Facilitation
Method 9.1.2

Policy 4.5.3³⁹ Urban design

Design new urban development with regard to:

- a) A resilient, safe and healthy community;
- b) A built form that relates well to its surrounding environment;
- c) Reducing risk from natural hazards;
- d) Good access and connectivity within and between communities;
- e) A sense of cohesion and recognition of community values;
- f) Recognition and celebration of physical and cultural identity, and the historic heritage values of a place;
- g) Areas where people can live, work and play;
- h) A diverse range of housing, commercial, industrial and service activities;
- i) A diverse range of social and cultural opportunities.

Method 4 City and District Plans
Method 4.1

Policy 4.5.4 Low impact design

Encourage the use of low impact design techniques in subdivision and development to reduce demand on stormwater, water and wastewater infrastructure and reduce potential adverse environmental effects.

Method 4: City and District Plans
Method 4.1

Method 7: Education and Information
Method 7.1.4

Method 9: Advocacy and Facilitation
Method 9.1.2, Method 9.1.5

³⁹ Changed by Environment Court consent order – 28 June 2018

Policy 4.5.5 Warmer buildings

Encourage the design of subdivision and development to reduce the adverse effects of the region's colder climate, and higher demand and costs for energy, including maximising passive solar gain.

Method 4: City and District Plans

Method 4.1

Method 7: Education and Information

Method 7.1.4

Method 9: Advocacy and Facilitation

Method 9.1.2, Method 9.1.5 c.

Policy 4.5.6 Designing for public access

Design and maintain public spaces, including streets and open spaces, to meet the reasonable access and mobility needs of all sectors.

Method 4: City and District Plans

Method 4.1.7

Principal Reasons and Explanation:

Well-designed and integrated urban growth, achieves effective and affordable infrastructure, and improves resilience. The best use of the natural and physical resources will reduce the effects of unanticipated growth.

Well planned urban growth and development 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 infrastructure and supports community facilities such as health care and educational facilities. This can also reduce pressure on the surrounding productive and natural environment.

Urban areas that are well designed will improve quality of life, resilience and create more attractive opportunities for business investment.

The quality of the urban environment can affect quality of life and community viability. Built environments that relate well to their surroundings, have easy connectivity access to key services and reflect the distinctive character of their locality make a positive contribution to the community. Poor quality or badly co-ordinated development presents social, environmental, and economic risks.

Integrating the natural environment into urban areas has been shown to achieve multiple benefits. Urban design choices can allow natural processes to continue through and around everyday activities with minimal adverse impact to either.

Objective 4.6 Hazardous substances, contaminated land and waste materials do not harm human health or the quality of the environment in Otago

Issue:

Waste materials, hazardous substances and contaminated land may adversely affect the environment and community health and safety.

Policy 4.6.1 Hazardous substances

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

Method 6: Non RMA Strategies and Plans
Method 6.9

Method 7: Education and Information
Method 7.1.6

Method 9: Advocacy and Facilitation
Method 9.1.2, Method 9.1.4

Policy 4.6.2⁴⁰ Use, storage and disposal of hazardous substances

Manage the use, storage and disposal of hazardous substances, by all of the following:

- a) Providing secure containment for the storage of hazardous substances;
- b) Minimising risk associated with natural hazard events;
- c) Ensuring the health and safety of people;
- d) Avoiding, remedying or mitigating adverse effects on the environment;
- e) Providing for the development of facilities to safely store, transfer, process, handle and dispose of hazardous substances;
- f) Ensuring hazardous substances are treated or disposed of in accordance with the relevant regulatory requirements;
- g) Restricting the location and intensification of activities that may result in reverse sensitivity effects near authorised facilities for hazardous substance bulk storage, treatment or disposal;
- h) Encouraging the use of best management practices.

Method 2: Regional, City and District Council Relationships
Method 2.1, Method 2.2

Method 3: Regional Plans

⁴⁰ Changed by Environment Court consent order – 28 June 2018

Method 3.1

Method 4: City and District Plans

Method 4.1.9

Method 6: Non RMA Strategies and Plans

Method 6.9

Method 7: Education and Information

Method 7.1.6

Method 9: Advocacy and Facilitation

Method 9.1.2, Method 9.1.4

Policy 4.6.3 Hazardous substance collection, disposal and recycling

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

Method 9: Advocacy and Facilitation

Method 9.1.2

Policy 4.6.4 Identifying contaminated land

Identify sites of known or potentially contaminated land in Otago.

Method 5: Research, Monitoring and Reporting

Method 5.2.1 e, Method 5.2.1 k.

Method 7: Education and Information

Method 7.1.3 b.

Policy 4.6.5⁴¹ Managing contaminated land

Ensure contaminated or potentially contaminated land does not pose an unacceptable risk to people and the environment, by:

- a) Assessing and, if required, monitoring contaminant levels and environmental risks;
- b) Protecting human health in accordance with regulatory requirements;
- c) Minimising adverse effects of the contaminants on the environment.

Method 2: Regional, City and District Council Relationships

Method 2.1, Method 2.2

⁴¹ Changed by Environment Court consent order – 28 June 2018

Method 3: Regional Plans
Method 3.1.11

Method 4: City and District Plans
Method 4.2.6

Policy 4.6.6 Waste management

Promote an integrated approach to the management of the use, storage and disposal of waste materials.

Method 6: Non RMA Strategies and Plans
Method 6.9

Method 9: Advocacy and Facilitation
Method 9.1.2 c.

Policy 4.6.7⁴² Waste minimisation responses

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) Treatment; then
- f) Disposing residual waste to a disposal facility.

Method 6: Non RMA Strategies and Plans
Method 6.8

Method 9: Advocacy and Facilitation
Method 9.1.2 c.

Policy 4.6.8⁴³ Waste storage, recycling, recovery, treatment and disposal

Manage the storage, recycling, recovery, treatment and disposal of waste materials by undertaking all of the following:

- a) Providing for the development of facilities and services for the storage, recycling, recovery, treatment and disposal of waste materials;
- b) Ensuring the health and safety of people;

⁴² Changed by Environment Court consent order – 28 June 2018

⁴³ Changed by Environment Court consent order – 28 June 2018

- c) Minimising adverse effects on the environment;
- d) Minimising risk associated with natural hazard events;
- e) Restricting the location of activities that may result in reverse sensitivity effects near waste management facilities and services.

Method 2: Regional, City and District Council Relationships

Method 2.1, Method 2.2

Method 3: Regional Plans

Method 3.1.12

Method 4: City and District Plans

Method 4.1.10

Method 5: Research, Monitoring and Reporting

Method 5.2.1 f.

Method 6: Non RMA Strategies and Plans

Method 6.8, Method 6.9

Method 7: Education and Information

Method 7.1.5

Method 9: Advocacy and Facilitation

Method 9.1.5

Policy 4.6.9⁴⁴ New Contaminated land

Avoid the creation of new contaminated land or, where this is not practicable, minimise adverse effects on the environment.

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1

Principal Reasons and Explanation:

Resources need to be carefully used to minimise the material disposed of as waste.

Waste materials and hazardous substances need to be carefully managed to avoid creating

⁴⁴ Changed by Environment Court consent order – 28 June 2018

environmental problems or adversely affecting human health.

Hazardous substances can be dangerous when not managed appropriately but are essential components of some activities. Hazardous substances and their waste should also be managed to avoid creating environmental problems or adversely affecting human health, in accordance with regulatory requirements.

PART B Chapter 5 People are able to use and enjoy Otago's natural and built environment

The use of natural and physical resources underpins community, cultural, and economic wellbeing. Due to the importance of natural resources to wellbeing and the dynamic and interconnected nature of the environment, the sustainable management of resources requires consideration of the adverse effects of resource use on the environment and on other resource users.

This fifth chapter builds on the previous ones by enabling the use of the natural and physical environment for enjoyment and making a living, while ensuring that resources are sustainably managed for conflicting or incompatible uses.

Chapter overview:

Objective 5.1		
Public access to areas of value to the community is maintained or enhanced.		Page
Policy 5.1.1	Public access	54
Objective 5.2		
Historic heritage resources are recognised and contribute to the region's character and sense of identity.		Page
Policy 5.2.1	Recognising historic heritage	56
Policy 5.2.2	Identifying historic heritage	56
Policy 5.2.3	Managing historic heritage	57
Objective 5.3		
Sufficient land is managed and protected for economic production.		Page
Policy 5.3.1	Rural activities	58
Policy 5.3.2	Distribution of commercial activities	58
Policy 5.3.3	Industrial land	59
Policy 5.3.5	Tourism and outdoor recreation	59
Objective 5.4		
Adverse effects of using and enjoying Otago's natural and physical resources are minimised.		Page
Policy 5.4.1	Offensive or objectionable discharges	60
Policy 5.4.2	Adaptive management approach	60
Policy 5.4.3	Precautionary approach to adverse effects	61
Policy 5.4.4	Emission standards	61
Policy 5.4.5	Pest plants and animals	61
Policy 5.4.7	Offsetting for air quality	62
Policy 5.4.9	Activities in the Coastal Marine Area	62

Policy 5.4.10

Managing land use change in dry catchments

63

Objective 5.1 Public access to areas of value to the community is maintained or enhanced

Issue:

Public access to areas of value to the community is sometimes limited or inappropriate.

Policy 5.1.1⁴⁵ Public access

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

- a) Protecting public health and safety;
- b) Protecting the natural heritage and ecosystem values of sensitive natural areas or habitats;
- c) Protecting identified sites and values associated with historic heritage or cultural significance to Kāi Tahu;
- d) Ensuring a level of security consistent with the operational requirements of a lawfully established activity.

Method 1: Kāi Tahu Relationships

Method 1.2

Method 2: Regional, City and District Council Relationships

Method 2.1, Method 2.2

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1.14, Method 4.2.9

Method 8: Funding

Method 8.1.1

Method 9: Advocacy and Facilitation

Method 9.2.2 e, 9.2.8 b.

Principal Reasons and Explanation:

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

⁴⁵ Changed by Environment Court consent order – 28 June 2018

The opportunities subdivision and development create to improve access to the natural environment or to limit access to more sensitive places should be utilised.

The ability to access the natural environment and areas of cultural and historic significance is highly valued by the community and contributes significantly to the 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.

Objective 5.2 Historic heritage resources are recognised and contribute to the region's character and sense of identity

Issue:

Subdivision, use, and development may risk damage to Otago's rich historic heritage.

Policy 5.2.1 Recognising historic heritage

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

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

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

Policy 5.2.2 Identifying historic heritage

Identify historic heritage places and areas of regional or national significance, using the attributes in Schedule 5.

Method 3: Regional Plans
Method 3.1.10

Method 4: City and District Plans
Method 4.1.11

Method 5: Research, Monitoring and Reporting
Method 5.1.4

Method 9: Advocacy and Facilitation
Method 9.1.3 e.

Policy 5.2.3 Managing historic heritage

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

- a) Recognising that some places or areas are known or may contain archaeological sites, wāhi tapu or wāhi taoka which could be of significant historic or cultural value;
- b) Applying these provisions immediately upon discovery of such previously unidentified archaeological sites or areas, wāhi tapu or wāhi taoka;
- c) Avoiding adverse effects on those values that contribute to the area or place being of regional or national significance;
- d) Minimising significant adverse effects on other values of areas and places of historic heritage;
- e) Remedying when adverse effects on other values cannot be avoided;
- f) Mitigating when adverse effects on other values cannot be avoided or remedied;
- g) Encouraging the integration of historic heritage values into new activities;
- h) Enabling adaptive reuse or upgrade of historic heritage places and areas where historic heritage values can be maintained.

Method 1: Kāi Tahu Relationships

Method 1.2

Method 2: Regional, City and District Council Relationships

Method 2.1, Method 2.2

Method 3: Regional Plans

Method 3.1.10

Method 4: City and District Plans

Method 4.1.11, Method 4.2.3, Method 4.2.5

Method 8: Funding

Method 8.1.1

Method 9: Advocacy and Facilitation

Method 9.1.5 b

Principal Reasons and Explanation:

In the RMA, protection of historic heritage from inappropriate activities is a matter of national importance.

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

The use of common criteria identifying historic heritage provides a more efficient and consistent approach across the region, while allowing local variation.

Objective 5.3 Sufficient land is managed and protected for economic production

Policy 5.3.1⁴⁶ Rural activities

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

- a) Enabling primary production and other rural activities that support that production;
- b) Providing for mineral exploration, extraction and processing;
- c) Minimising the loss of significant soils;
- d) Restricting the establishment of incompatible activities in rural areas that are likely to lead to reverse sensitivity effects;
- e) Minimising the subdivision of productive rural land into smaller lots that may result in a loss of its productive capacity or productive efficiency;
- f) Providing for other activities that have a functional need to locate in rural areas.

Method 4: City and District Plans
Method 4.1.6, Method 4.2.4

Method 5: Research, Monitoring and Reporting
Method 5.1.3 c, Method 5.2.1 d

Method 7: Education and Information
Method 7.1.2 f

Policy 5.3.2 Distribution of commercial activities

Manage the distribution of commercial activities by:

- a) Enabling a wide variety of commercial, social and cultural activities in central business districts, and town and commercial centres;
- b) Enabling smaller commercial centres to service local community needs;
- c) Restricting commercial activities outside of a) and b) when such activities are likely to undermine the vibrancy and viability of those centres;
- d) Encouraging the adaptive reuse of existing buildings.

Method 4: City and District Plans
Method 4.1

Method 9: Advocacy and Facilitation
Method 9.1.5

⁴⁶ Changed by Environment Court consent order – 5 September 2018

Policy 5.3.3 Industrial land

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

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

Method 4: City and District Plans

Method 4.1

Policy 5.3.5⁴⁷ Tourism and outdoor recreation

Recognise the social and economic value of some forms of outdoor recreation and tourism having access to, and being located within, outstanding natural features and landscapes.

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1

Principal Reasons and Explanation:

Some degree of spatial separation of incompatible activities and control over land use change is needed to ensure efficient use of land and continuing economic viability.

The use of land for productive activity underpins the economy of the region. Opportunities for economic growth and development need to be provided for by recognising and managing 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.

⁴⁷ Changed by Environment Court consent order – 28 June 2018

Objective 5.4 Adverse effects of using and enjoying Otago's natural and physical resources are minimised

Issue:

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

Ecosystems, significant areas of biological diversity and outstanding landscapes are under pressure from the direct effects of human activities, as well as indirect effects, including the spread of multiple pest species.

Policy 5.4.1⁴⁸ Offensive or objectionable discharges

Manage offensive or objectionable discharges to land, water and air by:

- a) Avoiding significant adverse effects of those discharges;
- b) Avoiding significant adverse effects of discharges of human or animal waste directly, or in close proximity, to water or mahika kai sites;
- c) Avoiding, remedying or mitigating other adverse effects of those discharges.

Method 3: Regional Plans

Method 3.1

Method 4: City and District Plans

Method 4.1.5

Method 7: Education and Information

Method 7.1.2

Policy 5.4.2 Adaptive management approach

Apply an adaptive management approach, to avoid, remedy or mitigate actual and potential adverse effects that might arise and that can be remedied before they become irreversible, by both:

- 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 3.1

Method 4: City and District Plans

Method 4.1

⁴⁸ Changed by Environment Court consent order – 6 July 2018

Policy 5.4.3⁴⁹ Precautionary approach to adverse effects

Apply a precautionary approach to activities where adverse effects may be uncertain, not able to be determined, or poorly understood but are potentially significant or irreversible.

Method 3: Regional Plans
Method 3.1

Method 4: City and District Plans
Method 4.1

Policy 5.4.4 Emission standards

Apply emission standards within airsheds, to achieve ambient air quality that supports good human health.

Method 3: Regional Plans
Method 3.1.9

Method 5: Research, Monitoring and Reporting
Method 5.1.3 a

Method 6: Non RMA Strategies and Plans
Method 6.2

Policy 5.4.5⁵⁰ Pest plants and animals

Control the adverse effects of pest species, prevent their introduction, reduce their spread and enable the removal and destruction of material for biosecurity purposes, to safeguard all of the following:

- a) The viability of indigenous species and habitats for indigenous species;
- b) Ecosystem services that support economic activities;
- c) Water quality and water quantity;
- d) Soil quality;
- e) Human and animal health;
- f) Recreation values;
- g) Landscapes, seascapes and natural character;
- h) Primary production.

Method 2: Regional, City and District Council Relationships
Method 2.1, Method 2.2

⁴⁹ Changed by Environment Court consent order – 6 July 2018

⁵⁰ Changed by Environment Court consent order – 6 July 2018

- Method 3: Regional Plans**
Method 3.1
- Method 4: City and District Plans**
Method 4.1
- Method 6: Non RMA Strategies and Plans**
Method 6.5, Method 6.6
- Method 7: Education and Information**
Method 7.1.1 e
- Method 8: Funding**
Method 8.1
- Method 9: Advocacy and Facilitation**
Method 9.2.6

Policy 5.4.7 Offsetting for air quality

Provide for the offsetting of adverse effects of discharges to air on ambient air quality, only when all of the following are met:

- a) The ambient air quality of the relevant airshed breaches air quality standards for human health;
- 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;
- c) Offsetting improves access to reliable and affordable domestic heating in the relevant airshed.

Method 3: Regional Plans
Method 3.1

Method 6: Non RMA Strategies and Plans
Method 6.2

Policy 5.4.9⁵¹ Activities in the Coastal Marine Area

In the coastal marine area minimise adverse effects from activities by all of the following:

- a) Avoiding activities that do not have a functional need to locate in the coastal marine area;
- b) When an activity has a functional need to locate in the coastal marine area, giving preference to avoiding its location in:

⁵¹ Changed by Environment Court consent order – 6 July 2018

- i. Areas of significant indigenous vegetation and significant habitats of indigenous fauna;
 - ii. Outstanding natural features, landscapes and seascapes;
 - iii. Areas of outstanding natural character;
 - iv. Places or areas containing historic heritage of regional or national significance;
 - v. Areas subject to significant natural hazard risk;
- c) Where it is not practicable to avoid locating in the areas listed in b) above, because of the functional needs of that activity:
- i. Avoid adverse effects on the values that contribute to the significant or outstanding nature of b)i.-iii;
 - ii. Avoid significant adverse effects on natural character in all other areas of the coastal environment;
 - iii. Avoid, remedy or mitigate adverse effects on values as necessary to preserve historic heritage of regional or national significance;
 - iv. Minimise any increase in natural hazard risk through mitigation measures;
 - v. Avoiding, remedying, or mitigating adverse effects on other values;
- d) Providing for the efficient use of space by requiring structures be made available for public or multiple use wherever reasonable and practicable;
- e) 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 3.1

Policy 5.4.10 Managing land use change in dry catchments

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

- a) Controlling 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 tall tussock grasslands to species which are less able to capture and hold precipitation.

Method 2: Regional, City and District Council Relationships
Method 2.1, Method 2.2

Method 3: Regional Plans
Method 3.1.16

Method 5: Research, Monitoring and Reporting
Method 5.1.3 b

Principal Reasons and Explanation:

Any use of natural or physical resources has the potential to generate adverse effects. Resource use significantly contributes to the economic and wider wellbeing of communities. It is important to manage activities to avoid, remedy or mitigate individual or cumulative adverse effects on the quality of the natural environment. This requires the proactive management of natural resources,

and can only be achieved through the integrated management of 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 often involve balancing values or uses. Section 3.2 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 with significant values. To provide for those activities, it is important to outline how their adverse effects should be managed.

PART C Implementation

Roles and Responsibilities

Sections 62(1)(h) and (i) of the RMA requires the RPS identify the regional, city and district councils' responsibilities for the control of land use in regard to natural hazards, hazardous substances and the maintenance of indigenous biological diversity. These roles and responsibilities are provided for as follows:

Regional council will:

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

- a. The management of natural hazards in the beds of rivers, lakes and wetlands, and the coastal marine area;
- b. The management of hazardous substances to:
 - i. Avoid, remedy, or mitigate the actual or potential adverse effects of discharges of hazardous substances to water, land and air;
 - ii. Control the use, storage, disposal or transportation of hazardous substances in the beds of rivers, lakes and wetlands and 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 in district plans 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. Avoiding, remedying or mitigating 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, wetlands and lakes.

Regional, city and district councils will:

Share 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 ⁵²Establish and maintain effective resource management relationships with Kāi Tahu based on a mutual obligation to act reasonably and in good faith;
 - 1.1.2 Take Iwi Management Plans into account;
 - 1.1.3 Consult Kāi Tahu at an early stage in resource management processes and implementation.
 - 1.1.4 Facilitate efficient and effective processes for applicants to consult Kāi Tahu on resource consent applications and private plan change requests.

- 1.2 Regional, city and district councils will collaborate with Kāi Tahu to:
 - 1.2.1 ⁵³Identify and protect places, areas or landscapes of cultural, spiritual or traditional significance to them, in accordance with Policy 2.2.2, 3.1.11, 3.2.3 and Schedule 3;
 - 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, landscapes and seascapes, and highly valued natural features, landscapes and seascapes;
 - 1.2.4 Determine appropriate naming for places of significance in Otago.
 - 1.2.5 Share information relevant to Kāi Tahu interests.

- 1.3 Regional, city and district councils will:
 - 1.3.1 Promote awareness and improve knowledge of tikaka and the principles of Te Tiriti o Waitangi among staff and stakeholders.
 - 1.3.2 Include statutory acknowledgement areas in district and regional plans.

- 1.4 Regional, city and district councils may:
 - 1.4.1 ⁵⁴Delegate and transfer any one or more of their functions, powers or duties to an iwi authority in accordance with section 33 of the RMA and where this provides an 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;

⁵² Changed by Environment Court consent order – 28 June 2018

⁵³ Changed by Environment Court consent order – 28 June 2018

⁵⁴ Changed by Environment Court consent order – 28 June 2018

- 2.1.2 Work together to ensure RMA plan provisions are complementary for overlapping or abutting responsibilities.
 - 2.1.4 ⁵⁵Policy 4.5.1, by applying an integrated management approach to achieving air quality standards, including through advising district plan users on regional rules and building consent requirements.
- 2.2 Regional, city and district councils may:
- 2.2.4 Establish processes for working together on common resource management matters or cross boundary issues, such as:
 - a. Committees;
 - b. Working groups;
 - c. Project management;
 - d. Combined hearings;
 - 2.2.5 Prepare combined regional and district documents;
 - 2.2.7 Establish management agreements with another statutory body;
 - 2.2.8 Establish protocols and processes for resolving cross boundary issues through the Local Government Act 2002 triennial agreement.
- 2.3 Regional council may, at the request of city or district councils:
- 2.3.7 Make a regional rule for the purpose of extinguishing existing use rights under Section 10 of the RMA to address natural hazard risk;
 - 2.3.8 Delegate the administration of that regional rule to the city or district council.

Method 3: Regional Plans

- 3.1⁵⁶ Regional Plans will set objectives, policies and methods to implement policies in the RPS as they relate to Regional Council areas of responsibility. All objectives and policies of the RPS must be considered and given effect to when preparing Regional Plans. Matters in the methods can also be taken into account when considering resource consent applications.

More specific direction is provided in the following areas.

Objectives, policies and methods to implement the following policies:

- 3.1.1⁵⁷ Policy 2.2.2: by including in regional plans encompassing wāhi tupuna sites:
 - a) provisions to recognise wāhi tupuna and to protect the values that contribute to wāhi tupuna being significant;
 - b) the location on plans of the wāhi tupuna to be protected and the values that contribute to their significance, using the guide in schedule 1C to assist;

⁵⁵ Changed by Environment Court consent order – 28 June 2018

⁵⁶ Changed by Environment Court consent order – 28 June 2018

⁵⁷ Changed by Environment Court consent order – 28 June 2018

- 3.1.2 Policy 2.1.2: 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;
 - 3.1.3⁵⁸ Policies 3.1.1 to 3.1.5, and Policies 4.3.3, 4.4.1 and 4.4.3:
 - b. In appropriate circumstances, provide for activities that have a functional need to be located in the beds of rivers, lakes, wetlands, and their margins.
 - c. Manage change in river morphology;
 - d. Encourage restoration of water margins;
 - e. Managing noise in the coastal marine area;
 - f. Identify freshwater management units that include all freshwater bodies in Otago in accordance with the National Policy Statement for Freshwater Management 2014;
 - 3.1.4 Policies 3.1.7 and 3.2.18: by including provisions to manage adverse effects of land use on soil and protect significant soil.
 - 3.1.5 Policy 4.3.1: by providing controls adjacent to infrastructure, where necessary to ensure the functional needs of infrastructure are not compromised.
 - 3.1.7 Policies 3.2.11 and 3.2.12: by protecting surf breaks of national importance.
 - 3.1.8 Policies 3.2.13 – 3.2.16: by protecting the values of wetlands and outstanding freshwater bodies.
 - 3.1.9 Policy 3.1.6 and 5.4.4: by applying emission standards within airsheds to achieve ambient air quality that supports good human health;
 - 3.1.11 Policy 4.6.5: by managing the effects of the use of contaminated land:
 - a. On the quality of air, water or land;
 - b. In the coastal marine area, and the beds of rivers, lakes and other waterbodies;
 - 3.1.13 Policy 4.1.3: by using the criteria when undertaking natural hazard assessments;
 - 3.1.14 Policy 3.1.2: by developing river management strategies, including:
 - a. The management of riparian margins along rivers and lakes;
 - b. The management of bed alterations.
 - 3.1.15 Policy 5.4.6: by providing for offsetting for indigenous biological diversity.
 - 3.1.16 Policy 5.4.10: by including provisions managing land use change in dry catchments where this will impact on water yield.
 - 3.1.17⁵⁹ Policy 5.4.5: by including provisions managing removal and disposal of material for biosecurity purposes.
- 3.2 Implementing Regional Plans:
- 3.2.1 Regional council will implement Policies 4.1.2 and 4.1.3 when undertaking natural hazard assessments;

⁵⁸ Changed by Environment Court consent order – 28 June 2018

⁵⁹ Changed by Environment Court consent order – 28 June 2018

3.3 Monitoring and reviewing Regional Plans:

- 3.3.1 Regional Council will monitor and review regional plans to give effect to their responsibilities under the RMA.

Method 4: City and District Plans

4.1 ⁶⁰City 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. All objectives and policies of the RPS must be considered and given effect to when preparing city and district plans. Matters in the methods can also be taken into account when considering resource consent applications.

More specific direction is provided in the following areas.

Objectives, policies and methods to implement the following policies:

4.1.1 ⁶¹Policy 2.2.2 by:

- a. including provisions to recognise the wahi tupuna and to protect the values that contribute to wahi tupuna being significant;
- b. Identifying the location on plans of the wahi tapuna to be protected and the values that contribute to their significance, using the guide in Schedule 1C to assist.

4.1.2 Policies 4.1.1 to 4.1.11 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 natural hazards;
- c. Considering the use of adaptive management techniques;

4.1.5 Policies 3.1.7, 3.1.8 and 5.4.1: by including provisions to manage the discharge of dust, and silt and sediment associated with earthworks and land use;

4.1.6 Policies 3.1.7, 3.2.18, 4.5.1, and 5.3.1: by managing urban growth and development and the subdivision of land to protect significant soils

4.1.7 Policy 4.5.6: 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;

4.1.8 Policy 3.2.12: by maintaining and where possible enhancing access to surf breaks of national importance;

4.1.10 Policy 4.6.8: by providing for and managing adverse effects associated with the establishment of waste management activities and facilities including but not limited to;

- a. Providing for the development of facilities and services for the storage, recycling, recovery, treatment and disposal of waste so that adverse effects on health and safety are avoided and adverse effects on the environment are avoided, remedied or mitigated;

⁶⁰ Changed by Environment Court consent order – 28 June 2018

⁶¹ Changed by Environment Court consent order – 28 June 2018

- b. Minimising risk associated with natural hazard events; and
 - c. Restricting the location of activities that may result in reverse sensitivity effects.
- 4.1.11 Policy 5.2.2 and 5.2.3 by:
- a. Including accidental discovery protocols as advice notes on consents for earthworks or other activities that may unearth archaeological features
 - b. Providing for activities that contribute to the retention of historic heritage places, areas or landscapes, including maintenance and seismic strengthening;
 - c. Providing for the recording of information culturally sensitive to Kāi Tahu and the protection of culturally sensitive areas through the use of silent files, heritage alert layers or other methods satisfactory to them;
 - d. Identifying and protecting significant historic heritage resources located within the authority's district;
 - e. Including heritage alert layers in plans to inform the public about areas where there is a high probability of the presence of heritage values, particularly archaeological values.
- 4.1.12 Policy 2.2.4: 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;
- 4.1.13 Policy 4.5.1 and 4.5.2 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 20 years urban growth based on demographic growth projections;
- 4.1.14 Policy 5.1.1: by providing for the maintenance and enhancement of public access to the natural environment, including the coast, lakes, rivers and their margins, and where possible areas of cultural and historic significance.
- 4.1.15⁶² Policy 3.1.2, 4.3.3, 4.4.1 and 4.4.3: by providing, in appropriate circumstances, for activities that have a functional need to be located in the beds of rivers, lakes, wetlands, and their margins.
- 4.1.16⁶³ Policy 4.3.1: by providing controls adjacent to infrastructure where necessary to ensure the functional needs of infrastructure are not compromised.
- 4.1.17⁶⁴ Policy 4.3.6: by:
- a. Identifying National Grid transmission lines and corridors on planning maps for managing sensitive and non-sensitive activities and development that can compromise the Grid;
 - b. Providing controls to avoid reverse sensitivity effects on the National Grid;

⁶² Changed by Environment Court consent order – 6 July 2018

⁶³ Changed by Environment Court consent order – 6 July 2018

⁶⁴ Changed by Environment Court consent order – 6 July 2018

- c. Providing controls on activities as necessary to ensure that the functional needs of the National Grid are not compromised.
- 4.1.18⁶⁵ Policies 4.3.2 and 4.3.5: by:
- a. Identifying nationally or regionally significant infrastructure on planning maps, including corridors where appropriate;
 - b. Including provisions managing land use activities within or adjacent to this regionally or nationally significant infrastructure to address potential reverse sensitivity issues;
 - c. When considering provisions to manage activities within or adjacent to electricity infrastructure, having regard to NZECP34:2001 Electrical Code of Practice for Electrical Safe Distances and the Electricity (Hazards from Trees) Regulations 2003 (prepared under the Electricity Act 1992).
- 4.1.19⁶⁶ Policy 4.4.5: by:
- a. Where necessary, providing controls for buildings, structures and other activities adjacent to electricity infrastructure, to ensure the functional needs of that infrastructure are not compromised based on NZECP34:2001 Electrical Code of Practice for Electrical Safe Distances and the Electricity (Hazards from Trees) Regulations 2003 (prepared under the Electricity Act 1992);
 - b. Identifying significant electricity distribution infrastructure on planning maps;
 - c. Where necessary, providing controls on activities to ensure that the functional needs of the significant electricity distribution infrastructure are not compromised.
- 4.1.20⁶⁷ Policies 4.3.6 and 5.4.6: by providing for offsetting for indigenous biological diversity.
- 4.1.21⁶⁸ Policy 5.4.5: by including provisions managing removal and disposal of material for biosecurity purposes.

4.2 Implementing district plans.

City and District Councils may implement the following policies by:

- 4.2.8 Policies 4.1.1 to 4.1.6, and 4.1.13:
- a. 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;

⁶⁵ Changed by Environment Court consent order – 6 July 2018

⁶⁶ Changed by Environment Court consent order – 28 June 2018

⁶⁷ Changed by Environment Court consent order – 6 July 2018

⁶⁸ Changed by Environment Court consent order – 6 July 2018

- 4.2.9 Policy 5.1.1: by including conditions to maintain or enhance access to the natural environment or sites of cultural significance.
 - 4.2.10⁶⁹ Policy 4.5.1: For medium growth areas, as defined under the NPS Urban Development Capacity, by developing a future development strategy.
- 4.3 Monitoring and reviewing city and district plans:
- 4.3.1 City and district councils will monitor and review district plans to give effect to their responsibilities under the RMA.

Method 5 Research, Monitoring and Reporting

- 5.1 Identification of important resources
- 5.1.1 Regional, city and district councils will:
 - a. Work collaboratively to identify the landward extent of the coastal environment
 - 5.1.3 Regional council will:
 - a. Identify airsheds based on geographical and physical boundaries, for the management of air quality;
 - b. Identify dry catchments where rules are required by regional council to manage water quantity;
 - c. Identify significant soils;
 - d. Identify the spatial extent of the nationally important surf breaks.
 - 5.1.4⁷⁰ Regional council will engage with Kāi Tahu to identify the cultural values of resources and requirements for customary uses.
- 5.4 RMA plan effectiveness reporting
- 5.4.1 Regional council will develop appropriate indicators and measures for the RPS within 12 months, report on the efficiency and effectiveness of the RPS based on those indicators and measures, and review those indicators and measures every five years.
- 5.5 Plan implementation reporting
- 5.5.1 Regional, city and district councils will:
 - a. Monitor and report publicly on the achievement of regional and district plan objectives, policies and methods.

⁶⁹ Changed by Environment Court consent order – 28 June 2018

⁷⁰ Changed by Environment Court consent order – 28 June 2018

Method 6 Non-RMA Strategies and Plans

6.1 Natural hazard strategies

6.1.1 Regional, city and district councils may:

- a. Prepare strategies or other similar documents to assist in the management and reduction of natural hazard risk and adaptation to, and mitigation of, climate change;
- b. Develop community relevant responses to the impacts of natural hazards and climate change, in collaboration with the relevant local authority, key stakeholders and affected community.

6.2 Air strategy

6.2.1 Regional, city and district councils may develop and implement, in collaboration with other key stakeholders, a strategy for:

- a. The upgrading of housing stock and their thermal envelopment;
- b. The reduction of domestic emissions to air.

6.3 Regional Land Transport Plan

6.3.1 Regional council will set objectives, policies and activities to assist in the implementation of policy 4.4.6, 4.5.2, 4.3.1, 4.3.2, with a particular focus on:

- a. Enhancing road safety;
- b. Ensuring travel needs in Otago are met;
- c. Enabling increased freight efficiency;
- d. Managing Otago's public transport services;
- e. Ensuring transport networks are resilient, efficient and sustainably managed.

6.4 Regional Biological Diversity Strategy

6.4.1 The regional council will develop and implement, with other key stakeholders, a Biological Diversity Strategy.

6.5 Pest management strategy

6.5.1 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 biological diversity;
 - iii. Have significant adverse effects on indigenous biological diversity;
 - iv. Have adverse effects on outstanding natural features, landscapes, seascapes and highly valued natural features, landscapes and seascapes;
- b. Have regard to indigenous biological diversity 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 biological diversity strategies.
- 6.6 Pan-regional pest management strategy
 - 6.6.1 The regional council may develop a pest management strategy with neighbouring regions.
- 6.7 Urban stream plans
 - 6.7.1 District and city councils may develop and implement urban stream restoration plans, for the restoration of the natural character and natural functioning of urban streams.
- 6.8 Waste Management and Minimisation Plans
 - 6.8.1 City and District Councils will develop Waste Management and Minimisation Plans in accordance with the Waste Minimisation Act 2008 and any regional strategy.

Method 7 Education and Information

- 7.1 Providing public information
 - 7.1.2 Regional council will provide information and guidance on:
 - a. Natural hazards;
 - b. Rainfall and river flow;
 - c. Climate change;
 - d. Measures to mitigate erosion risks resulting from land uses;
 - e. Riparian margin management, especially on flooding and erosion risks;
 - f. Measures to maintain or enhance soil quality;
 - g. Discharge management, including on reducing domestic discharges to air;
 - h. The management of diffuse discharges to water;
 - i. The ecosystem services derived from indigenous biological diversity;
 - j. On the benefits of riparian margin management, especially on flooding and erosion risks.
 - 7.1.4 City and district councils may provide information and guidance on:
 - a. Crime prevention through environmental design and urban design principles to inform local development proposals;
 - b. Urban design techniques to respond to the different access requirements or needs of the community;
 - c. Design techniques to enable adaptive reuse of buildings;
 - d. Water conservation and the efficient domestic use of water;
 - e. Measures for increased energy efficiency and energy conservation;
 - f. Opportunities for the development of small-scale renewable electricity generation.
 - g. The projected demographic changes to local communities.

- 7.1.5 Regional, city and district councils will provide information and guidance on waste minimisation and management.
- 7.1.6 Regional Council may facilitate and support a regional response to hazardous substances collection, disposal and recycling services.

Method 9: Advocacy and Facilitation

9.1 Promotion

- 9.1.1 Regional, city and district councils will work with stakeholders, including central government agencies and other interested parties, on resource management matters;
- 9.1.2 Regional, city and district councils may advocate for:
 - a. Initiatives and proposals which support or complement the goals of the RMA, RPS and supporting documents;
 - b. Subdivision and building design that increases passive solar gain and uses higher levels of insulation in buildings to improve energy efficiency;
 - c. The implementation of the waste hierarchy throughout the region;
 - d. National guidance on managing natural hazards, and mitigating and adapting to climate change;
 - e. Legislative change to improve resilience and reduce the risk of natural hazards and climate change to individuals and communities;
 - f. The development of infrastructure and services to provide for hazardous substance collection, disposal and recycling services across the region;
 - g. The development, upgrade or maintenance of infrastructure, when it will enhance Otago's communities' well-being or health and safety;
- 9.1.3 Enhance individual and community resilience by encouraging activities and actions that:
 - a. Promote interactions and partnerships within and between communities, businesses and organisations;
 - b. Support self-sufficiency;
 - c. Improve disaster readiness, response and recovery;
 - d. Enable opportunities for improvements to be made following a disaster event;
 - e. Contribute to the retention of historic heritage places, areas or landscapes, including maintenance and seismic strengthening;
 - f. Encourage an approach to resource management that assists in reducing individual and community natural hazard risk and in reducing the effects of climate change.
- 9.1.4 Regional, city and district councils may promote:
 - a. Subdivision and urban development that responds to and anticipates the changing demographic needs of the local community;
 - b. The development and adoption of best practice guidelines for the use and management of hazardous substances, and a reduction in hazardous substance use.
- 9.1.5 City and district councils will:

- b. Encourage the adaptive reuse of buildings;
- c. Ensure consideration of orientation and design for solar gain in subdivision and building design;

9.2 Facilitation

- 9.2.5 Regional council will facilitate the restoration, rehabilitation or creation of freshwater and coastal habitats, particularly when it:
 - a. Encourages the natural regeneration of indigenous species;
 - b. Buffers or links ecosystems, habitats and areas of significance that contribute to ecological corridors;
 - c. Maintains or enhances the provision of indigenous ecosystem services.
- 9.2.6 Regional council will facilitate the control of pest species, including wilding pines, particularly when it contributes to the protection or restoration of:
 - a. Outstanding or highly valued landscapes;
 - b. Indigenous species.
- 9.2.7 Regional council will facilitate the establishment of:
 - a. Water management groups that co-ordinate the exercise of water-related consents;
 - b. Water allocation committees for the management of water allocation in case of drought.
- 9.2.8 Regional, city and district councils may facilitate:
 - a. The planning for community infrastructure, when it would increase the efficiency of water use;
 - b. Negotiations with landowners for public or Kāi Tahu access to sites of significance that do not have suitable access.

Monitoring Procedures and Anticipated Environmental Results

Monitoring Procedures

This section describes the procedures that will be used to monitor the efficiency and effectiveness of PRPS provisions, as required by the section 62(1)(j) of the RMA.

Within 12 months of the PRPS becoming operative, the Regional Council will develop specific indicators and measures to monitor the RPS against its anticipated environmental results.

The Regional Council will report on the efficiency and effectiveness of the PRPS based on those indicators and measures, and review those indicators and measures every five years. This work will be in accordance with Section 35 of the RMA, and integrated with the other significant monitoring work that the ORC carries out, such as state of the environment reporting and compliance with resource consents.

These procedures are set out in Method 5 Research, Monitoring and Reporting.

The following section identifies environmental results anticipated from implementing the policies and methods of the PRPS.

Anticipated Environmental Results

1. Resource management in Otago is integrated

Objective 1.1⁷¹

Otago's resources are used sustainably to promote economic, social, and cultural wellbeing for its people and communities

Objective 1.2⁷³

Recognise and provide for the integrated management of natural and physical resources to support the wellbeing of people and communities in Otago

AER 1.1⁷²

The economic, social, and cultural wellbeing of Otago's people and communities is enabled through sustainable use, development and protection of natural and physical resources

AER 1.2

Natural and physical resources are managed in an integrated way

⁷¹ Changed by Environment Court consent order – 28 June 2018

⁷² Changed by Environment Court consent order – 28 June 2018

⁷³ Changed by Environment Court consent order – 28 June 2018

2. Kāi Tahu values and interests are recognised and kaitiakitaka is expressed.

Objective 2.1

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

AER 2.1

Te Tiriti o Waitangi principles are adhered to

Objective 2.2

Kāi Tahu values, interests and customary resources are recognised and provided for

AER 2.2

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

4. Communities in Otago are resilient, safe and healthy

Objective 4.1

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

AER 4.1

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

Objective 4.2

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

AER 4.2

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

Objective 4.3

Infrastructure is managed and developed in a sustainable way

AER 4.3

Infrastructure is safe, and efficient and the adverse effects of infrastructure on outstanding and highly-valued natural and physical resource values are avoided, remedied or mitigated.

Objective 4.4

Energy supplies to Otago's communities are secure and sustainable

AER 4.4

The use of local renewable energy sources increases and reliance on fossil fuels decreases

Objective 4.5

Urban growth and development is well designed, reflects local character and integrates effectively with adjoining urban and rural environments

AER 4.5

Urban areas are compact, maximise the use of existing services and infrastructure and are able to adapt to evolving standards and to the changing requirements of its inhabitants and surrounding natural and physical environment

Objective 4.6

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

AER 4.6

Hazardous substances, contaminants and waste materials are not harmful to the environment, people and communities.

AER 4.7

The waste hierarchy is implemented, resulting in less waste requiring disposal and a reduction of the environmental effects generated from waste.

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

Objective 5.1

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

AER 5.1

The coast, lakes and rivers can be accessed by the public

Objective 5.2

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

AER 5.2

Significant historic heritage is identified, protected, and integrated into current and future uses

Objective 5.3

Sufficient land is managed and protected for economic production

AER 5.3

The effects of land management do not preclude future economic uses of land

Objective 5.4

Adverse effects of using and enjoying Otago's natural and physical resources are minimised

AER 5.4

The number and severity of environmental issues is reduced

PART D Schedules and Appendices

Schedule 1 Kāi Tahu values & interests

The following Kāi Tahu 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

This schedule is a guide to assist in identifying Kāi Tahu values. It is not a complete list of all values Kāi Tahu have.

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 defines people's rights and responsibilities in relation to the use and management of resources in.

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, see 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, from the mountains to the sea, is the concept used to describe holistic natural resource management.

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.

Kaitiakitaka

Kaitiakitaka means the exercise of guardianship by Kāi Tahu 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 Kāi Tahu.

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 biological diversity, 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

This schedule is a guide to assist in identifying Kāi Tahu interests. It is not a complete list of all interests Kāi Tahu have.

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.



Te Rūnanga o Moeraki Marae, Moeraki

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, Heyward 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 and estuary are treasured and well-utilised mahika kai for Kāti Huirapa Rūnaka ki Puketeraki.



Puketeraki Marae

Te Rūnanga o Ōtākou

The takiwā 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 well-being 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.



Ōtākou Marae, Otago Peninsula

Hokonui Rūnanga

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 Rūnanga and those located from Waihemo southwards. Although Hokonui Rūnanga is 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.



Hokonui Marae

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

This schedule is a guide to assist in identifying wāhi tūpuna. It is not a complete list of all wāhi tūpuna in Otago.

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. The different elements of 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 whareniui, 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 kōhatu	Rock outcrops. Rocky outcrops provided excellent shelters and were intensively occupied by Māori from the moa-hunter period into early European settlement during seasonal hikoī. 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 Kāi Tahu. 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.

Wai Māori

Freshwater areas important to Māori, including wai puna (springs), roto (lakes) and awa (rivers).

Schedule 1D Māori land reserves

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

- Native Reserve excluded from the Ōtākou Land Purchases (1844)
- 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 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 Northern sections are Reserved lands	South Island Landless Natives Act Native Reserve
Glenomaru	Located south of Kaka Point	South Island Landless Natives 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

Lake Tatawai	Located on the Taieri Plain, south of the Dunedin City Airport	Native Reserve
Lake Tatawai	Lake that is now drained	Landing 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
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 2019, all Māori land is governed by Te Ture Whenua Māori Act 1993. Some lands, such as those at Port Chalmers also fall under the Māori Reserve Land Act 1955.

Explanatory notes:

Since approximately the mid 1890's, ancillary claim blocks have been awarded for various reasons. Ancillary claim blocks are Māori freehold land granted under the South Island Landless Natives Act 1906 to those who were left landless when the original reserves were granted. 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 the RPS. Māori Reservations that have been created in recent times and fall outside the boundaries of the Native Reserves are not included, such as land at Arai te Uru Marae in Shetland Street, Wakari, Dunedin and Whare Koa, located in Oamaru.

Schedule 2 Statutory acknowledgement areas

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

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

Part 12 of the Ngāi Tahu Claims Settlement Act 1998 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 95 of the RMA in deciding whether Te Rūnanga 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 tūpuna.

Statutory Acknowledgement areas	Ngāi Tahu Claims Settlement Act 1998 Schedule Number
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
Tokatā (The Nuggets)	64
Waihola/Waipori Wetland	70
Whakatipu Wai Māori (Lake Wakatipu)	75
Te Tai O Arai Te Uru (Otago Coastal Marine Area)	103

Schedule 5 Criteria for the identification of historic heritage values

The identification of items, places and areas of historic heritage value will be based on but not limited to the following criteria:

-
1. The extent to which the item, place or area reflects important or representative aspects of Otago or New Zealand history.
-
2. The association of the item, place or area with events, persons, or ideas of importance in Otago or New Zealand history.
-
3. The potential of the item, place or area to provide knowledge of Otago or New Zealand history.
-
4. The importance of the item, place or area to tangata whenua.
-
5. The community association with, or public esteem for, the item, place or area.
-
6. The potential of the item, place or area for public education.
-
7. The technical accomplishment, value or design of the item, place or area.
-
8. The symbolic or commemorative value of the item, place or area.
-
9. The importance of identifying historic items, places or areas known to date from an early period of New Zealand settlement:
-

10. The importance of identifying rare types of historic items, places or areas:

11. The extent to which the item, place, or area forms part of a wider historical and cultural item, place or area.

Schedule 6⁷⁴: Housing capacity

This schedule will be amended in accordance with NPS Urban Development Capacity requirements. Refer to Policy 4.5.1(c) Providing for urban growth and development

⁷⁴ Changed by Environment Court consent order – 28 June 2018

Appendix 1: 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 wakaetanga 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

If a word or phrase is not defined then the meaning should be taken to be the same as found in Section 2 of the RMA, or relevant National Policy Statement or National Environmental Standard. Terms not defined in either the glossary or the above documents should be interpreted in keeping with their common usage.

Where used in this regional policy statement, these terms have the following definitions.

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.
Ahi kā	Continued occupation according to traditional law of Māori tenure “keeping the fires burning”.
Ara Tawhito	Ancient Trails.
Atua	God, supernatural being.
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.
Coastal water	Coastal water means seawater within the outer limits of the territorial sea and includes: (a) Seawater with a substantial fresh water component; and (b) Seawater in estuaries, fiords, inlets, harbours, or embayments.
Contaminant	Includes any substance (including gases, odorous compounds, liquids, solids, and micro-organisms) or energy (excluding noise) or heat, that either by itself or in combination with the same, similar, or other substances, energy, or heat: (a) when discharged into water, changes or is likely to change the physical, chemical, or biological condition of water; or (b) when discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged

Contaminated Land	Means land that has a hazardous substance in or on it that: <ul style="list-style-type: none">(a) has significant adverse effects on the environment; or(b) is reasonably likely to have significant adverse effects on the environment
Crime prevention through environmental design	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: <ul style="list-style-type: none">a) The repeat of the same type of event, or different types of events, on the same area and/or people; andb) 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. The word 'customary' in this policy statement 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 e.g. purification of water and air, pollination of plants and decomposition of waste.
Electricity distribution infrastructure⁷⁵	Lines and associated equipment used for the conveyance of electricity on lines other than the National Grid or electricity sub-transmission infrastructure.

⁷⁵ Changed by Environment Court consent order – 6 July 2018

Electricity sub-transmission Infrastructure⁷⁶	Means electricity infrastructure which conveys electricity between the National Grid and renewable energy generation sources to zone substations and between zone substations.
Electricity transmission infrastructure	The National Grid of transmission lines and cables (aerial, underground and undersea, including the high-voltage direct current link), stations and sub-stations and other works used to connect grid injection points and grid exit points to convey electricity throughout the North and South Islands of New Zealand.
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 e.g. managed retreat or relocating dwellings.
Fresh water	Fresh water means all water except coastal water and geothermal water.
Functional needs⁷⁷	The locational, operational, practical or technical needs of an activity, including development and upgrades.
Future development strategy⁷⁸	In accordance with the NPS Urban Development Capacity
Hapū	Sub-tribe, extended whānau.
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.
Indigenous species	A species or genetic variant found naturally in New Zealand, including migrant species visiting New Zealand on a regular or irregular basis.

⁷⁶ Changed by Environment Court consent order – 6 July 2018

⁷⁷ Changed by Environment Court consent order – 28 June 2018

⁷⁸ Changed by Environment Court consent order – 28 June 2018

- Infrastructure**
- a) Pipelines that distribute or transmit natural or manufactured gas, petroleum, biofuel, or geothermal energy;
 - b) A network for the purpose of telecommunication as defined in section 5 of the Telecommunications Act 2001;
 - c) 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—
 - i. 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;
 - h) 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;
 - l) 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 Tribe.

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.

Kāi Tahu The collective of individuals who descend from Kāi Tahu, Kāti Māmoe and Waitaha, and who have mana whenua in Otago.

Note: 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 Ngāi Tahu. In this document,

the “ng” is used for the iwi in general, and the “k” for southern Māori in particular.

Kāi Tahu ki Otago	The four Papatipu Rūnaka and associated whānau and rōpū of the Otago Region.
Kāika	Settlement.
Kaimoana	Food obtained from the sea.
Kaitiaki	Guardian.
Kaitiakitaka	The exercise of customary custodianship, in a manner that incorporates spiritual matters, by Kāi Tahu who hold manawhenua status for particular area or resource.
Ki Uta Ki Tai	Mountains to the sea.
Lifeline utilities	Utilities provided by those entities listed in Schedule 1 of the Civil Defence Emergency Management Act, 2002.
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 in an identified area.
Manawhenua	Those who exercise customary authority or rakatirataka in an identified area.
Marae	The marae atea and the complex of buildings around it, including the wharenuī, wharekai, church and urupa.
Marae atea	Courtyard or meeting place in front of the wharenuī.
Marae related activity	Māori cultural activities and provision of services primarily aimed at the health and wellbeing of the Māori population, by or for Kāi Tahu, undertaken on a marae that has the approval of rūnaka, including: <ul style="list-style-type: none">a) Hui;b) Wānaka;c) Tangi;d) Overnight accommodation for visitors;e) Events and gatherings;f) Health services; andg) Cultural tourism.

Mauka	Mountain.
Mauri	Life supporting capacity. This definition, while not replicating the term 'Mauri', achieves the essence of this concept.
Multiple hazards	Where two or more unrelated natural hazard events may occur.
Municipal infrastructure⁷⁹	<p>Infrastructure for:</p> <ul style="list-style-type: none">a) Conveyance of untreated water from source to, and including, the point of its treatment to potable standard for an urban environment (see below), but excluding its distribution within that urban environment;b) Treatment of wastewater from a reticulated system in an urban environment (see below) and conveyance for its disposal, but excluding its pre-treatment collection within that urban environment;c) Treatment of stormwater from a reticulated system in an urban environment (see below) and conveyance for its disposal, but excluding its pre-treatment collection within that urban environment. <p>Urban Environment means:</p> <ul style="list-style-type: none">a) Dunedin, Queenstown, Oamaru and any other urban area within Otago that qualifies as an urban environment as defined by the National Policy Statement on Urban Development Capacity 2016.b) An area of land containing, or intended to contain, a concentrated settlement of 10,000 people or more and any associated business land, irrespective of local authority or statistical boundaries).
Native Reserve	Any property or site that is a: Native Reserve excluded from the Ōtākou Land purchases (1844), 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, landslide, subsidence, sedimentation, wind, drought, fire, or flooding) the action of

⁷⁹ Changed by Environment Court consent order – 6 July 2018

which adversely affects or may adversely affect human life, property, or other aspects of the environment.

No net loss	In the context of biodiversity offsets, means no net loss with respect to: <ol style="list-style-type: none"> a) Species abundance, population structure, and composition (e.g. individual species or species groups) b) Habitat structure (e.g. vegetation tiers, vegetation pattern) c) Ecosystem function (e.g. nutrient cycling rates) d) People's use of and cultural values associated with biodiversity (e.g. particularly valued habitats or species).
Nohoaka/Nohoanga	Seasonal settlements.
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.
Papakāika	Traditional settlement or settlement on traditional land.
Papatipu Rūnaka/Rūnanga	Local manawhenua representative group or community system of representation.
Pounamu	Nephrite, greenstone, jade.
Primary Production	The use of land and auxiliary buildings for the production (but not processing) of primary products (including agricultural, pastoral, horticultural, and forestry products). Primary production does not include land or auxiliary buildings used or associated with prospecting, exploration, or mining for minerals.
Rāhui	Restriction on access to a specific resource for a particular time.
Rakātira	Chief.
Rakātirataka	Chieftainship, decision-making rights.
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	The potential for the operation of an existing lawfully established activity to be constrained or curtailed by the more recent establishment or intensification of other activities which are sensitive to the established 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.
Rohe	Boundary.
Rōpū	Grouping.
Significant electricity distribution infrastructure⁸⁰	Means electricity infrastructure which supplies: <ul style="list-style-type: none">a) Essential public services (such as hospitals and lifeline facilities);b) Other regionally significant infrastructure or individual consumers requiring supply of 1MW or more;c) 700 or more consumers; ord) Communities that are isolated and which do not have an alternative supply in the event the line or cable is compromised and where the assets are difficult to replace in the event of failure.
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).
Surf break	A natural feature that is comprised of swell, currents, water levels, seabed morphology, and wind. The hydrodynamic character of the ocean (swell, currents and water levels) combines with seabed morphology and winds to give rise to a ‘surfable wave’. A surf break includes the ‘swell corridor’ through which the swell travels, and the morphology of the seabed of that wave corridor, through to the point where waves created by the swell dissipate and become non-surfable. ‘Swell corridor’ means

⁸⁰ Changed by Environment Court consent order – 28 June 2018

the region offshore of a surf break where ocean swell travels and transforms to a 'surfable wave'. 'Surfable wave' means a wave that can be caught and ridden by a surfer. Surfable waves have a wave breaking point that peels along the unbroken wave crest so that the surfer is propelled laterally along the wave crest.

System⁸¹	A set of discrete components interconnected and working together to function as a complex whole.
Takata whenua	The iwi or hapū that holds mana whenua in a particular area.
Takiwā	Area, region, district.
Te Ao Tūroa	The natural environment.
Te Tai o Arai Te Uru	Otago Coastal Marine Area.
Te Wai Pounamu	The South Island.
Tikaka	Lore and custom, customary values and practices.
Tino Rangatirataka	Full chiefly authority.
Tōpuni	Named for the Tōpuni cloak worn by Ngāi Tahu raketira, Tōpuni in this sense provides a public symbol of Ngāi Tahu manawhenua and raketirataka over some of the most prominent landscape features and conservation areas in Te Wai Pounamu. Under the Ngāi Tahu Claims Settlement Act 1998 Tōpuni 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 tī.
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.
Urupā	Burial place.

⁸¹ Changed by Environment Court consent order – 28 June 2018

Wāhi Taoka	Resources, places and sites treasured by Kāi Tahu.
Wāhi Tapu	Places sacred to Kāi Tahu.
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.
Waste	Has the meaning set out in section 5 of the Waste Minimisation Act 2008.
Water body	Fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area.
Whakapapa	Genealogy.
Whānau	Family.
Whānau Rōpū	Whānau grouping.
Whare Kai	Dining hall.
Wharenui	Ancestral meeting house.
Whenua	Land.

User Index

This index assists users of the Regional Policy Statement for Otago in identifying the most relevant objectives and policies that relate to a specific topic. Topics are presented in this index in alphabetical order. The index is a guide only and other policies may be relevant.

Chapter One 'Resource Management in Otago is Integrated' and Chapter Two 'Kāi Tahu Values and Interests are Recognised and Kaitiakitaka is Expressed' should be considered in every instance.

AIR		Page
Objective 5.4	Adverse effects of using and enjoying Otago's natural and physical resources are minimised	60
	Policy 5.4.1 Offensive or objectionable discharges	60
	Policy 5.4.4 Emission standards	61
	Policy 5.4.7 Offsetting for air quality	62
BIOLOGICAL DIVERSITY		Page
Objective 5.4	Adverse effects of using and enjoying Otago's natural and physical resources are minimised	60
	Policy 5.4.5 Pest plants and animals	61
CLIMATE CHANGE		Page
Objective 4.1	Risks that natural hazards pose to Otago's communities are minimised	24
	Policy 4.1.1 Identifying natural hazards	24
	Policy 4.1.2 Natural hazard likelihood	24
	Policy 4.1.6 Avoiding increased natural hazard risk	27
	Policy 4.1.8 Precautionary approach to natural hazard risk	28
	Policy 4.1.9 Protecting features and systems that provide hazard mitigation	29
Objective 4.2	Otago's communities are prepared for and able to adapt to the effects of climate change	32
	Policy 4.2.1 Sea level rise	32
	Policy 4.2.2 Climate change	32
COASTAL ENVIRONMENT		Page

Objective 5.4	Adverse effects of using and enjoying Otago’s natural and physical resources are minimised	60
	Policy 5.4.5 Pest plants and animals	61
	Policy 5.4.9 Activities in the Coastal Marine Area	62
DEVELOPMENT		Page
Objective 5.3	Sufficient land is managed and protected for economic production	58
	Policy 5.3.1 Rural activities	58
	Policy 5.3.2 Distribution of commercial activities	58
	Policy 5.3.3 Industrial land	59
	Policy 5.3.5 Tourism and outdoor recreation	59
Objective 5.4	Adverse effects of using and enjoying Otago’s natural and physical resources are minimised	60
	Policy 5.4.1 Offensive or objectionable discharges	60
	Policy 5.4.2 Adaptive management approach	60
	Policy 5.4.3 Precautionary approach	61
	Policy 5.4.4 Emission standards	61
	Policy 5.4.5 Pest plants and animals	61
ENERGY		
Objective 4.4	Energy supplies to Otago’s communities are secure and sustainable	39
	Policy 4.4.1 Renewable electricity generation	39
	Policy 4.4.2 Small and community scale renewable electricity generation	39
	Policy 4.4.3 Protecting existing renewable electricity generation	40
	Policy 4.4.4 Efficient transport of electricity	40
	Policy 4.4.5 Electricity distribution infrastructure	40
	Policy 4.4.6 Energy efficient transport	41
	Policy 4.4.7 Fuels	42
FRESH WATER		
Objective 5.4	Adverse effects of using and enjoying Otago’s natural and physical resources are minimised	60
	Policy 5.4.1 Offensive or objectionable discharges	60
	Policy 5.4.5 Pest plants and animals	61
HISTORIC HERITAGE		
Objective 5.2	Historic heritage resources are recognised and contribute to the region’s character and sense of identity	56

Policy 5.2.1	Recognising historic heritage	56
Policy 5.2.2	Identifying historic heritage	56
Policy 5.2.3	Managing historic heritage	57
INFRASTRUCTURE AND LIFELINE UTILITIES		
Objective 4.1	Risks that natural hazards pose to Otago's communities are minimised	24
Policy 4.1.7	Reducing existing natural hazard risk	28
Policy 4.1.11	Hard protection structures	30
Policy 4.1.12	Lifeline utilities and facilities for essential or emergency services	30
Policy 4.1.13	Hazard mitigation measures, lifeline utilities, and essential and emergency services	30
Objective 4.3	Infrastructure is managed and developed in a sustainable way	34
Policy 4.3.1	Managing infrastructure activities	34
Policy 4.3.2	Nationally and regionally significant infrastructure	35
Policy 4.3.3	Functional needs of infrastructure that has national or regional significance	35
Policy 4.3.4	Adverse effects of nationally and regionally significant infrastructure	35
Policy 4.3.5	Protecting infrastructure with national or regional significance	36
Policy 4.3.6	The National Grid	37
Objective 4.5	Urban growth and development is well designed, occurs in a strategic and coordinated way, and integrates effectively with adjoining urban and rural environments	43
Policy 4.5.2	Integrating infrastructure with land use	44
INTEGRATED RESOURCE MANAGEMENT		Page
Objective 1.1	Otago's resources are used sustainably to promote economic, social, and cultural wellbeing for its people and communities	11
Policy 1.1.1	Economic wellbeing	11
Policy 1.1.2	Social and cultural wellbeing and health and safety	11
Objective 1.2	Recognise and provide for the integrated management of natural and physical resources to support the wellbeing of people and communities in Otago	13
Policy 1.2.1	Integrated resource management	13
KĀI TAHU		Page
Objective 1.1	Otago's resources are used sustainably to promote economic, social, and cultural wellbeing for its people and communities	11

	Policy 1.1.2 Social and cultural wellbeing and health and safety	11
Objective 2.1	The principles of Te Tiriti o Waitangi are taken into account in resource management processes and decisions	16
	Policy 2.1.1 Treaty obligations	16
	Policy 2.1.2 Treaty principles	16
Objective 2.2	Kāi Tahu values, interests and customary resources are recognised and provided for.	18
	Policy 2.2.1 Kāi Tahu wellbeing	18
	Policy 2.2.2 Recognising sites of cultural significance	18
	Policy 2.2.3 Wāhi tūpuna and associated sites	19
	Policy 2.2.4 Sustainable use of Māori land	19
Objective 5.2	Historic heritage resources are recognised and contribute to the region's character and sense of identity	56
	Policy 5.2.1 Recognising historic heritage	56
	Policy 5.2.2 Identifying historic heritage	56
	Policy 5.2.3 Managing historic heritage	57
LAND AND SOIL		Page
Objective 5.3	Sufficient land is managed and protected for economic production	58
	Policy 5.3.1 Rural activities	58
	Policy 5.3.2 Distribution of commercial activities	58
	Policy 5.3.3 Industrial land	59
	Policy 5.3.5 Tourism and outdoor recreation	59
Objective 5.4	Adverse effects of using and enjoying Otago's natural and physical resources are minimised	60
	Policy 5.4.1 Offensive or objectionable discharges	60
	Policy 5.4.5 Pest plants and animals	61
	Policy 5.4.10 Managing land use change in dry catchments	63
LANDSCAPES, SEASCAPES AND NATURAL FEATURES		Page
NATURAL HAZARDS		Page
Objective 4.1	Risks that natural hazards pose to Otago's communities are minimised	24
	Policy 4.1.1 Identifying natural hazards	24
	Policy 4.1.2 Natural hazard likelihood	24
	Policy 4.1.3 Natural hazard consequence	25
	Policy 4.1.4 Assessing activities for natural hazard risk	25
	Policy 4.1.5 Natural hazard risk	26

Policy 4.1.6	Minimising increase in natural hazard risk	27
Policy 4.1.7	Reducing existing natural hazard risk	28
Policy 4.1.8	Precautionary approach to natural hazard risk	28
Policy 4.1.9	Protecting features and systems that provide hazard mitigation	29
Policy 4.1.10	Mitigating natural hazards	29
Policy 4.1.11	Hard protection structures	30
Policy 4.1.12	Lifeline utilities and facilities for essential or emergency services	30
Policy 4.1.13	Hazard mitigation measures, lifeline utilities, and essential and emergency services	30
PUBLIC ACCESS		Page
Objective 4.5	Urban growth and development is well designed, occurs in a strategic and coordinated way, and integrates effectively with adjoining urban and rural environments	43
Policy 4.5.6	Designing for public access	46
Objective 5.1	Public access to areas of value to the community is maintained or enhanced	54
Policy 5.1.1	Public access	54
URBAN DESIGN AND GROWTH		Page
Objective 4.5	Urban growth and development is well designed, occurs in a strategic and coordinated way, and integrates effectively with adjoining urban and rural environments	43
Policy 4.5.1	Providing for urban growth and development	43
Policy 4.5.2	Integrating infrastructure with land use	44
Policy 4.5.3	Urban design	45
Policy 4.5.4	Low impact design	45
Policy 4.5.5	Warmer buildings	46
Policy 4.5.6	Designing for public access	46
WASTE, CONTAMINATION AND HAZARDOUS SUBSTANCES		Page
Objective 4.6	Hazardous substances, contaminated land and waste materials do not harm human health or the quality of the environment in Otago	47
Policy 4.6.1	Hazardous substances	47
Policy 4.6.2	Use, storage and disposal of hazardous substances	47
Policy 4.6.3	Hazardous substance collection, disposal and recycling	48
Policy 4.6.4	Identifying contaminated land	48
Policy 4.6.5	Managing contaminated land	48
Policy 4.6.6	Waste management	49
Policy 4.6.7	Waste minimisation responses	49

Policy 4.6.8	Waste storage, recycling, recovery, treatment and disposal	49
Policy 4.6.9	New contaminated land	50