SOUTHLAND
Regional Policy Statement
2017

environment SOUTHLAND
REGIONAL COUNCIL
Te Taiao Tonga

Southland Regional Policy Statement 2017

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List of Abbreviations

the Act	Resource Management Act 1991
HAIL	Hazardous Activities and Industries List
The HSNO Act	Hazardous Substances and New Organisms Act 1996
LGA	Local Government Act 2002
LIM	Land Information Memorandum
NESAQ	National Environmental Standard for Air Quality 2011
NESCS	National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012
NPS-FM	National Policy Statement for Freshwater Management 2014
NPSET	National Policy Statement on Electricity Transmission 2008
NPSREG	National Policy Statement for Renewable Electricity Generation 2011
NZCPS	New Zealand Coastal Policy Statement 2010
NZWS	New Zealand Waste Strategy 2010
RPS	Southland Regional Policy Statement
the Settlement Act	Ngai Tahu Claims Settlement Act 1998
Water Plan	Regional Water Plan for Southland
WMA	Waste Minimisation Act 2008

Foreword

I'm delighted the Southland Regional Policy Statement is now operative. We initiated discussions about the issues and options to be included in this document way back in 2009, so getting to this point has been a huge effort from staff, councillors, stakeholders and our communities.

In December 1997, the first Southland Regional Policy Statement became operative. Since then, this document has guided all resource management decisions for our region – it is Southland's most significant planning tool; an overarching document that provides direction to district plans and other resource management plans.

In Southland we are blessed with an abundance of natural resources – water, land, coast, air. These resources underpin our regional economy and quality of life and as a regional council it is our job to ensure they are managed responsibly and sustainably. It's a vital role because it impacts on how Southlanders live, work and play, now and in the future. However, our natural resources are under increasing pressure. How we use them has changed and in places like our farms and in the city, we are trying to do more with less.

We continue to increase our awareness of pollution and the causes of it, not only in our rivers, lakes and streams. There are also initiatives underway to improve air quality, particularly in our urban centres; and our city and district councils are working on strategies to improve their infrastructure for stormwater and sewage treatment to minimise their impact. As well, we've increased our focus on safeguarding biodiversity and Southland's heritage.

The Regional Policy Statement identifies the community's aspirations and the actions required to achieve success. It directs regional and district plans to address the cumulative effects of resource use and development. It encourages people to work together and recognises our connections to our environment by encompassing the Ngāi Tahu philosophy of "ki uta ki tai" – from the mountains to the sea.

The community is also increasingly conscious of the need to prepare for natural hazards and climate change, and we have taken these factors into account in the preparation of this document.

The Regional Policy Statement is at the heart of resource management in Southland. Working with communities to improve the sustainability of our region's natural resources is a priority for this council. Providing future generations of Southlanders with an environment we can all share and enjoy is a legacy we all want to be a part of.

By affixing the Common Seal, it is hereby certified that this is a true and correct copy of the Southland Regional Policy Statement 2017, approved by resolution on 20 September 2017 and to become operative on 9 October 2017.

Nicol Horrell
Chair

Rob Phillips
Chief Executive

Chapter 1: Introduction

1.1 Introduction

The Southland Regional Policy Statement (RPS) guides resource management policy and practice in Southland. It provides a framework on which to base decisions regarding the management of the region's natural and physical resources, gives an overview of the significant resource management issues facing Southland, including issues of significance to tangata whenua, and includes objectives, policies and methods to resolve any identified issues. The RPS also includes measures to indicate whether the objectives have been achieved.

In working to achieve the objectives of the RPS, the Southland Regional Council seeks to improve the quality of life for Southlanders. This means giving the community confidence that:

- our current activities will be managed to protect the intrinsic value of Southland's ecosystems; and
- Southland's natural and physical resources will be developed and used in a way that will ensure that the environment can support the community's health and wellbeing now and in the future.

The issues, objectives, policies and methods contained within the RPS provide direction for both regional and district planning documents to achieve the integrated management of Southland's natural and physical resources. The document has been divided into 15 topic chapters. In some instances, the topic chapters cross reference to each other. The RPS should be read as a whole and all issues, objectives and policies considered together. If there are conflicts between competing issues, objectives and policies, the provisions of all of the chapters will be evaluated and reconciled to reach an outcome that promotes sustainable management. The exception to this approach is where a provision in the RPS is expressly giving effect to a directive provision in a higher order planning document, such as a national policy statement or national environment standard. The RPS will contribute to the broader goal of sustainable management and ensure that both current and future generations of Southlanders have the opportunity to appreciate and benefit from the region's bounty.

1.2 The Southland region and its resources

Southland is New Zealand's most southern region (refer to Figure 1). It has a total area (land and sea) of 5504874.43 hectares.[1] This area includes several off-shore islands, the largest being Stewart Island/Rakiura. The neighbouring regions are Otago and the West Coast.

Southland has an extensive coastline, the longest in the country at 3,000 km.[2] On the mainland, the coastline stretches from the Waiparau Head in the Catlins to Awarua Point in Fiordland. The Southland region extends 12 nautical miles (approximately 22 km) seaward from the coastlines of both the mainland and off-shore islands to the limit of New Zealand's territorial waters. To the north, mountain ranges generally provide a barrier between the region and the remainder of the South Island. These ranges include the Eyre Mountains and the Darran Mountains.

[1] Statistics New Zealand (2011) Land Area, NZ.
[2] Environment Southland (2005) Regional Coastal Plan for Southland, Invercargill, NZ.

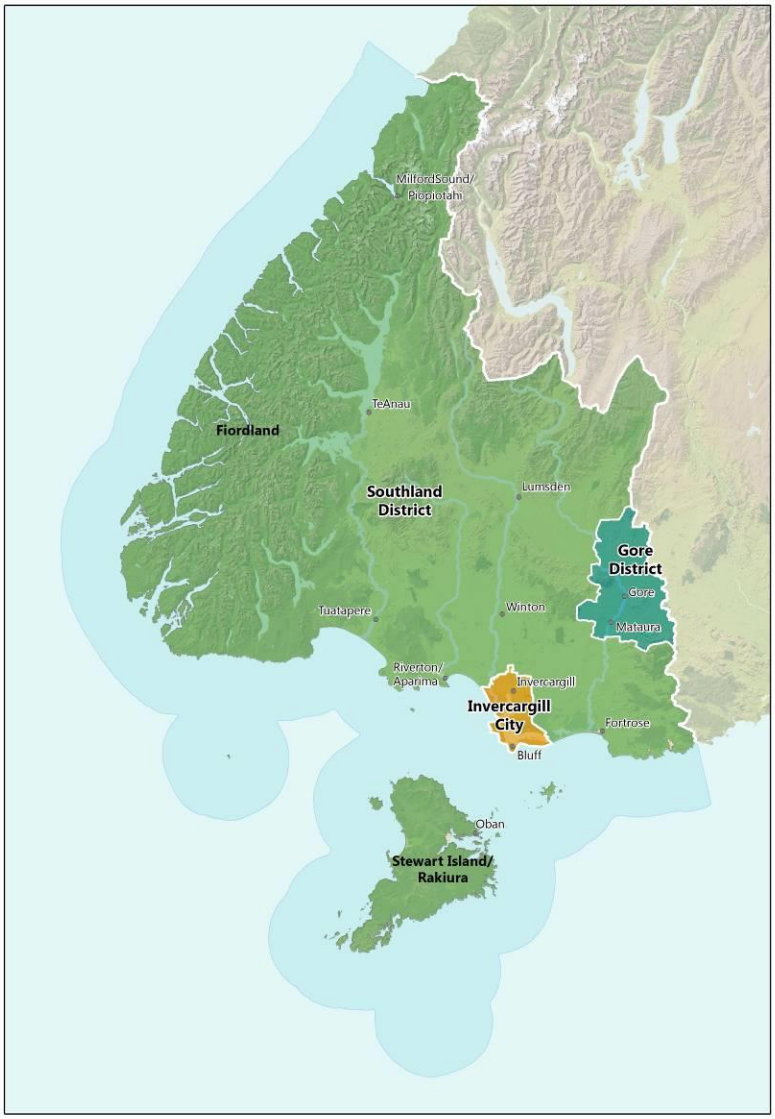

Figure 1: Map of the Southland Region

Over half (53%) of the land area of Southland is part of New Zealand's Conservation Estate and is managed by the Department of Conservation.[3] This area includes the Rakiura and Fiordland National Parks. Fiordland is the largest national park in New Zealand and covers 1,257,000 hectares.[4]

The national parks, rivers and lakes and wilderness areas in Southland attract local residents as well as national and international tourists. The recreational and tourism opportunities provided by the trout fisheries, tramping tracks, wildlife and other natural resources benefit both the health and wellbeing of the community and the local economy.

[3] The Department of Conservation, n.d., Southland, http://www.doc.govt.nz/about-doc/structure/offices/conservancies/southland/, viewed 6.9.2011.
[4] Ibid.

Southland's natural and physical resources also support a thriving agricultural economy and community. Farms occupy a large proportion of the non-conservation land in mainland Southland.[5] This highlights the importance of agriculture to the region and the significant contribution the industry makes to the national economy. The agriculture industry, including primary processing, is the largest contributor to Southland's regional economy.[6] It also contributes to Southland's social and cultural wellbeing. Other primary industries that are important to Southland include forestry, mining and commercial fishing.

The largest non-agricultural based industrial operation in Southland is the aluminium smelter at Tiwai Point near Bluff,[7] currently operated by New Zealand Aluminium Smelters (NZAS). A significant proportion of the electricity required to run the smelter comes from the Manapouri hydroelectric power station. The Manapouri hydroelectric power station is the country's largest hydroelectric power station in terms of both capacity and energy production[8] and is of regional and national significance. The White Hill wind farm and Monowai hydroelectric power station are the other regionally and nationally significant generation activities in operation in the region. Despite these generation activities, due to the smelter's demand for a continuous supply of high-load power, Southland generally has to import electricity to meet the region's needs. The National Grid plays a critical role in delivering this electricity to support the health and wellbeing of the region. The region has significant renewable energy resources, for example wind resources, and the maintenance and development of these has an important role to play in improving regional and national security of supply.

Southland is one of New Zealand's more sparsely populated regions. The total population of Southland at the 2013 Census was 93,342[9] people. This equates to 2.2%[10] of New Zealand's population. The Gore District has a population of 12,033[11], the Southland District has a population of 29,613[12] and the Invercargill City District has a population of 51,696[13]. Invercargill is the largest settlement in Southland, and Gore the second largest. Approximately 30% of Southland's population lives in rural areas[14]. There are also several other smaller towns throughout Southland including Winton, Te Anau, Bluff and Riverton/Aparima. Most of the population is concentrated on the eastern Southland Plains, with Fiordland almost totally devoid of permanent human settlement. The attractions of Southland's

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[5] Statistics New Zealand (n.d.) New Zealand: An Urban/Rural Profile Update, http://www.stats.govt.nz/browse_for_stats/people_and_communities/geographic-areas/urban-rural-profile-update.aspx, viewed 29.9.2011.

[6] Market Economics Limited (2013). Southland Region: Economic Impacts of Water Policy Decisions Workstream, NZ.

[7] Venture Southland, (n.d.) *The Southland Regional Economic Profile,* Venture Southland, Invercargill, http://www.southlandnz.com/LinkClick.aspx?fileticket=SoK6L2cs42U%3d&tabid=296, viewed 14.7.11.

[8] East Harbour Management Services (2003) Southland Regional Energy Assessment, Venture Southland, Invercargill.

[9] Statistics New Zealand (2013) *Quick Stats about the Southland Region* retrieved from *http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=15112&tabname=, viewed 24/07/2014.*

[10] Ibid.

[11] Statistics New Zealand (2013) *Quick Stats about the Gore District http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=15152&parent_id=15112&tabname=#15152, viewed 24/07/2014.*

[12] Statistics New Zealand (2013) *Quick Stats about the Southland District http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=15113&parent_id=15112&tabname=#15113, viewed 24/07/2014.*

[13] Statistics New Zealand (2013) *Quick Stats about the Invercargill City District http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=15162&parent_id=15112&tabname=#15162, viewed 24/07/2014.*

[14] Statistics New Zealand (2013) Population estimates http://www.stats.govt.nz/~/media/Statistics/browse-categories/people-and-communities/geographic-areas/urban-rural-profile-update/population-estimates.xls, viewed 24/07/2014.

National Parks cause the region's population to swell in the summer months due to an influx of tourists.

The physical resources associated with Southland's urban communities include infrastructure for transport, energy and network utilities. Flood protection infrastructure systems are also an important component of the urban environment for many Southland communities including Invercargill, Tuatapere, Lumsden, Winton, Athol, Gore, Mataura, Wyndham and Cleddau Village at Milford Sound/Piopiotahi.

The Climate

Southland's climate is generally cool and temperate. Typical summer daytime maximum air temperatures range from 16°C to 23°C, but occasionally rise above 30°C. Winters are cold and the region can experience frequent frosts, particularly in inland areas. Typical winter daytime maximum air temperatures range from 8°C to 12°C. [15] The mountains of Fiordland intercept the prevailing westerly winds. This means that though rainfall is reliable in most parts of the region, areas in the rain shadow created by the Fiordland Ranges, such as the Te Anau Basin and Northern Southland, are more prone to periods of dry weather. The region's mean annual rainfall ranges from about 800 mm at Otama on the Waimea Plain to nearly 6,500 mm at Milford in Fiordland. There are about 1600 hours of bright sunshine in Southland annually.[16] Southland's climate is strongly influenced by large-scale changes in oceanic and atmospheric circulations in the western Pacific – these can occur over a few years (the El Niño Southern Oscillation) or over a few decades (the Interdecadal Pacific Oscillation).[17]

Human activity is also changing Southland's climate. Emissions of greenhouse gases, such as carbon dioxide, are causing the earth's atmosphere to warm up; this is disrupting natural climate patterns. The National Institute of Water and Atmospheric Research (NIWA) predicts that Southland's annual average temperature could increase by 0.8–0.9°C by 2040.[18] Southland could also be up to 30% wetter with more varied rainfall patterns, and flooding could become up to four times as frequent by 2070.[19] Should these predictions materialise, Southland would be exposed to an increased magnitude of natural hazards such as flooding and droughts.

Discrete natural hazard events are not the only negative effects of climate change. Slight changes in temperature and rainfall patterns can also present major challenges to ecosystems, and the individual species and primary industries they support.[20]

The Coast

Southland's coastal waters lie in the Tasman Sea, Foveaux Strait and the Southern and Pacific Oceans. The outer boundary is the edge of New Zealand's territorial sea, at 12 nautical miles from shore; while

[15] Ministry for the Environment (2008) How might climate change affect my region? Climate change in Southland, http://www.mfe.govt.nz/issues/climate/about/climate-change-affect-regions/southland.html, viewed 28.9.2011.
[16] Ibid.
[17] Environment Southland and Te Ao Mārama Incorporated (2011) *Our Threats: How safe are we from floods, droughts and other extreme climate events? Part 4 of Southland Water 2010: Report on the State of Southland's Freshwater Environment.* Environment Southland, Invercargill.
[18] Ibid.
[19] Ministry for the Environment (2008) How might climate change affect my region? Climate change in Southland, http://www.mfe.govt.nz/issues/climate/about/climate-change-affect-regions/southland.html, viewed 28.9.2011
[20] Environment Southland and Te Ao Mārama Incorporated (2011) *Our Threats: How safe are we from floods, droughts and other extreme climate events? Part 4 of Southland Water 2010: Report on the State of Southland's Freshwater Environment.* Environment Southland, Invercargill.

on land the boundary is generally the average spring tide high water mark – known as mean high water springs.

The coastline is an important habitat for many different species of plants and animals, some of which are nationally and internationally significant. Significant biological communities in coastal areas include those supported by sand dune systems and marine sediments, including those in lagoons and estuaries, the rocky shore, open water and areas where alpine species occur at sea level. Most of Southland's coastal waters are no more than 200 metres deep, except for the area directly west of Fiordland where the continental shelf is close to the land edge and the sea depth drops quickly to more than 4,000 metres.[21] There are ten marine reserves, five Mātaitai reserves,two marine mammal sanctuaries and 23 'china shops'[22] in the Southland coastal marine area. The natural and physical resources present in Southland's coastal environment contribute to the social, economic and cultural wellbeing of the region.

Water Bodies

Four major river catchments extend over Southland: the Waiau, Aparima, Ōreti and Mataura. These four rivers are formally recognised for their cultural significance to Ngāi Tahu by way of a statutory acknowledgement under the Ngāi Tahu Claims Settlement Act 1998. National Water Conservation Orders on the Mataura and Ōreti Rivers also reflect the national significance of these water bodies, particularly as brown trout fisheries.

Southland has several large, iconic lakes including Lakes Te Anau, Manapōuri, the Mavora Lakes and Lake Hauroko. These lakes generally have high water quality, and support a variety of species within their waters and on the surrounding land. They are also valued highly for aesthetic, cultural, recreational and economic reasons (including electricity generation). Southland also has a number of smaller coastal lakes, such as Lake Vincent, Lake George/Uruwera, Forest Lake and The Reservoir.

The Waituna Lagoon is a large shallow water body on the southern coast. The lagoon, together with the associated Awarua Wetland, has been designated as a wetland of international importance under the 1976 Ramsar Convention. This convention recognises that the lagoon has large areas of unmodified wetland, is an important habitat for resident and migratory birds (including nationally critical and endangered species), supports several alpine and sub-alpine plant species at sea level, as well as a variety of other terrestrial and aquatic plants and animals.[23] The significance of the Waituna Wetland to the local Ngāi Tahu people is recognised by a Statutory Acknowledgement under the Ngāi Tahu Claims Settlement Act 1998.

However, because of many years of land development in the catchment, including drainage of wetland areas and clearance of indigenous vegetation, water quality in the lagoon and the creeks that flow into it has deteriorated. High levels of nutrients in the water, particularly nitrogen and phosphorus, mean that the lagoon is at risk of shifting from having clear water and an aquatic environment dominated by *Ruppia* to having turbid, murky water dominated by algae.

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[21] Environment Southland, Department of Conservation (Southland Conservancy), Invercargill City Council, Southland District Council and Te Ao Marama Inc. (2005) *The State of Southland's Coastal Marine Environment: Summary Report*, Environment Southland. Invercargill.

[22] 'China shops' are identified and defined in the Fiordland Marine Conservation Strategy. They include small discrete areas that are outstanding for the abundance and/or diversity of animal communities, mixed animal and plant communities or particular animal species.

[23] Thompson, R., Ryder, G. (2002) Waituna Lagoon: Summary of existing knowledge and identification of knowledge gaps. *Science for Conservation 215,* Department of Conservation/Te Papa Atawhai, Wellington.

Groundwater (sediments beneath the ground that bear freshwater) has a significant influence on surface water bodies, both in terms of water quantity and water quality. For example, it contributes to the flows in streams and lowers surface water temperatures and is also important to a number of Southland communities as a source of drinking water. Groundwater in some areas of Southland has naturally high levels of iron, manganese and hardness. Groundwater can also be contaminated by poorly maintained or installed bores and by the application of nitrogen fertilisers and land management practices (e.g. soil cultivation, winter grazing) on the ground above.

Plains

Southland has experienced a number of ice ages during the past two and a half million years. Glaciers active during these periods transported sediments from mountains and valleys to form Southland's plains. Finer sediments were, and continue to be, deposited by Southland's river systems. These sediments have provided Southland's plains with good natural drainage and an abundant supply of water. Both factors contribute to the productivity of Southland's farmland.

Tussock Grasslands and Forested Areas

Southland (excluding the conservation areas) has experienced significant deforestation and land clearance during its history. However, the region still supports 14 species of tussock, some of which can survive at an altitude of 2,000 metres, and remnants of scrub and native bush. Many of the bush remnants are under threat from wind damage, introduced animals, both farm animals and pests, wilding trees and further deforestation. Some tussock grasslands are under pressure from land use intensification, wilding trees and development. Tussock grasslands and forested areas have a range of benefits, including the provision of habitat for indigenous species, prevention of erosion and benefits to water quality and quantity.

Fiordland

Fiordland is a rugged and largely pristine area of Southland with areas of dense bush, alpine areas and steep fiords. Fiordland's land area is a significant part of Te Wāhipounamu South West Fiordland World Heritage Area. The 14 main fiords support a variety of different habitats with a diverse range of flora and fauna which have been recognised as significant, nationally and regionally. Many parts of Fiordland are extremely isolated, enabling species, such as the takahe, to survive safe from humans and, as a result of pest control programmes, introduced pests. However, other areas such as Milford Sound/Piopiotahi attract a significant number of visitors each year.

Stewart Island/Rakiura

Stewart Island/Rakiura is the third largest island in New Zealand and lies 30 km southwest of Bluff, between latitudes 46 and 47 degrees south.[24] Stewart Island/Rakiura has been recognised for its outstanding landscape values (excluding Oban and Halfmoon Bay). The island's sheltered bays and natural harbours, including Paterson Inlet/Whaka a Te Wera and Port Pegasus/Pikihatiti were sites for early Māori occupation and European settlement from the 1820s.[25] Today, Oban/Halfmoon Bay is the only permanent settlement with a population of around 380[26] people. The settlement relies primarily

[24] Department of Conservation (n.d.) Rakiura National Park, http://www.doc.govt.nz/parks-and-recreation/national-parks/rakiura/, dated viewed 29.9.2011.
[25] Peat, N. (2010) *Rakiura Heritage: A Stewart Island History and Guide to Historic Sites*, Department of Conservation/ Te Papa Atawhai Southland Conservancy, Invercargill.
[26] Statistics New Zealand (2013) QuickStats about Stewart Island

on imported energy resources, but there are opportunities for the development of appropriate renewable energy resources for the island.

The main industries on Stewart Island/Rakiura are fishing, marine farming and tourism, and historically the island has been host to sealing and whaling activities, gold prospecting, tin mining, forestry and farming. In 2002, the Rakiura National Park was established. The park covers 85% of the island, and protects temperate rainforests, nationally significant dune systems (i.e. Mason Bay), wetlands, the coastal environment and the species these areas support.[27] The national park also protects the island's historic heritage sites which provide evidence of both Māori and European occupation and remnants of past industry like the nationally significant Tin Range schist and tin workings.[28]

1.3 Legislative context

Resource Management Act 1991

The purpose of the Resource Management Act 1991 (the Act) is to promote the sustainable management of New Zealand's natural and physical resources. This means managing resources in a way that will provide for the needs of current and future generations.

Local authorities (regional, district and city councils) are responsible for achieving sustainable resource management within their areas of jurisdiction. As part of this role, Sections 59 to 62 of the Act state that a regional council must prepare a regional policy statement to contribute to this purpose in their particular region. The RPS has been prepared in accordance with these provisions of the Act (refer to Figure 2).

A regional policy statement must give effect to national policy statements, including the New Zealand Coastal Policy Statement 2010. Furthermore, a regional policy statement must not be inconsistent with any water conservation order.

The RPS must also take into account any iwi planning documents which includes Te Tangi a Tauira, Ngāi Tahu Ki Murikihu Natural Resource and Environmental Iwi Management plan 2008.

Both regional plans and district plans must give effect to a regional policy statement, a requirement that helps to implement the provisions of the RPS.

Local Government Act 2002

While the RPS has been developed in accordance with the Act, its implementation is also reliant on work undertaken by local government under the provisions of the Local Government Act 2002 (LGA). The LGA requires accountability from local government, and promotes the wellbeing of the community in four areas: environmental, social, cultural and economic. The RPS plays an important role in contributing to those four wellbeings of the community and towards the achievement of community outcomes.

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http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=15148&parent_id=15113&tabname=, viewed 24/07/2014.

[27] Department of Conservation/ Te Papa Atawhai Southland Conservancy (2011) Stewart Island / Rakiura Conservation Management Strategy 2011 – 2021: *Provisionally Approved*, Author, Invercargill.

[28] Ibid.

The LGA requires all local authorities to prepare a Long-term Plan to provide a focus for the decisions and activities of the local authority. In addition to a Long-term Plan, local authorities must allocate funding to their activities through Annual Plans. Activities that implement the RPS must be planned for through Long-term Plan and Annual Plan processes. Successful implementation of the RPS will require resources to be allocated through these funding processes and is not guaranteed depending on individual local authority priorities.

The Southland Regional Council will, from time to time, participate in decision-making processes of other local authorities to advance the implementation of the objectives, policies and methods of the RPS. This may include submissions and appeals on resource consent proposals, plan changes and plan reviews, as well as submissions on Long-term and Annual Plan processes.

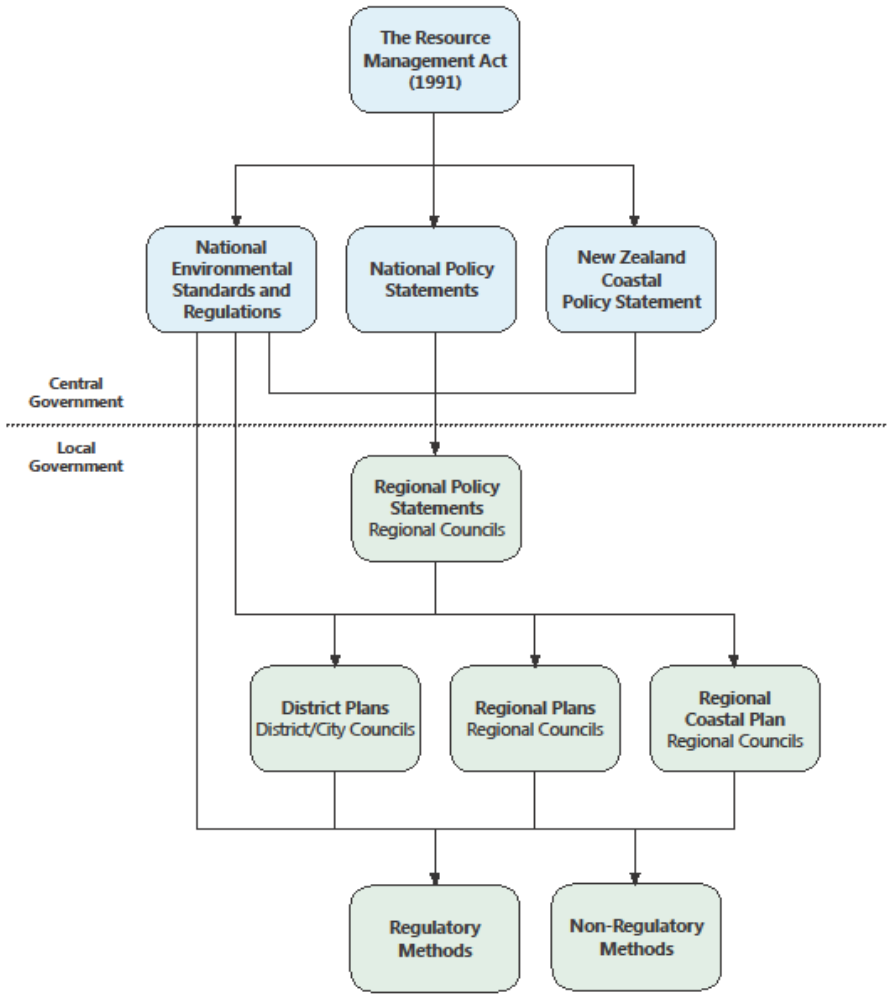

Figure 2: Legislative and policy framework in New Zealand

Chapter 2: Resource Management Processes for Local Authorities

2.1 Processes for resolving cross-boundary issues and inter-agency coordination of processes

Integrated management acknowledges the inextricable connection between air, water, land and all living things. The knowledge that resources are integrated and must be managed as such, is encompassed by the Ngāi Tahu philosophy of "ki uta ki tai" – from the mountains to the sea. Recognising the concept of "ki uta ki tai" and fostering integrated management will help the Southland Regional Council to promote the sustainable management of the natural and physical resources of the region.

The Southland Regional Council will promote the consistent and integrated management of natural resources, including:

- integrating the management of coastal and fresh waters; and
- addressing the effects that land use activities have on water quality, particularly cumulative effects.

However, natural and physical resources and processes, such as infrastructure networks and areas of significant biodiversity, do not necessarily stop at city, district or regional boundaries. Additionally, both Te Rūnanga o Ngāi Tahu and papatipu rūnanga have interests across regional and district boundaries. Therefore, Section 62(1)(h) of the Act requires a regional policy statement to describe "the processes to be used to deal with issues that cross local authority boundaries, and issues between territorial authorities or between regions."

The processes the Southland Regional Council will promote include:

- a collaborative approach to resource management between local authorities;
- decision-making that takes account of the needs of current and future generations and environmental, social, economic and cultural outcomes; and
- the need for local authorities, tangata whenua, resource users, the government and communities to work collaboratively and share information.

Opportunities that arise from this approach include, but are not limited to, the preparation, implementation, and administration of combined regional and district planning documents as set out in Section 80 of the Act. Other existing examples in Southland of regional collaboration and groups working together in planning and decision-making include the Southland Regional Transport Committee, Emergency Management Southland, Te Rōpū Taiao, Biodiversity Southland, the Mayoral Forum and the Shared Services Forum.

An integrated management approach will also benefit the processing and hearing of resource consent applications. For example, where the request for a consent involves decisions by a district or city council and/or the Southland Regional Council, the Southland Regional Council will endeavour to collaborate with the territorial authority concerned. If all consents are applied for at the same time for a particular activity, all of the effects of new activities can be considered at the same time, including any cumulative effects. Territorial authorities and the Southland Regional Council should seek to notify each other as soon as practical if they receive an application for a proposal likely to require consents from more than one authority.

Where appropriate, the Southland Regional Council will facilitate applications being made so they can be considered together, as well as joint and combined hearings, as per Sections 91, 102 and 103 of the Act.

Other opportunities for identifying and resolving cross boundary issues include:

- transfer of powers (Section 33 of the Act) and delegation of functions (Sections 34 and 34A of the Act);
- joint management agreements with another statutory body (such as Te Rūnanga o Ngāi Tahu) or the Crown (Section 36B of the Act);
- Annual and Long-term planning processes under the Local Government Act 2002 (LGA), which provides the opportunity for local authorities to cooperate and budget for joint processes;
- communication and undertaking major projects together;
- triennial agreements under the LGA are an opportunity for local authorities within a region to set out processes for consultation, protocols and processes for resolving cross-boundary issues;
- the Southland Regional Council advising and working with the Minister for the Environment, the Minister of Conservation in the coastal marine area, and the Environmental Protection Authority to identify and resolve cross boundary issues or proposals that are significant at a national level.

2.2 Implementation of the Southland Regional Policy Statement by local authorities through plans

Sections 67 and 75 of the Act require that regional and district plans give effect to the RPS. The methods are the key provisions that state how local authorities will give effect to the RPS. They also indicate how it is expected the policies will be implemented so that the objectives are achieved. Methods contained in the RPS require or encourage local authorities to take a course of action.

The word *Will* indicates an action that must be taken to give effect to the policy, although there sometimes may be differences as to how that action is expressed within plans.

The phrase *Will be encouraged to* indicates discretion about whether or not to take a course of action to implement the policy, to be determined by the local authority. Methods in this category should be implemented where practicable, but there may be good reasons for the local authority not to take that action and instead implement other actions to achieve the objectives of the RPS. The *Will be encouraged to* category also includes actions that fall outside the planning framework of the Act. This recognises that only district and regional plans are required to give effect to a regional policy statement. However, these actions can sometimes be implemented through local authority Long-term Plan and Annual Plan processes, although this is not guaranteed. There will be many instances where the provisions are already being implemented by local authorities. In these situations, no further action will be necessary to give effect to the RPS.

In specific circumstances, the methods will specify timeframes for implementation. Where these are not specified, implementation is to occur as soon as reasonably practicable.

Methods in the RPS direct the Southland Regional Council and territorial authorities to act. When the term "local authorities" is used, a method applies to the Southland Regional Council and/or territorial authorities. Territorial authorities will implement such methods within their own districts. There may be a need for some collaboration between the territorial authority and the Southland Regional Council to ensure the method is enacted efficiently and effectively.

2.3 Monitoring statement

The Southland Regional Council will monitor and review the provisions in the Regional Policy Statement to check their efficiency and effectiveness throughout the life of this document and publish the results. This is both a legal requirement and good practice. The anticipated environmental results (AERs) will be used to measure success and to check if the RPS is working or not.

This work will be integrated and linked with the other significant monitoring that the Southland Regional Council carries out i.e. state of the environment, plan and resource consent monitoring.

The RPS needs to reflect the needs and aspirations of tangata whenua and the wider community, so tangata whenua and stakeholders will be encouraged to be involved with monitoring the provisions of the RPS. The results of monitoring will be reported every three years through the Southland Regional Council's Long-term Plan.

The RPS is meant to be a living document, so changes will be sought to it when:

1. monitoring shows that adequate progress is not being made towards achieving the anticipated environmental results;
2. there are major national developments with implications for the RPS, e.g. significant amendments to the Act or the adoption of national policy statements or national environmental standards;
3. the results of new scientific work enhance the RPS and make its provisions more certain for resource users.

The First Schedule of the Act sets out the process for changing the RPS.

Chapter 3: Tangata Whenua

Introduction

Ngāi Tahu are tangata whenua of the entire Southland region. Ngāi Tahu have occupied the area and used its natural resources for centuries and have a special relationship with the land, air, water and natural resources. The Treaty of Waitangi/Te Tiriti o Waitangi was signed locally by Ngāi Tahu in 1840 at Ruapuke Island in Foveaux Strait, as well as other places in Te Wai Pounamu (the South Island) and guarantees rangatiratanga, the right of tangata whenua to manage their lands and natural resources in accordance with cultural traditions.

The purpose of this chapter is to:

1. identify who the relevant organisations representing tangata whenua are in the Southland region, and any relevant background information;
2. set out the resource management issues of significance to Ngāi Tahu;
3. set out the objectives, policies and methods to resolve those issues, and achieve outcomes consistent with those desired by Ngāi Tahu as tangata whenua of the Southland region.

This chapter should not be read in isolation from other chapters of the RPS). The approach taken has been to integrate tangata whenua themes throughout the entire document and all other chapters, to reinforce the Ngāi Tahu philosophy of "ki uta ki tai" (from the mountains to the sea) holistic resource management planning. For example, the identification and management of natural features and landscapes which have cultural significance to tangata whenua is provided for in Chapter 10: Natural Features and Landscapes.

Tangata Whenua in the Southland region

Papatipu Rūnanga and Te Rūnanga o Ngāi Tahu

Ngāi Tahu are the people who, by whakapapa (genealogical descent), derive their status as mana whenua from their ancestors who held the customary title and aboriginal rights to the land at the time of signing the Treaty of Waitangi/Te Tiriti o Waitangi at Ruapuke Island and other places in the South Island/Te Wai Pounamu. This acknowledges Ngāi Tahu as a Treaty of Waitangi/Te Tiriti o Waitangi partner. The Crown has formally acknowledged the Ngāi Tahu tangata whenua status in the Ngāi Tahu Claims Settlement Act 1998.

Ngāi Tahu have a tribal council, Te Rūnanga o Ngāi Tahu, which is made up of 18 papatipu rūnanga who hold the rights and responsibilities to defined areas of land and waters within the takiwā (area) of Ngāi Tahu. The Te Rūnanga o Ngāi Tahu Act 1996 establishes Te Rūnanga o Ngāi Tahu as the iwi authority for the purposes of the Act.

There are four Murihiku papatipu rūnanga. They are:

- Waihōpai Rūnaka
- Te Rūnanga o Ōraka-Aparima
- Hokonui Rūnaka
- Te Rūnanga o Awarua

These rūnanga are the principal mana whenua and kaitiaki for the Southland region.

The Murihiku Papatipu Rūnanga also share an interest with Te Rūnanga o Makaawhio, based on Tai Poutini (the West Coast), in the area between Whakatipu-Waitai (Lake McKerrow) and Piopiotahi (Milford Sound) inland to the Main Divide (refer to Figure 3).

Figure 3: Murihiku and the Papatipu Rūnanga

Source: Te Tangi a Tauira Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008.

Ngāi Tahu Claims Settlement Act 1998

The Ngāi Tahu Claims Settlement Act 1998 was enacted to achieve settlement of historical claims against the Crown. The Ngāi Tahu Claims Settlement Act 1998, amongst other things, identifies taonga species, and establishes tōpuni, statutory acknowledgements, dual place names and nohoanga sites (refer to Figure 4). These instruments recognise the special association of Ngāi Tahu with these areas and resources and assist with Ngāi Tahu participation in processes under the the Act and the Local Government Act 2002 (LGA).

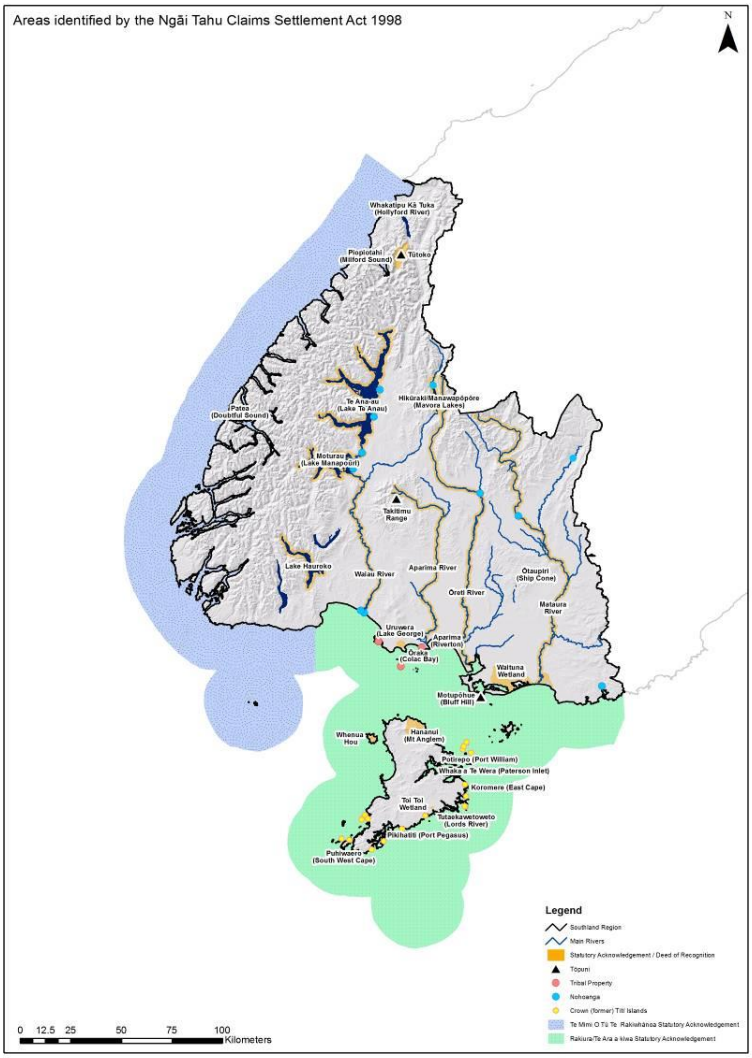

Figure 4: Areas identified by the Ngāi Tahu Claims Settlement Act 1998

Ngāi Tahu and the management of natural resources

For Ngāi Tahu as tangata whenua, the natural environment (including lands, coasts, water, air and biodiversity) and how they engage with it is a critical component of their identity as a people and in maintaining their culture. The concept of kaitiakitanga (guardianship) is central to Ngāi Tahu and is key to their role as mana whenua. Kaitiakitanga is the means by which the mauri (life force) of taonga (treasures) is restored, maintained and enhanced for present and future generations. Tikanga, or customary practices, are followed in order to protect mauri.

The relationship between Ngāi Tahu and local government in Southland

Local government authorities in Southland have a number of statutory functions and responsibilities under both the Resource Management Act 1991 and the Local Government Act 2002. Local government in Southland have recognised the importance in establishing, and the need to maintain, a close working relationship with Ngāi Tahu to ensure that their views are heard and carefully considered in decision-making.

Consultation under the Act during the early stages of any proposed undertaking, which may affect Ngāi Tahu interests, and full consideration of their views, is seen as essential. In Southland, local government and Ngāi Tahu have established a number of forums and mechanisms to build the relationship between the organisations and to assist consultation. Te Rōpū Taiao is a political forum

made up of representatives of Ngāi Tahu and elected representatives of local government that meets regularly to discuss resource management issues.

The four Murihiku papatipu rūnanga also created an entity, Te Ao Mārama Incorporated, which is mandated to provide input into the processes required by the Act and the LGA, and other relevant legislation, and to represent them with day-to-day resource management processes.

Table 1: Overview of Tangata Whenua provisions

Issues	Objectives	Policies	Methods
Issue TW.1	**Objective TW.1** Decision-making and partnerships with tangata whenua	**Policy TW.1** Treaty of Waitangi	**Methods TW.1 – 10**
		Policy TW.2 Partnerships and relationship agreements	**Methods TW.3, 4, 6, 7, 9, 10**
		Policy TW.4 Decision making	**Methods TW.1, 2, 4, 5, 7, 9, 10**
Issue TW.2	**Objective TW.2** Provision for iwi management plans	**Policy TW.3** Iwi management plans	**Methods TW.2, 3, 7, 9, 10**
Issue TW.3	**Objective TW.3** Tangata whenua spiritual values and customary resources	**Policy TW.4** Decision making	**Methods TW.1, 2, 4, 5, 7, 9, 10**
	Objective TW.4 Sites of cultural significance		
Issue TW.4	**Objective TW.3** Tangata whenua spiritual values and customary resources	**Policy TW.4** Decision making	**Methods TW.1, 2, 4, 5, 7, 9, 10**
Issue TW.5	**Objective TW.5** Provision for Māori land and resources	**Policy TW.5** Māori land and resources	**Methods TW.1, 5, 10**

3.1 ISSUES

Resource management issues of significance to Ngāi Tahu

The following significant resource management issues have been identified by tangata whenua of the Southland region, and included in the RPS in accordance with Section 62(1)(b) of the Act.

The resource management issues identified below are those of particular significance for Ngāi Tahu across the Southland region. The issues identified are not intended as an exhaustive list, and furthermore, all the resource management issues in this Regional Policy Statement are of significance to tangata whenua in the region. Accordingly, and as noted above, tangata whenua themes and associated provisions are integrated throughout the Regional Policy Statement document and other chapters in a holistic manner to reinforce the Ngāi Tahu philosophy of "ki uta ki tai" (from the mountains to the sea) and ensure that outcomes are consistent with those desired by Ngāi Tahu.

Issue TW.1
Limited understanding by decision-makers of tangata whenua environmental and cultural values, and lack of capacity and resources to enable tangata whenua to effectively engage in resource management processes and decisions.

Issue TW.2
Insufficient recognition of iwi management plans in resource management processes and decisions.

Issue TW.3
Destruction, damage and modification of wāhi tapu, wāhi taonga and sites of significance to tangata whenua.

Issue TW.4
Degradation of mauri and wairua of natural resources used for customary purposes, and loss of quality and access to mahinga kai.

Issue TW.5
Difficulties in developing and using Māori land and resources.

3.2 OBJECTIVES

Objective TW.1 – Decision-making and partnerships with tangata whenua
The principles of the Treaty of Waitangi/Te Tiriti o Waitangi are taken into account in a systematic way through effective partnerships between tangata whenua and local authorities, which provide the capacity for tangata whenua to be fully involved in council decision-making processes.

Explanation/Principal Reasons
Objective TW.1 meets Part 2 of the Act by seeking that sustainable management of the region's environment involves both tangata whenua and the local authorities working together in decision-making, under Treaty of Waitangi/Te Tiriti o Waitangi principles.

Objective TW.2 – Provision for iwi management plans
All local authority resource management processes and decisions take into account iwi management plans.

Explanation/Principal Reasons
Iwi management plans are an important tool to identify issues of resource management significance to tangata whenua in local authority decision-making processes.

Objective TW.3 – Tangata whenua spiritual values and customary resources
Mauri and wairua are sustained or improved where degraded, and mahinga kai and customary resources are healthy, abundant and accessible to tangata whenua.

Explanation/Principal Reasons
For Ngāi Tahu as tangata whenua, the natural environment (lands, coasts, water, air and biodiversity) and how they engage with it, is a critical component of their identity as a people and in maintaining their culture. The ongoing ability to keep alive traditional and customary practices passed down and gifted by tūpuna (ancestors) in places or on ancestral lands provides spirituality, a sense of belonging and of continuity.

Objective TW.4 – Sites of cultural significance
Wāhi tapu, wāhi taonga and sites of significance are appropriately managed and protected.

Explanation/Principal Reasons
Section 6 of the Act recognises that the protection of historic heritage (including sites of significance to Māori, including wāhi tapu) and the relationship of Māori and their culture and traditions with their ancestral lands from inappropriate subdivision, use and development, are matters of national importance. The management and protection of such values recognises their importance to the regional sense of identity and is essential to providing for the social and cultural wellbeing of the community.

Objective TW.5 – Provision for Māori land and resources
Māori are able to develop and use their land and resources and provide for their social, economic and cultural wellbeing, in a manner that is sustainable.

Explanation/Principal Reasons
The use and development of Māori land and resources, including Māori land administered under the Te Ture Whenua Māori Act 1993, papakāinga and marae, offers significant social, economic and cultural benefits. Such activities should not adversely affect the health and safety of people and should recognise and respond to Part 2 of the Act.

3.3 POLICIES

Policy TW.1 – Treaty of Waitangi
Consult with, and enhance tangata whenua involvement in local authority resource management decision-making processes, in a manner that is consistent with the principles of the Treaty of Waitangi/Te Tiriti o Waitangi.

Explanation/Principal Reasons
The Treaty of Waitangi/Te Tiriti o Waitangi is a founding document of New Zealand, which established a special relationship between Māori people and the Crown. The Treaty of Waitangi/Te Tiriti o Waitangi provided for the exchange of kawanatanga (governance) for the protection of tino rangatiratanga (including tribal self-management). The Crown, exercising governance, has established a system of delegated authority with the functions delegated to regional councils and territorial authorities set out in Sections 30 and 31 of the Act.

The Treaty of Waitangi/Te Tiriti o Waitangi requirements in Section 8 of the Act encompass guiding principles for the engagement of local authorities with Māori in resource management decision-making processes. The Murihiku Ngāi Tahu Treaty principles include representation, partnership, building capacity, shared decision-making, active protection and shared initiatives.

Local authorities should ensure that their functions and powers under the Act are exercised in a manner that:

(a) is consistent with the principles of the Treaty of Waitangi/Te Tiriti o Waitangi;
(b) recognises that tangata whenua, as indigenous people, have rights protected by the Treaty of Waitangi/Te Tiriti o Waitangi and that consequently the Act accords iwi authorities a status distinct from that of interest groups and members of the public;
(c) promotes awareness and understanding of local authority obligations under the Act regarding the principles of the Treaty of Waitangi/Te Tiriti o Waitangi, tikanga Māori and Māori kaupapa among Council decision-makers, staff and the community;
(d) provides for the ongoing implementation of the Ngāi Tahu Claims Settlement Act 1998 (e.g. appending statutory acknowledgements to regional and district planning documents, regulations and relevant "cultural redress" provisions).

Policy TW.2 – Partnerships and relationship agreements
Actively foster partnerships and relationship agreements between local authorities and tangata whenua.

Explanation/Principal Reasons
Partnerships and relationship agreements among local authorities and tangata whenua are essential if the sustainable management of the region's natural resources is to be achieved. A number of partnerships have been established in Southland. Examples include Te Rōpū Taiao Tangata Whenua/Council Advisory Committee and iwi representation on Council committees/hearing panels. A Charter of Understanding relationship agreement has also been entered into between local authorities and tangata whenua, which covers consultation, shared decision-making, joint management agreements, capacity building and resourcing for iwi to contribute to decision-making. A number of protocols/guidelines have also been developed, to assist with tangata whenua consultation under the Act.

Policy TW.3 – Iwi management plans
Take iwi management plans into account within local authority resource management decision making processes.

Explanation/Principal Reasons
An iwi management plan is a general term given to any planning document recognised by Te Rūnanga o Ngāi Tahu (as iwi authority) and lodged with a local authority. While iwi management plans are not statutory, since 2003 local authorities have had an obligation under the Act to take them "into account" when preparing their own regional and district planning documents.

Te Tangi a Tauira is an iwi management plan recognised by Ngāi Tahu which encompasses the Southland region.

Local authorities should take iwi management plans into account by:

(a) recognising and using Te Tangi a Tauira as a basis for tangata whenua input into planning processes;
(b) assisting and encouraging tangata whenua to use, monitor and review their iwi management plans, and to achieve their implementation projects.

Policy TW.4 – Decision making
When making resource management decisions, ensure that local authority functions and powers are exercised in a manner that:
(a) recognises and provides for:
    (i) traditional Māori uses and practices relating to natural resources (e.g. mātaitai, kaitiakitanga, manaakitanga, matauranga, rāhui, wāhi tapu, taonga raranga);
    (ii) the ahi kā (manawhenua) relationship of tangata whenua with and their role as kaitiaki of natural resources;
    (iii) mahinga kai and access to areas of natural resources used for customary purposes;
    (iv) mauri and wairua of natural resources;
    (v) places, sites and areas with significant spiritual or cultural historic heritage value to tangata whenua;
    (vi) Māori environmental health and cultural wellbeing.
(b) recognises that only tangata whenua can identify their relationship and that of their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga.

Explanation/Principal Reasons
Growth and development pressures have led to widespread destruction and degradation of places, sites and values of cultural, spiritual or historic significance to tangata whenua. Tangata whenua are increasingly seeking greater involvement in local government decision-making processes (e.g. resource consent proposals, plan/policy making and designations), to fulfil their role as kaitiaki and address adverse effects on Māori environmental health, cultural wellbeing and traditions.

Policy TW.5 – Māori land and resources
Assist and enable the use and development of Māori land and resources, in a manner that is sustainable.

Explanation/Principal Reasons
Substantial areas of Māori land administered under Te Ture Whenua Māori Act 1993 are situated within Southland including Māori freehold land and Māori customary land. Māori land is often more difficult to develop than land in general title, due to multiple ownership and succession, fragmentation, its location and other reasons.

The Māori Land Court has jurisdiction over all Māori land in accordance with the Te Ture Whenua Maori Act 1993, with the Court's role to facilitate owner aspirations in terms of retention and utilisation of Māori land. Additionally, the requirements of the Act also apply to the use and development of Māori land.

Where owners determine that Māori land resources are to be utilised and developed in accordance with the purpose for which the land was originally allocated, local authority planning documents should assist and enable owners, trusts and tangata whenua to plan for the use and development of their land in accordance with the provisions of the Act.

The Southland Regional Council also has the view that where it is demonstrated that Māori lands that support areas with significant indigenous vegetation should be left untouched in the national interest, it is up to the Crown to compensate the owners for the loss of their private property rights.

Iwi may also have aspirations to use, develop and protect resources such as:

- marae, papakainga and associated community facilities or housing;
- other resources held in iwi ownership, such as pounamu/greenstone pursuant to the Ngāi Tahu (Pounamu Vesting) Act 1997 and "tribal properties" pursuant to the Ngāi Tahu Claims Settlement Act 1998;
- coastal resources, for example aquaculture activities. Additionally the Crown has obligations under the Maori Commercial Aquaculture Claims Settlement Act 2004;
- particular fresh or coastal water bodies of special significance to tangata whenua, including the aspirations of iwi to develop, use and protect water.

The continuation and expansion of such activities is also appropriate, in accordance with the provisions of the Act.

3.4 METHODS

The Southland Regional Council will:

Method TW.1 – Regional plans
Establish and maintain provisions in regional plans that safeguard identified environmental and cultural values and resources of tangata whenua from inappropriate use or development.

Method TW.2 – Consultation
Consult with tangata whenua and take into account Te Tangi a Tauira and other relevant iwi planning documents for guidance in plan development to identify:
(a) resource management issues relevant to tangata whenua;
(b) environmental, cultural and spiritual values and customary resources, including mahinga kai;
(c) effects on statutory acknowledgement sites/values, and sites of cultural significance.

Method TW.3 – Information and assistance
Actively encourage and support tangata whenua in developing and implementing registered iwi management plans by providing technical advice, information or administrative support.

Method TW.4 - Sharing and transfer of responsibilities
Provide for tangata whenua involvement in resource management, decisions and monitoring through:
(a) working parties or advisory groups in collaboration with other stakeholders;
(b) where appropriate, joint management agreements, and full or partial transfer of the Southland Regional Council's functions, duties or powers to tangata whenua through the recognised iwi authority, in accordance with Section 33 of the Act.

Territorial authorities will:

Method TW.5 – District plans

Establish and maintain provisions in district plans that:

(a) safeguard identified tangata whenua environmental and cultural values and resources from inappropriate subdivision, use or development, including recognising and providing for ancestral lands, wāhi tapu, wāhi taonga and recognised customary sites, activities and statutory acknowledgements;

(b) make provision for appropriate and sustainable development of land held by Māori under Te Ture Whenua Māori Act 1993, and resources while safeguarding biodiversity and the life-supporting capacity of land, air and water.

Local authorities will be encouraged to:

Method TW.6 – Research and investigation

(a) Seek cultural impact, Māori environmental health impact, and/or archaeological assessments to be included as part of relevant resource management proposals that may significantly affect environmental, cultural or resource values identified in statutory resource management plans or iwi management plans.

(b) Use indicators such as cultural monitoring tools as necessary to determine the effectiveness and efficiency of plan provisions and consent conditions, and the state of the environment.

Method TW.7 – Collaboration

(a) Include accredited tangata whenua commissioners on hearings panels for resource consent applications, notices of requirement or plan making processes, where tangata whenua environmental and cultural values or resources may be affected.

(b) Consider, where appropriate, full or partial transfer of a council's functions, duties or powers to tangata whenua through the recognised iwi authority, in accordance with Section 33 of the Act.

(c) Actively provide for tangata whenua involvement in plan development and statutory processes by:

  (i) giving effect to and maintaining the Charter of Understanding, or other formal agreements between the local authorities, Te Rūnanga o Ngāi Tahu and Te Ao Mārama Inc;

  (ii) giving effect to Te Tangi a Tauira;

  (iii) directly advising Te Rūnanga o Ngāi Tahu and papatipu rūnanga of notified applications for statutory approval where tangata whenua environmental or cultural values or resources may be affected;

  (iv) encouraging and facilitating consultation with tangata whenua by establishing protocols around involvement in resource management processes and decisions.

Method TW.8 – Protocols

Review and update the Charter of Understanding and other formal agreements as necessary, including providing for capacity building.

Method TW.9 – Consultation

(a) Consult with tangata whenua and take into account Te Tangi a Tauira and other relevant iwi planning documents in plan development, and in resource consent and notice of requirement processes.

(b) Encourage applicants for resource consents or notices of requirement to consult with tangata whenua where appropriate, and to take into account Te Tangi a Tauira and other relevant iwi

planning documents in plan development, and in resource consent and notice of requirement processes.

Method TW.10 – Other methods
Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons
The Act identifies the Southland Regional Council's responsibilities in managing natural and physical resources. These responsibilities include managing the effects of using, developing or protecting land, air and water resources through policy statements and regional plans. The Southland Regional Council is also required to monitor the state of the environment and the effectiveness of plan provisions and resource consent conditions. The Act clearly sets out the Southland Regional Council's obligations regarding tangata whenua involvement in establishing plans and making resource management decisions.

The principles of the Treaty of Waitangi/Te Tiriti o Waitangi are reflected in the overarching purpose of the Act, and are required to be taken into account in all resource management decisions. In particular, the Act specifically identifies the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga as a matter of national importance (Section 6 of the Act), and requires that particular regard be had for kaitiakitanga (the ethic of stewardship – Section 7 of the Act). When preparing regional policy statements to guide resource use, protection and management of resources, the Southland Regional Council is required to take into account the Treaty of Waitangi/Te Tiriti o Waitangi (Section 8 of the Act), identify the issues of resource management significance to tangata whenua, and take into account registered iwi management plans such as Te Tangi a Tauira*,* or any iwi management plan that follows.

The Southland Regional Council has built and maintains active relationships, understanding and communication with tangata whenua through Te Ao Mārama Incorporated, underpinned by a Charter of Understanding between tangata whenua and Southland's local authorities. The opportunity exists through the second generation RPS to build on the existing relationships and strengthen the understanding of tangata whenua values and perspectives, and involvement in resource management processes and decisions in a manner aligned with the principles of the Treaty of Waitangi/Te Tiriti o Waitangi.

The methods set out in this document build on established relationships, and recognise Ngāi Tahu as tangata whenua in Southland. In particular, the methods reflect and promote greater awareness and understanding of tangata whenua values, and acknowledge the special status afforded to tangata whenua under the Act. Establishing and maintaining open and effective relationships and communication between tangata whenua and the Southland Regional Council is fundamental to meeting obligations under the Act, and to recognising tangata whenua status and the Treaty of Waitangi/Te Tiriti o Waitangi principles. Actively including tangata whenua in decision-making processes including transferring Southland Regional Council functions where appropriate enables direct input into resource management outcomes. In particular it enables tangata whenua to exercise kaitiakitanga and rangatiratanga.

Chapter 4: Water

Introduction

This chapter of the RPS is concerned with fresh water. Fresh water is considered within the RPS in three parts – water quality, water quantity, and management of the beds of lakes and rivers. Consideration of water quality and water quantity includes both surface water and groundwater. Each part of this chapter outlines the significant resource management issues for water in the region, and the objectives, policies and methods to address those issues, all with the aim of sustainably managing the water resources of the Southland region. Management of water in the coastal marine area is addressed in Chapter 7: Coast, and the majority of issues relating to wetlands are addressed in Chapter 6: Biodiversity, of the RPS. However, the water quality and water quantity provisions of Chapter 4: Water are relevant to wetlands, as are the river and lake bed provisions where wetlands are located in the beds of lakes and rivers. Other chapters in the RPS also address issues that relate to, or influence fresh water, such as Chapter 5: Rural Land/Soils, Chapter 8: Natural Hazards, Chapter 13: Solid Waste, Chapter 16: Energy and Chapter 17: Urban. This chapter should be read in association with these other chapters. It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

To tangata whenua, water is a taonga for which they hold the kaitiaki responsibility to ensure it is passed on to future generations in as good as, if not better, condition than it was received by the current generation. Ngāi Tahu's particular cultural, spiritual, historical and traditional associations with a number of water bodies are recognised under Statutory Acknowledgements pursuant to the Ngāi Tahu Claims Settlement Act 1998. In addition, under the Customary Fishing Regulations 1998, mātaitai reserves can be established on traditional fishing grounds for the purpose of recognising and providing for customary management practices and food gathering. A freshwater mātaitai reserve is in place on the Mataura River above, at and below, the Mataura Falls.

To resource users such as industry, the agricultural sector and local communities, water sustains their social, economic and cultural wellbeing. To the whole regional community, water represents a significant recreational and natural asset that has intrinsic values just through its existence.

There are four major river catchments in Southland – the Waiau, Aparima, Ōreti and Mataura catchments, which cover 54% of the land area of the region. Numerous smaller catchments cover the balance of the region, in the Fiordland and Rakiura National Parks, the lower Southland Plains and the Catlins. It is also important to recognise the importance of high altitude lands as a source of water for Southland.

Two Water Conservation Orders apply in the region – the Water Conservation (Mataura River) Order 1997 and the Water Conservation (Oreti River) Order 2008. Both identify features or values of the rivers that are considered to be outstanding. A consent authority is not to grant a resource consent if it would be contrary to any restriction contained in a water conservation order, and shall not grant a resource consent unless the provisions of a water conservation order can remain without change or variation. When granting a consent, conditions are to be imposed to ensure that the provisions of water conservation orders are maintained. The objectives and policies in this RPS have been written to be consistent with the two water conservation orders that exist in the region.

The National Policy Statement for Freshwater Management 2014 (NPS-FM) sets out objectives and policies that direct local government to manage water in an integrated and sustainable way, while providing for economic growth within water quantity and quality limits. This RPS must give effect to

the NPS-FM, as well as any other relevant National Policy Statements. The approach taken by the RPS is to specify that water quality will be maintained as a bottom line and then put in place a process for setting freshwater objectives in accordance with the NPS-FM. This RPS seeks to maintain water quality, as a minimum. The setting of freshwater objectives will identify areas where water quality needs to be improved. This approach recognises that Southland's freshwater is very closely connected to coastal water with estuaries at the bottom of each main stem river. The New Zealand Coastal Policy Statement 2010 (NZCPS) sets a similar standard to that adopted in this RPS, which is to require coastal water quality to be maintained as a minimum.

Part A: Water Quality

Managing water quality remains a challenge within Southland. In the past, point source discharges directly to the region's rivers and streams have been the source of much of the contamination. While point source discharges continue to add some contamination to surface water, non-point source discharges are now the bigger issue. The second generation RPS will seek to address these in a way that recognises the complexity of managing these discharges, and provide a variety of methods to work in partnership with the community to work towards maintaining and improving water quality in Southland.

A general trend throughout the region for surface water is that quality decreases from the headwaters to lower catchment areas. While groundwater quality is generally good, in 2012 22% of defined aquifer zones had groundwater nitrate levels that showed evidence of significant land use impacts.

In rivers and streams where both nitrogen and phosphorus levels are high there is an increased risk of excessive algae growth during summer low flows. Monitoring over the last ten years has demonstrated a trend of steadily increasing levels of nitrogen in many waterways, particularly in the areas where more intensive land use is occurring. Water temperatures generally increase in lower catchment areas. Changes in water quality can affect downstream environments such as estuaries and coastal lagoons. These types of changes lead to ecosystem health decreases, reflecting the influence of increasing land use intensification and the effects of point source and non-point source discharges. Water quality can also be affected to such an extent that it is considered unsafe to swim and undertake other contact recreation activities, due to elevated bacteria levels.

A number of human activities cause adverse effects on water quality in Southland. Many of the activities result in nutrient leakage from land to surface and groundwater. Activities affecting water quality can include:

- direct discharges of contaminants (including industrial, municipal and agricultural wastes) to surface water and to land;
- intensive farming – particularly dairy and deer farming, and winter grazing of forage crops;
- stock access to waterways;
- flood and drainage works in river and stream beds;
- gravel extraction and quarrying adjacent to river beds;
- land development leading to increased discharges of sediment and stormwater to local surface waterways.

Further to this, Southland contains nationally significant deposits of coal, lignite and gas. Development of these resources has the potential to have significant adverse effects on water quality as well.

Extraction of large quantities of water can also reduce levels and flows of water in rivers and streams with consequent effects on water quality as the volume of water available to dilute contaminants decreases. While management of flows and levels in surface waterbodies can assist management of water quality, it should not be relied on, and direct causes of contamination and decreasing water quality should be addressed.

Where possible, an effects based approach is the preferred approach to managing water quality. However, where it is known that land use activities are causing non-point source discharges that are affecting water quality and which need to be managed, it is appropriate to focus on managing the activities themselves.

Table 2: Overview of Water Quality provisions

Issues	Objectives	Policies	Methods
Issue WQUAL.1	**Objective WQUAL.1** Water quality goals	**Policy WQUAL.1** Overall management of water quality	**Methods WQUAL.1 – 16**
		Policy WQUAL.2 All waterbodies	**Methods WQUAL.1 - 16**
		Policy WQUAL.3 Wetlands and outstanding freshwater bodies	**Methods WQUAL.1 - 16**
		Policy WQUAL.4 Awarua Wetland	**Methods WQUAL.1 - 16**
		Policy WQUAL.5 Improve catchment water quality	**Methods WQUAL.1 -7, 9 - 16**
		Policy WQUAL.6 Water in natural state	**Methods WQUAL.1 -7, 9 - 16**
		Policy WQUAL.7 Social, economic and cultural benefits	**Methods WQUAL. 1, 2, 4 - 16**
		Policy WQUAL.8 Preference for discharge to land	**Methods WQUAL.1, 4, 8, 16**
		Policy WQUAL.9 Untreated human and animal wastes	**Methods WQUAL.1, 2, 4, 5, 7, 8, 10 - 16**
		Policy WQUAL.10 Siting and operation	**Methods WQUAL.1, 4, 5, 8, 10, 11, 13 - 16**
		Policy WQUAL.11 Sources of community water supplies	**Methods WQUAL.1, 2, 5, 6, 11, 12, 14 - 16**
		Policy WQUAL.12 Integrated management	**Methods WQUAL.1, 4 - 16**
	Objective WQUAL.2 Lowland water bodies	**Policy WQUAL.1** Overall management of water quality	**Methods WQUAL.1 – 16**

Issues	Objectives	Policies	Methods
		Policy WQUAL.2 All waterbodies	**Methods WQUAL.1 - 16**
		Policy WQUAL.3 Wetlands and outstanding freshwater bodies	**Methods WQUAL.1 - 16**
		Policy WQUAL.4 Awarua Wetland	**Methods WQUAL.1 - 16**
		Policy WQUAL.5 Improve catchment water quality	**Methods WQUAL.1 -7, 9 - 16**
		Policy WQUAL.6 Water in natural state	**Methods WQUAL.1 -7, 9 - 16**
		Policy WQUAL.7 Social, economic and cultural benefits	**Methods WQUAL. 1, 2, 4 - 16**
		Policy WQUAL.8 Preference for discharge to land	**Methods WQUAL.1, 4, 8, 16**
		Policy WQUAL.9 Untreated human and animal wastes	**Methods WQUAL.1, 2, 4, 5, 7, 8, 10 - 16**
		Policy WQUAL.10 Siting and operation	**Methods WQUAL.1, 4, 5, 8, 10, 11, 13 – 16**
		Policy WQUAL.11 Sources of community water supplies	**Methods WQUAL.1, 2, 5, 6, 11 - 12, 14 - 16**
		Policy WQUAL.12 Integrated management	**Methods WQUAL.1, 4 - 16**
Issue WQUAL.2	**Objective WQUAL.1** Water quality goals	**Policy WQUAL.1** Overall management of water quality	**Methods WQUAL.1 – 16**
		Policy WQUAL.2 All waterbodies	**Methods WQUAL.1 - 16**
		Policy WQUAL.3	**Methods WQUAL.1 - 16**

Issues	Objectives	Policies	Methods
		Wetlands and outstanding freshwater bodies	
		Policy WQUAL.4 Awarua Wetland	**Methods WQUAL.1 - 16**
		Policy WQUAL.5 Improve catchment water quality	**Methods WQUAL.1 -7, 9 - 16**
		Policy WQUAL.6 Water in natural state	**Methods WQUAL.1 -7, 9 - 16**
		Policy WQUAL.7 Social, economic and cultural benefits	**Methods WQUAL. 1, 2, 4 - 16**
		Policy WQUAL.8 Preference for discharge to land	**Methods WQUAL.1, 4, 8, 16**
		Policy WQUAL.9 Untreated human and animal wastes	**Methods WQUAL.1, 2, 4, 5, 7, 8, 10 - 16**
		Policy WQUAL.11 Sources of community water supplies	**Methods WQUAL.1, 2, 5, 6, 11, 12, 14 - 16**
		Policy WQUAL.12 Integrated management	**Methods WQUAL.1, 4 - 16**
	Objective WQUAL.2 Lowland water bodies	**Policy WQUAL.1** Overall management of water quality	**Methods WQUAL.1 – 16**
		Policy WQUAL.2 All waterbodies	**Methods WQUAL.1 - 16**
		Policy WQUAL.3 Wetlands and outstanding freshwater bodies	**Methods WQUAL.1 - 16**
		Policy WQUAL.4 Awarua Wetland	**Methods WQUAL.1 - 16**
		Policy WQUAL.5 Improve catchment water quality	**Methods WQUAL.1 -7, 9 - 16**
		Policy WQUAL.6	**Methods WQUAL.1 -7, 9 - 16**

Issues	Objectives	Policies	Methods
		Water in natural state	
		Policy WQUAL.7 Social, economic and cultural benefits	**Methods WQUAL. 1, 2, 4 - 16**
		Policy WQUAL.8 Preference for discharge to land	**Methods WQUAL.1, 4, 8, 16**
		Policy WQUAL.9 Untreated human and animal wastes	**Methods WQUAL.1, 2, 4, 5, 7, 8, 10 - 16**
		Policy WQUAL.11 Sources of community water supplies	**Methods WQUAL.1, 2, 5, 6, 11, 12, 14 - 16**
		Policy WQUAL.12 Integrated management	**Methods WQUAL.1, 4 - 16**
	Objective WQUAL.3 Water in natural state	**Policy WQUAL.6** Water in Natural State	**Methods WQUAL.1 -7, 9 - 16**
Issue WQUAL.3	**Objective WQUAL.1** Water quality goals	**Policy WQUAL.1** Overall management of water quality	**Methods WQUAL.1 - 16**
		Policy WQUAL.5 Improve catchment water quality	**Methods WQUAL.1 -7, 9 - 16**
		Policy WQUAL.14 Information gathering	**Methods WQUAL.1 - 3, 5, 6, 10, 12 - 16**

4.1 ISSUES

Issue WQUAL.1
Good water quality and use of the assimilative capacity of water contribute to the social, economic and cultural wellbeing of Southland people and communities, but current and past discharges of contaminants, and land use and development are affecting the quality of Southland's surface and groundwater. Effects vary across the region and over time but are particularly apparent in lowland water bodies and coastal lakes, lagoons, tidal estuaries, salt marshes and coastal wetlands. Such discharges of contaminants, and land use and development can result in:

- microbiological contamination of waterways reducing recreation, cultural values, in particular tangata whenua cultural values, and drinking water quality;
- excessive nutrients causing nuisance algae and loss of drinking water quality, and affecting fisheries, ecosystems and natural character;
- sediment affecting fisheries, ecosystems and natural character.

Issue WQUAL.2
The effects of non-point source discharges on water quality in Southland are a significant and complex issue to manage.

Issue WQUAL.3
Further information on the state of some water resources and on the effects of land use and development on water quality is needed for informed decision making.

4.2 OBJECTIVES

Objective WQUAL.1 – Water quality goals
Water quality in the region:

(a) safeguards the life-supporting capacity of water and related ecosystems;
(b) safeguards the health of people and communities;
(c) is maintained, or improved in accordance with freshwater objectives formulated under the National Policy Statement for Freshwater Management 2014;
(d) is managed to meet the reasonably foreseeable social, economic and cultural needs of future generations.

Explanation/Principal Reasons
Objective WQUAL.1 sets out the overall framework for the management of water quality in Southland. It recognises that water quality has a significant effect on the life-supporting capacity of water and related ecosystems, and that safeguarding life-supporting capacity is required by the Act. It also requires that the health of people and communities is safeguarded in accordance with the NPS-FM.

In some areas in Southland, water quality is degraded. The situation has worsened with respect to some contaminants in some waterways and has improved for other contaminants since the last RPS became operative. Objective WQUAL.1 therefore sets an ambitious goal to maintain water quality, or improve it in accordance with freshwater objectives formulated in accordance with the NPS-FM. This recognises that freshwater objectives may vary across the region. Objective WQUAL.1 recognises that water quality affects how people use water and recognises the importance of safeguarding, maintaining and improving water quality to provide for the needs of future generations. The objective also recognises that people make use of water to provide for their social, economic and cultural wellbeing, and that this should be recognised in its management.

Water quality and water quantity are closely linked. Objective WQUAN.1 therefore includes reference to maintaining flows and levels for water quality purposes in order to provide a link to Objective WQUAL.1.

Objective WQUAL.2 – Lowland water bodies
Halt the decline, and improve water quality in lowland water bodies and coastal lakes, lagoons, tidal estuaries, salt marshes and coastal wetlands in accordance with freshwater objectives formulated in accordance with the National Policy Statement for Freshwater Management 2014.

Explanation/Principal Reasons
Surface water bodies throughout Southland have been classified by Southland Regional Council based on the River Environment Classification system developed by NIWA, adapted for specific Southland circumstances. Lowland water bodies are generally those found on the central plains and coastal areas, where the source rises at low elevations (below 400 metres above sea level). Lowland water bodies and coastal lakes, lagoons, tidal estuaries, salt marshes and coastal wetlands typically have lower water quality because land uses within their catchments tend to be more intensive and the lower elevation of the source means that all parts of the catchment are affected.

While point source discharges to land and water are or have been managed through resource consent conditions and a series of plan changes to the Regional Water Plan for Southland (Water Plan), the cumulative effects of land use can cause water quality issues in lowland water bodies and coastal lakes, lagoons, tidal estuaries, salt marshes and coastal wetlands. Objective WQUAL.2 aims to address Issue WQUAL.1 and avoid continued decline in the water quality of lowland water bodies and coastal lakes, lagoons, tidal estuaries, salt marshes and coastal wetlands. A whole of catchment approach will need to be taken to management of water quality in lowland water bodies, to recognise the effects of activities throughout the catchment on water quality. Depending on the water quality issue and its causes in any given catchment, improvements in water quality may take some time to be realised.

Objective WQUAL.3 – Water in natural state
Maintain the quality of water where it is in its natural state.

Explanation/Principal Reasons
The objective provides specific recognition of those areas where water quality is in its natural state. Within these areas the overall water quality is of a high standard and is generally low in nutrients, as it is largely unmodified or unaffected by point and non-point discharges.

4.3 POLICIES

Policy WQUAL.1 – Overall management of water quality
(a) Identify values of surface water, groundwater, and water in coastal lakes, lagoons, tidal estuaries, salt marshes and coastal wetlands, and formulate freshwater objectives in accordance with the National Policy Statement for Freshwater Management 2014; and
(b) Manage discharges and land use activities to maintain or improve water quality to ensure freshwater objectives in freshwater management units are met.

Explanation/Principal Reasons

Policy WQUAL.1 outlines the overall framework for managing water quality within Southland. The policy recognises that waterbodies in the region each have specific values (including cultural values, particularly tangata whenua cultural values), which vary depending on factors such as waterbody type (for example, lowland soft bedded streams versus rocky mountain streams), location (for example, headwaters or lower catchment areas), existing ecosystems and human uses. It is necessary to identify those values to set the basis on which water quality can be managed. Statutory Acknowledgements will also be relevant considerations. The aim for water quality should be to formulate freshwater objectives that recognise agreed community values associated with a particular water body, including the instream values most likely to be present in that water body.

Policy WQUAL.1 also sets out that the approach to water quality in the region will be to manage discharges and land use activities to maintain water quality or improve it so that freshwater objectives are met.

Policy WQUAL.2 – All waterbodies

Maintain or improve water quality, having particular regard to the following contaminants:

(a) nitrogen;
(b) phosphorus;
(c) sediment;
(d) microbiological contaminants.

Explanation/Principal Reasons

The major contaminants of concern in relation to water quality in Southland are those listed in Policy WQUAL.2, which arise from both point-source and non-point source discharges. Point-source discharges of contaminants, such as those from wastewater treatment plants, industrial sites and production land contribute to levels of nitrogen, phosphorus, sediment and microorganisms in surface water and groundwater. Non-point source discharges from land use activities contribute contaminants to groundwater, and contaminated groundwater can then affect surface water quality. Method WQUAL.1 provides for timeframes for improvements to meet freshwater objectives.

Managing activities that give rise to these contaminants will assist the Southland Regional Council to meet Objectives WQUAL.1 and WQUAL.2. Without this management it will not be possible to maintain water quality throughout the region. Depending on the water quality issue and its causes in any given catchment, improvements in water quality may take some time to be realised.

Policy WQUAL.2 lists the priority contaminants that need to be addressed. Additional contaminants may also need to be focused on in some areas.

Policy WQUAL.3 – Wetlands and outstanding freshwater bodies

Identify and protect the significant values of wetlands and outstanding freshwater bodies.

Explanation/Principal Reasons

Policy WQUAL.1 sets out the approach to managing water quality in the region through the formulation of freshwater objectives in accordance with the NPS-FM. Policy WQUAL.3 highlights that as part of this process, the significant values of wetlands and outstanding freshwater bodies will need to be identified and protected.

Wetlands form a significant part of the ecological character of Southland, and have an important role in maintaining water quality. Several of Southland's wetlands are of international or national significance, for example, the Waituna wetlands and the Te Anau string bogs.

The NPS-FM specifies that outstanding freshwater bodies are those water bodies identified in a regional policy statement or regional plan as having outstanding values, including ecological, landscape, recreational and spiritual values.

Policy WQUAL.4 – Awarua Wetland
Enhance the water quality of the Awarua Wetland by ensuring that discharges of contaminants and land use activities both individually and on a cumulative basis have no more than minor adverse effects on the significant characteristics and water quality of the Awarua Wetland.

Explanation/Principal Reasons
This policy sets the overall threshold for managing activities within the Awarua Wetland. Awarua Wetland is recognised for its international significance under the Convention on Wetlands of International Importance (also known as the Ramsar Convention) and is currently degraded as a result of deteriorating water quality. In order to protect the values of this wetland water quality should be enhanced. This will occur through the FMU process under the NPS-FM. The Ramsar Convention designation includes a map and geographic coordinates specifying the boundary of the Awarua Wetland.

Policy WQUAL.5 – Improve catchment water quality
Improve water quality by:
(a) identifying water bodies that are not meeting freshwater objectives, including identifying priority freshwater management units;
(b) specifying targets to improve water quality within those water bodies within defined timeframes;
(c) implementing management frameworks to meet the targets taking into account;
    (i) the values supported by the water body/ies;
    (ii) national or legislative standards and requirements;
    (iii) the benefits and costs associated with achieving improvement in water quality.

Explanation/Principal Reasons
Policy WQUAL.1 directs that discharges and land use activities are to be managed to ensure freshwater objectives are met. In order to achieve improvements in water quality to a point where freshwater objectives can be met it may, however, be necessary to undertake more specific management of activities in some catchments. More specific management actions will generally be necessary where water quality is significantly degraded and there is a more urgent need to improve it. For these catchments or waterbodies a timeframe should also be set by which measureable improvements in water quality will be achieved. Timeframes are necessary in order to provide certainty that degraded water quality will be addressed. Improvements in water quality may take some time to be realised depending on the water quality issue and its causes in any given catchment.

Policy WQUAL.6 – Water in natural state
To manage discharges and land use activities to maintain the quality of water and the associated values where it is in its natural state.

Explanation/Principal Reasons
This policy works within the overall framework of Policy WQUAL.1 and explicitly recognises the existing values associated with areas where the water quality is in its natural state. The policy recognises that this existing high water quality is to be maintained.

Policy WQUAL.7 – Social, economic and cultural benefits
Recognise the social, economic and cultural benefits that may be derived from the use, development or protection of water resources.

Explanation/Principal Reasons
The use, development or protection of water resources can result in social, economic and cultural benefits at local, regional and national levels. It is important to recognise these potential benefits when managing water.

Policy WQUAL.8 – Preference for discharge to land
Prefer discharges of contaminants to land over discharges of contaminants to water, where:
(a) a discharge to land is practicable;
(b) the adverse effects associated with a discharge to land are less than a discharge to water.

Explanation/Principal Reasons
There are benefits from discharging contaminants to land rather than water. It avoids direct discharge of contaminants to surface water bodies, and enables natural processes (such as filtration, absorption and plant uptake) to reduce overall contaminant loads. Policy WQUAL.8 is a further development of policies contained within the previous RPS, with a definite preference now expressed for discharges to land. The policy recognises that a discharge to land may not always be practicable and that there are some situations where a discharge to water may be a more suitable option.

Policy WQUAL.9 – Untreated human and animal wastes
Avoid the direct discharge of sewage, wastewater, industrial and trade waste and agricultural effluent to water unless these discharges have undergone treatment.

Explanation/Principal Reasons
Discharges of untreated human and animal wastes to water can significantly raise the level of microbial contamination and increase the risk of disease if the water is used for drinking or contact recreation. Furthermore, such discharges are culturally offensive to many people, particularly tāngata whenua. Treatment methods are available, as are alternative disposal methods, such as discharge to land. This policy clearly indicates that discharge directly to water from any source, including from boats, is not acceptable.

Policy WQUAL.10 – Siting and operation
Manage the siting and operation of activities that result in point source discharges of contaminants to land to ensure that adverse effects on groundwater, surface water and coastal water quality are avoided, remedied or mitigated.

Explanation/Principal Reasons
Siting and operation of activities may in part be dictated by the location of the resource to be developed. Management of the operations to avoid, remedy or mitigate the effects of the activity provides the mechanism to achieve appropriate water quality for the relevant water body.

Policy WQUAL.11 – Sources of community water supplies
Avoid, as far as practicable, remedy or mitigate the risks that the adverse effects of land use activities and discharges of contaminants have on the sources of community water supplies.

Explanation/Principal Reasons
Community water supplies are a value of surface water and groundwater that needs to be recognised in order to ensure that the needs of existing and future generations can be met, as sought by Objective WQUAL.1. Land use activities and discharges of contaminants can pose risks to the water quality of sources of community water supplies, and therefore risks to the supplies themselves. The Southland Regional Council is conscious of the need to manage risks to the sources of community water supplies. Effects of land use activities and discharges of contaminants can be recognised by local authorities through consideration of resource consent applications, and when developing new plan provisions. Method WQUAL.15(b) outlines further ways in which the risks can be managed. The National Environmental Standard for Sources of Human Drinking Water 2008 also provides protection to sources of water for community supplies.

Policy WQUAL.12 – Integrated management
Integrate the management of land use, water quality, water quantity, coast and air, and the use, development and protection of resources wherever possible to achieve the freshwater objectives formulated in accordance with Policy WQUAL.1.

Explanation/Principal Reasons
Integrated management offers an opportunity to address in a more co-ordinated way the various activities occurring within surface water or groundwater catchment areas on land, water, coast and air and their effects on water quality. The policy has been adopted to give effect to Objective WQUAL.1.

Policy WQUAL.13 – Information gathering
Continue to improve knowledge and understanding of water resources, and the relationship of land use activities with water quality values in water bodies, in Southland to promote the sustainable management of water.

Explanation/Principal Reasons
The Southland Regional Council has been monitoring water quality in the region for a number of years, but changing resource use and the emergence of new water quality issues mean there is always a need to improve the information available to decision makers, resource users and the community.

4.4 METHODS

<u>The Southland Regional Council will:</u>

Method WQUAL.1 – Regional plans
Establish and maintain provisions in regional plans in accordance with the National Policy Statement for Freshwater Management 2014 that:
(a) identify freshwater management units;
(b) identify compulsory, national and regional values for each unit for which water quality is to be managed;
(c) establish freshwater objectives, based on the identified values;
(d) set limits or targets to allow the freshwater objectives to be met;

(e) manage land use activities and discharges of contaminants to stay within limits and meet targets;
(f) determine timeframes and appropriate methods for the improvement of degraded freshwater management units;
(g) in implementing the matters outlined in (a) to (f) above, the Southland Regional Council will work with tangata whenua, the community, territorial authorities, industry, stakeholders and the agricultural sector.

Method WQUAL.2 – Research and investigations

Undertake research and investigations:

(a) to maintain an up to date understanding of the values that surface and groundwater in the region can support;
(b) into the effects of land use on water quality and the effectiveness, efficiency and costs of different mitigation options.

Method WQUAL.3 – Monitoring

Monitor surface and groundwater quality and ecosystem health in order to assess whether water quality is being maintained and/or improved.

Method WQUAL.4 – Consents

Use consent conditions on discharge permits to manage the contaminants that can be discharged.

Method WQUAL.5 – Information and advice

Provide information and advice to territorial authorities, consent holders and the community on good management practices to reduce the effects of land use on water quality.

Method WQUAL.6 – Land use effects on water quality

(a) (i) Analyse the region-wide evaluation of the state, trends and pressures on water quality;
    (ii) Prepare a timetable for setting freshwater objectives and water quality limits (or water quality targets where water quality limits are not met) for all freshwater management units in the region, including the identification of priority units that require specific or immediate management through a regional plan process;
    (iii) Establish a regional policy framework to avoid over-allocation, or where over-allocation has occurred to specify targets and methods to meet these targets within defined timeframes. The framework shall address the priority freshwater management units in the first instance and all others according to the timetable identified in (a)(ii) above;
(b) For priority freshwater management units, according to the timetable defined above, develop a policy framework that includes:
    (i) setting fresh water quality limits (or water quality targets where water quality limits are not being met);
    (ii) determining the best approach to avoiding over-allocation;
    (iii) where over-allocation has occurred and water quality targets are set, providing timeframes by which those targets are to be met;
    (iv) regular reporting on changes in water quality over the life of the Regional Policy Statement;
(c) In implementing the matters outlined in (a) and (b) above, the Southland Regional Council will work with tangata whenua, the community, territorial authorities, industry, stakeholders and the agricultural sector.

Method WQUAL.7 – Management of activities that affect water quality

(a) Using the region-wide evaluation prepared under Method 6(a)(i) above, identify activities that require a review of the existing policy framework to address their effects on water quality.

(b) Initiate a series of plan changes as required to the Regional Water Plan for Southland to address activities identified in (a), including by reducing losses to water of nitrogen, phosphorus, sediment and microbiological contaminants.

Method WQUAL.8 – Discharges to land

When preparing regional plans and in considering resource consent applications, consider whether discharges of contaminants to land are practicable as opposed to discharges to water.

Method WQUAL.9 – Land use rules

Consider the use of regional rules, including permitted activity rules, to manage land use and/or land use change where the cumulative effects of non-point source discharges are a significant contributor to decreases in water quality.

Method WQUAL.10 – Collaboration

Work collaboratively with tangata whenua, the community, territorial authorities, industry, stakeholders and the agricultural sector to ensure discharges are appropriately sited and managed.

Method WQUAL.11 – Integrated management

When preparing regional plans and in considering resource consent applications, consider the interrelationships between water quality, water quantity and land use activities, and wherever possible, develop integrated planning frameworks.

Method WQUAL.12 – Good management practice

Provide information and advice to the community on land management practices that will assist to maintain or improve water quality, and align this advice with industry resources and programmes where appropriate.

Territorial authorities will:

Method WQUAL.13 – District plans

Establish and maintain provisions in district plans to manage the effects of subdivision, use and development on water quality, including by, but not limited to:

(a) controlling the location, density, design and standard of land use and development, including by developing subdivision and design standards to guide high quality land development and guide resource management decisions that avoid or mitigate adverse effects;

(b) promoting land use, development and management practices that maintain or improve water quality;

(c) ensuring that urban development cannot occur without the appropriate infrastructure capacity to support it;

(d) encouraging urban growth within urban areas of Southland that have existing infrastructure capacity where possible.

Local authorities will be encouraged to:

Method WQUAL.14 – Good management practice

Work in partnership with landowners and other organisations to promote good management practices that maintain or improve water quality.

Method WQUAL.15 – Collaboration

(a) Collaborate to manage the effects of land use on water quality through:
  (i) developing complementary district and regional plan provisions;
  (ii) regular liaison and sharing information on water quality matters of common interest;
  (iii) presenting joint information to the community about water quality issues and their management;
(b) Work collaboratively to:
  (i) undertake research and investigations into the identification and management of groundwater protection zones for sources of community water supplies;
  (ii) identify and implement complementary plan provisions or other mechanisms to manage the risks that land use activities could have on the sources of community water supplies;
(c) Work collaboratively with each other, the community, industry and the agricultural sector to develop codes of practice and programmes to improve water quality.

Method WQUAL.16 – Other methods

Collaborate with other local authorities, tangata whenua, the community, industry, stakeholders and the agricultural sector to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons

Under Section 30 of the Act, the Southland Regional Council has responsibility for controlling the discharge of contaminants into or onto land, air or water and discharges of water into water. The Southland Regional Council also has the responsibility for controlling the use of land for the purpose of maintaining or enhancing the quality of water in water bodies. The 2005 amendments to the Act gave the Southland Regional Council further new responsibilities for establishing rules in regional plans to allocate the capacity of water to assimilate a discharge of a contaminant (if appropriate). The NPS-FM contains further requirements for regional councils to maintain or improve the overall quality of fresh water within their regions.

Territorial authorities have the function of controlling any actual or potential effects of the use, development or protection of land, which will include any effects on water quality that may arise from the use, development or protection of land. All councils in Southland therefore have statutory responsibilities that relate to the management of water quality.

Managing water quality remains a challenge within Southland, with non-point source discharges of significant concern. A general trend through the region for surface water is that quality decreases from the headwaters to lower catchment areas. While groundwater quality is generally good, nitrate levels are elevated in many parts of Southland.

The primary means of managing the effects of discharges of contaminants on water quality will be through the Water Plan. The Southland Regional Council has developed an adaptive approach to the Water Plan, updating it as necessary to address emerging activities and water quality issues. This approach is supported by the methods of this chapter, and is particularly recognised by the method that requires a regional evaluation of degraded water bodies to be undertaken, and specific management approaches adopted for prioritised areas.

District plans prepared by the region's territorial authorities can also assist in managing water quality through setting out provisions to control effects of land use and development, such as through stormwater and on-site wastewater management.

Other methods which support the regional and district plans:

- monitoring, research and investigations to support the ongoing adaptation of management to water quality issues that arise;
- provision of information and advice to territorial authorities, consent holders and the community; and
- collaboration in the preparation of plans.

Many of the methods for implementing the WQUAL objectives and policies will involve close liaison and collaboration with the community and stakeholders, and this will be critical to their success.

Promoting land management practices that improve water quality could include such measures as provision of information and education, and assistance with implementing good management practices for different types of land uses. While lacking the enforcement powers of rules contained in plans, these types of methods can make a valuable contribution to managing water quality issues through the relationships that they build between the region's water quality stakeholders and the innovative solutions that can arise from these relationships, and through providing a robust foundation for future plan provisions.

Part B: Water Quantity

Until recently, Southland was not generally considered to be water short. However, the water resource in the region is finite, and at times, as a result of climatic conditions and existing abstraction, is under stress.

Abstraction of groundwater has generally been preferred over surface water, and the majority of consents for water takes in the region are from groundwater. While abstraction of water is not large in a national context, demand for water has increased significantly since 2000, particularly for irrigation. With land intensification and the need for more efficient production to remain competitive, irrigation is increasingly being used in the region as a tool to increase reliability of production.

Compared to other regions (particularly Canterbury and Otago) the amount of irrigation in Southland is still relatively small. Water is used for irrigation in Southland to provide insurance for pasture growth against dry periods, as opposed to being for increased production (as it generally is in Canterbury). However, the groundwater resources in Southland are considerably more limited than those in other areas of the country, and groundwater takes are tending to be concentrated within relatively confined areas (for example Riversdale and Five Rivers in northern Southland). This increases the potential for adverse effects.

The major allocation of water in the region is for generation of hydro-electric power in the Waiau catchment. The flows in the lower Waiau River are significantly modified by the Manapōuri hydro-electricity generation scheme. Water is also taken for a number of community supplies, primary production activities (including irrigation) and for some major industries.

The major pressures on water quantity in Southland are:

- abstraction of surface water for consumptive use (industrial, municipal and agricultural);
- abstraction of groundwater for consumptive use (principally for pastoral irrigation and dairying uses);
- the significant diversion of water from the Waiau catchment for hydro-electricity generation, which is a consumptive use in this instance as the water is not returned to the catchment;
- the holding of allocated water through resource consents that are not fully used, preventing or restricting other individuals or communities gaining access to the water resource;
- conflict between in-stream and out-of-stream uses, and the need to maintain life–supporting capacity.

Table 3: Overview of Water Quantity provisions

Issues	Objectives	Policies	Methods
Issue WQUAN.1	**Objective WQUAN.1** Sustainably managing the Region's water resources	**Policy WQUAN.1** Instream values	**Methods WQUAN.1, 3, 6, 14**
		Policy WQUAN.3 Regional plans	**Methods WQUAN.1, 3, 9, 12 - 14**
		Policy WQUAN.5 Abstraction management	**Methods WQUAN.1, 3, 8, 10 - 14**
		Policy WQUAN.7 Social, economic and cultural benefits	**Methods WQUAN.1, 4, 7 - 10, 12, 14**
		Policy WQUAN.8 Integrated management	**Methods WQUAN.1, 7, 8, 10 - 14**
Issue WQUAN.2	**Objective WQUAN.1** Sustainably managing the Region's water resources	**Policy WQUAN.2** Overallocation	**Methods WQUAN.1 - 3, 9, 12 - 14**
		Policy WQUAN.3 Regional plans	**Methods WQUAN.1, 3, 6, 9, 12 - 14**
	Objective WQUAN.2 The efficient allocation and use of water	**Policy WQUAN.3** Regional plans	**Methods WQUAN.1, 3, 6, 9, 12 - 14**
		Policy WQUAN.4 Demand management	**Methods WQUAN.1 - 3, 8 - 10, 12 - 14**
		Policy WQUAN.6 Efficient use of water	**Methods WQUAN.1, 8, 9, 12 - 14**
		Policy WQUAN.7 Social, economic and cultural benefits	**Methods WQUAN.1, 4, 7 – 10, 12, 14**
Issue WQUAN.3	**Objective WQUAN.1** Sustainably managing the Region's water resources	**Policy WQUAN.9** Information gathering	**Methods WQUAN.1 - 3, 6, 9, 13, 14**

4.5 ISSUES

Issue WQUAN.1
Taking, use, damming and diversion of water contributes to the social, economic and cultural wellbeing of Southland people and communities, but can cause changes in flows and levels of water that can significantly affect aquatic and riverine ecosystems, fish passage, natural character, amenity and recreational values, and the ability of groundwater to recharge or discharge.

Issue WQUAN.2
There is increasing demand for the finite water resources of Southland and there are conflicts and effects from allocation of water between competing uses, including people's social, economic and cultural needs and the need to protect aquatic and riverine ecosystems and values.

Issue WQUAN.3
Further information on the extent and state of some water resources, and on the effects of land use on flows and levels of water is required for informed decision making.

4.6 OBJECTIVES

Objective WQUAN.1 – Sustainably managing the region's water resources
Flows, levels and allocation regimes of surface water and groundwater in the region are developed in accordance with the National Policy for Freshwater Management 2014 to:
(a) safeguard the life-supporting capacity of water, catchments and related ecosystems;
(b) support the maintenance or improvement of water quality in accordance with Policy WQUAL.1;
(c) meet the needs of a range of uses, including the reasonably foreseeable social, economic and cultural needs of future generations;
(d) comply with limits or targets set to achieve freshwater objectives.

Explanation/Principal Reasons
Sustainably managing the region's water resources is important in order to enable the community to provide for its social, economic and cultural wellbeing. The challenge is to provide for current needs in such a way that future needs are not compromised, and so that environmental needs are provided for. The objective has been adopted to give effect to Section 5 of the Act.

Objective WQUAN.2 – The efficient allocation and use of water
The allocation and use of Southland's water resources:
(a) is efficient;
(b) recognises and makes provision for the Monowai and nationally significant Manapōuri hydro-electric generation schemes in the Waiau catchment and the resultant modified flows and levels.

Explanation/Principal Reasons
Objective WQUAN.2 guides the use of the region's water resources. Using any available water efficiently (i.e. not wastefully) will enable as wide a section of the regional community as possible to use water. Efficiency can include considerations of technical, dynamic (adjusting the use of water over time), allocative and economic efficiency. In the Waiau catchment allocation is dominated by the use of water for hydro-electric generation and the effects of this on the ability of other water users to access water needs to be recognised. The objective has been adopted to address Issue WQUAN.2.

4.7 POLICIES

Policy WQUAN.1 – Instream values
Maintain instream values of surface water that derive from flows and levels of water, while recognising the special circumstances of the Waiau catchment.

Explanation/Principal Reasons
Instream values, such as aquatic habitat, and natural character are derived in part from the amount of water flowing in a river or stream, or the level of a lake or wetland. Managing water resources so that these values are maintained is consistent with Sections 6 and 7 of the Act. Policy WQUAN.1 recognises the effects that the significant diversion of water from the Waiau catchment for hydro-electricity generation will have had, and will continue to have, on the instream values of the river.

Policy WQUAN.2 – Overallocation
Avoid over-allocation of surface water and groundwater, and resolve any historical instances of over-allocation, while recognising the special provisions made for the Waiau catchment.

Explanation/Principal Reasons
Overallocation of water has been recognised as a significant issue through the NPS-FM. Southland's rivers, streams and aquifers are generally not overallocated and it is important that policy guidance is included to require this situation to be maintained. In the uncommon instances where overallocation has occurred, in order to be consistent with the requirements of both Part 2 of the Act and the NPS-FM, it will be necessary to resolve overallocation. This will be done through policies, rules and resource consents issued under the Water Plan, and in consultation with affected water users. Mechanisms for addressing the potential adverse effects resulting from overallocation can include water storage, water sharing arrangements and rostering. Within the Water Plan, specific provisions have been made for the Waiau catchment, in recognition of the nationally significant hydro-electricity generation activities in this catchment.

Policy WQUAN.3 – Regional plans
Recognise the finite nature of water resources and catchments and identify management regimes in accordance with the National Policy Statement for Freshwater Management 2014 that:

(a) provide for the freshwater objectives for surface water and groundwater that derive from flows and levels of water;
(b) in managing the effects of activities on flows and levels of water in surface and groundwater:
    (i) avoid, as far as practicable, significant adverse effects (including cumulative effects);
    (ii) remedy or mitigate significant adverse effects only where avoidance is not practicable;
    (iii) avoid, remedy or mitigate other adverse effects;
(c) within allocation limits, provide for the current and reasonably foreseeable future needs, and the social, economic and cultural wellbeing, of people and communities;
(d) recognise the potential effects of climate change on flows and levels of water and on water availability;
(e) consider the effects of new uses of water on established activities;
(f) are capable of adapting to manage the effects of changing demand on flows and levels of surface water and groundwater;
(g) recognise the outstanding characteristics identified in water conservation orders applying to rivers within the region;
(h) recognise the need for availability of water to enable the Monowai and nationally significant Manapouri hydro-electricity power generation activities in the Waiau catchment to continue, and be enhanced where over-allocation will not occur;

(i) recognise the inter-related nature of all water bodies in a catchment and the need to maintain flows to sensitive habitats within the catchment.

Explanation/Principal Reasons

Policy WQUAN.3 provides an outline of the requirements for management of water quantity in the region in order to ensure that it is consistent with Objectives WQUAN.1 and WQUAN.2.

The Water Plan sets out the detailed framework for the sustainable management of Southland's water resources. The Water Plan aims to promote the sustainable management of rivers, lakes and water resources while also enabling the use and development of water where it can be undertaken sustainably. The Water Plan will therefore be the primary document that gives effect to Policy WQUAN.3.

The Southland Regional Council has developed a 'living document' approach to the Water Plan, adapting the plan to changing circumstances through plan changes.

The policy has been adopted to give effect to Objectives WQUAN.1 and WQUAN.2.

Policy WQUAN.4 – Demand management

Manage demand for water in order to protect instream values of surface water, and ensure freshwater objectives are met, including by:

(a) establishing specific allocation limits;
(b) allocating water to particular uses;
(c) determining the security of supply that should be afforded to water users;
(d) providing for the transfer or exchange of water between users;
(e) encouraging the development of water storage.

Explanation/Principal Reasons

Section 30(fa) of the Act provides, if appropriate, for the Southland Regional Council to establish rules in a regional plan to allocate the taking and use of water. This power acts as an alternative to the traditional 'first in first served' approach to allocating resources under the Act. Where there is competition for the use of water, alternative allocation regimes can better provide for sustainable management of the resource.

Water is currently allocated on the basis of 100% security of supply (i.e. the volume of water on any consent is the maximum needed and assessment of total allocation within a catchment is based on these maximum volumes). At certain times full use of allocated water does not occur. Where there is competition for water, the Southland Regional Council could reconsider the security of supply offered, in order to maximise the efficient use of the water.

The policy has been adopted to provide the ability for the Southland Regional Council to introduce new measures to ensure freshwater objectives are met, consistent with Objective WQUAN.2.

Policy WQUAN.5 – Abstraction management

In catchments and/or aquifers where:

(a) there is a high potential for increased use or demand for water;
(b) current allocation is approaching limits set in regional plans;
(c) adverse effects of taking, use, damming or diversion are likely due to the nature or size of the catchment or aquifer;

the Southland Regional Council will manage the cumulative effects of permitted, Section 14(3)(b) of the Act and consented taking, use, damming or diversion of water, while recognising the specific circumstances of the Waiau catchment resulting from hydroelectric generation.

Explanation/Principal Reasons

As demand for water increases in the region, the potential for adverse effects from the cumulative total of all taking, use, damming and diversion of water in a catchment or aquifer increases. In some circumstances, it may be necessary for the Southland Regional Council to consider not only the adverse effects of activities with resource consent, but also those that are permitted, in order to ensure that the water resource is sustainably managed. The significant diversion of water from the Waiau catchment for hydro-electricity generation will require specific recognition in this process.

Policy WQUAN.6 – Efficient use of water

(a) Ensure that any water taken from surface water or groundwater is used efficiently.
(b) Where fresh water bodies are approaching full allocation, consider establishing management provisions to maximise the efficiency of using any available water.

Explanation/Principal Reasons

Efficient use of water means understanding the amount of water available, ensuring that only the water needed for a particular use is allocated to it, and then using it in such a way that as little is wasted as possible. Efficiency can include considerations of technical, dynamic (adjusting the use of water over time), allocative and economic efficiency. Where available water for new users in a catchment is becoming limited, decisions about water management should take into consideration ways to maximise the benefits that can be obtained from efficient use of water.

Policy WQUAN.7 – Social, economic and cultural benefits

Recognise the social, economic and cultural benefits that may be derived from the use, development or protection of water resources.

Explanation/Principal Reasons

The use, development or protection of water resources can result in social, economic and cultural benefits at local, regional and national levels. It is important to recognise these potential benefits when managing water.

Policy WQUAN.8 – Integrated management

Integrate the management of land use, water quality, water quantity and use and development of resources wherever possible.

Explanation/Principal Reasons

Integrated management offers an opportunity to address in a more co-ordinated way the various activities occurring on both land and water and their effects on water quality. The policy has been adopted to give effect to Objective WQUAN.1.

Policy WQUAN.9 – Information gathering
Continue to gather information on Southland's water resources (including definition of catchment areas) and effects of land use change on flows and levels of surface water and groundwater, to assist with the sustainable management of water and the ongoing development and implementation of water management regimes.

Explanation/Principal Reasons
Through the Southland Regional Council's state of the environment monitoring programme, information on Southland's water resources has improved significantly. Continuing to gather information will assist the Southland Regional Council to sustainably manage the region's water resources. The effects of land use change on flows and levels of water in waterbodies are not currently well known in Southland. Investigation into these effects will allow the Southland Regional Council to make decisions about how activities that affect flows and water levels should be managed.

4.8 METHODS

The Southland Regional Council will:

Method WQUAN.1 – Regional plans
Establish and maintain provisions in regional plans in accordance with the National Policy Statement for Freshwater Management 2014 that:

(a) identify freshwater management units and
(b) identify compulsory, national and regional values for each unit for which water quantity is to be managed;
(c) establish freshwater objectives, based on the identified values;
(d) recognise waters in natural state and the outstanding characteristics identified in water conservation orders applying to rivers within the region;
(e) set environmental flows, including minimum flows or levels of surface water and levels for groundwater throughout the region appropriate to allow the freshwater objectives to be met;
(f) set allocation limits for each freshwater management unit;
(g) set lake level regimes, including maximum levels for lakes[29], in order to manage effects on adjacent land and wetlands, and to manage land use activities that may be affected by high lake levels;
(h) manage the effects of activities on the quantity of water in surface waterbodies and groundwater;
(i) provide for efficient allocation and efficient use of water;
(j) prohibit over-allocation of surface water or groundwater;
(k) identify and implement methodologies to resolve historical over-allocation issues;
(l) are subject to review and updating to manage the effects of changing demand on the maintenance of identified values;
(m) recognise and make provision for the use of the existing Manapōuri and Monowai hydroelectric generation schemes in the Waiau catchment;
(n) provide for adaptive management to recognise new information and changing circumstances.

[29] It should be noted that the operating guidelines for Lakes Manapōuri and Te Anau referred to in Section 4A of the Manapōuri Te Anau Development Act 1963 set the lake levels in these lakes.

Method WQUAN.2 – Allocation limits

(a) Define a timetable for establishing allocation limits for surface water and groundwater in each freshwater management unit.

(b) According to the timetable defined under Method WQUAN.2(a), gather information, including through review of resource consents and water permits, and establish allocation limits for the freshwater management units through consultation and plan changes.

Method WQUAN.3 – Monitoring

Monitor surface and groundwater flows and levels, and ecosystem health in order to assess whether freshwater objectives are being maintained, and to inform future resource management strategies and decisions.

Method WQUAN.4 – Research and investigations

Undertake research and investigations:

(a) to maintain an up to date understanding of the values that surface and groundwater in the region can support;

(b) to gain a better understanding of the hydrogeology of the region through integrating the fluxes and flows of surface and groundwater.

Method WQUAN.5 – Consents

Use consent conditions on water permits to assist with achieving environmental flows (including minimum flows), levels and lake level regimes developed through regional plans.

Method WQUAN.6 – Information gathering

Gather information to establish the cumulative effects of permitted, Section 14(3)(b) of the Act and consented water takes in catchments and/or aquifers that are likely to be susceptible to adverse effects from taking, using, damming or diverting water based on their size, location and/or demand for water.

Method WQUAN.7 – Integrated management

When preparing regional plans and in considering resource consent applications, take into account the interrelationships between water quality, water quantity (and associated ecosystems) and land use activities, and wherever possible develop integrated planning frameworks.

Territorial authorities will:

Method WQUAN.8 – District plans

Establish and maintain provisions in district plans to manage the effects of subdivision, land use and development on flows and levels of water in surface water and groundwater, including by, but not limited to:

(a) ensuring that flows and levels of water in surface water and groundwater are not significantly reduced due to land use activities;

(b) ensuring that urban development cannot occur without the appropriate infrastructure to support it;

(c) encouraging urban growth within urban areas of Southland that have existing infrastructure capacity where possible.

Local authorities will be encouraged to:

Method WQUAN.9 – Consultation

(a) Consult with tangata whenua, the community, territorial authorities, industry, stakeholders and the agricultural sector, and take into account Te Tangi a Tauira and other relevant iwi planning documents when developing resource management plans that may affect water quantity.

(b) Encourage applicants for resource consents to consult with stakeholders, the community and tangata whenua where appropriate.

Method WQUAN.10 – Allocation regimes

Where water availability is limited, investigate alternative water allocation regimes to the first in first served allocation regime.

Method WQUAN.11 – Strategies and other mechanisms

Establish and maintain provisions to promote measures to improve the efficiency of water use, including rainwater collection and use, and water conservation, reuse and recycling measures.

Method WQUAN.12 – Information, education and public awareness

Work together to promote efficient use of water, and demand management principles, to the community, industry and the agricultural sector.

Method WQUAN.13 – Collaborative management

Collaborate to manage the effects of land use on flows and levels of water in surface water and groundwater through:

(a) working together to develop complementary district and regional plan provisions and integrate management of land use and water quantity;

(b) regularly liaising and communicating information on water quantity matters of common interest;

(c) presenting joint information to the community about efficient water use and demand management.

Method WQUAN.14 – Other methods

Collaborate with tangata whenua, the community, territorial authorities, industry, stakeholders and the agricultural sector to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons

Under Section 30 of the Act, the Southland Regional Council has responsibility for controlling the taking, use, damming and diversion of water, and the quantity, level and flow of water in any water body. The Southland Regional Council also has responsibility for controlling the use of land to maintain the quantity of water in water bodies and coastal water. The 2005 amendments to the Act gave the Southland Regional Council further new responsibilities for establishing rules in regional plans to allocate the taking or use of water (if appropriate).

Territorial authorities have the function of controlling any actual or potential effects of the use, development or protection of land, which will include any effects on flows and levels of water in waterbodies and aquifers that may arise from the use, development or protection of land. All councils in Southland therefore have statutory responsibilities that relate to the management of water quantity.

Outside of Fiordland, water quantity issues tend to arise in Southland due to the low flows in hill country and lowland rivers during extended periods of low rainfall, the limited spatial dimensions and high degree of interconnection between surface water and groundwater in many aquifer systems, restrictions on water availability in some catchments (such as the Mataura and Waiau catchments), and the limited lake storage outside of the Waiau catchment. Protection of environmental values, efficient use of water, and demand management are therefore the principal focus of the methods of this chapter.

The primary means of managing the effects of taking and use of water will be through the Water Plan. The Southland Regional Council has developed an adaptive approach to the Water Plan, updating it as necessary to address emerging activities and water quantity issues. District plans prepared by the region's territorial authorities can also assist in managing the use of water by setting out provisions that promote efficient use, alternative sources and demand management, and by considering of the effects of land development, for example, the generation of stormwater, or reduction in yield from the land surface.

Other methods that will support the regional and district plans include:

- information gathering and investigations to support water quantity management initiatives, such as setting allocation limits and allocation regimes;
- provision of advice and information to water users and the regional community; and
- collaboration in the preparation of plans.

While lacking the enforcement powers of rules contained in plans, these types of methods can make a valuable contribution to managing water quantity issues through the relationships that they build between the region's water quantity stakeholders and the innovative solutions that can arise from these relationships, and through providing a robust foundation for the development of future plan provisions.

Part C: Beds of lakes and rivers

The lakes and rivers of Southland are dominant features of the region's environment and contribute to its natural, scenic, recreational and amenity values. The four major river catchments have created the fertile plains that dominate the region.

The Mataura/Waikaia River, their tributaries upstream of Gore, and the Mimihau and Mokoreta Rivers are recognised as protected waters that include outstanding fisheries and angling amenity features. They provide habitat to many native species and are an internationally recognised trout fishery. The Ōreti River has been recognised as providing outstanding habitat for brown trout, angling amenity, habitat for black-billed gulls and as being of significance in accordance with tikanga Māori.

The beds of the Aparima, Waiau, Oreti and Mataura and some tributaries are significant habitats for the braided river birds, including banded dotterels and the nationally endangered black billed gulls and black fronted terns, and large bare gravel bars are essential habitats for successful nesting and roosting of these birds.

The large lakes of the region are also nationally significant. Lakes Te Anau, Manapōuri, Monowai, Hauroko, Poteriteri, McKerrow, Gunn and the North and South Mavora Lakes are highly valued for their water quality, recreational, landscape and remoteness values. Lakes Te Anau and Manapouri

have hydroelectric generation values and are important natural resources for the Manapouri Power Scheme.

The lakes and rivers of Southland play a major part in Māori values, and the social, economic and cultural wellbeing of the people and communities of Southland.

The tangata whenua have a strong spiritual and cultural relationship with lakes and rivers, and are reliant on them as a source of native fish species (in particular freshwater eels) and other fauna.

River beds provide a source of gravel for construction and roading works throughout the region, and historically adverse effects have arisen from poorly managed gravel extraction activities. Lakes and rivers also serve as a major recreational asset for the regional community. Activities in the beds of lakes and rivers contribute to the social, economic and cultural wellbeing of Southland people and communities, but can have effects on ecosystems, physical processes, other lake or river users and existing structures.

Preservation and protection of many of the values of lakes and rivers are matters of national importance, as is the maintenance and enhancement of public access. The region's local authorities are also required to have particular regard to amenity values, the quality of the environment and the intrinsic values of ecosystems. The issues, objectives, policies and methods of this chapter set out the regional direction in relation to these values and management of activities in the beds of lakes and rivers that can adversely affect them.

Table 4: Overview of Beds of Lakes and Rivers provisions

Issues	Objectives	Policies	Methods
Issue BRL.1	**Objective BRL.1** Lake and river bed values	**Policy BRL.1** Managing effects on values and physical processes	**Methods BRL.1 - 5, 8, 9**
		Policy BRL.2 Existing uses of lake and river beds	**Methods BRL.1, 2, 9**
		Policy BRL.3 Managing gravel resources	**Methods BRL.1 - 3, 6, 8, 9**
		Policy BRL.5 Social, economic and cultural benefits	**Methods BRL.1, 2, 6, 8, 9**
Issue BRL.2	**Objective BRL.2** Public access	**Policy BRL.4** Public access	**Methods BRL.1 - 4, 7 - 9**

4.9 ISSUES

Issue BRL.1
Inappropriate activities and structures in the beds of lakes and rivers can adversely affect significant values of lakes and rivers.

Issue BRL.2
Lack of or fragmented access to, along and across some lakes and rivers.

4.10 OBJECTIVES

Objective BRL.1 – Lake and river bed values
All significant values of lakes and rivers are maintained and enhanced.

Explanation/Principal Reasons
Objective BRL.1 recognise the values of the region's lakes and rivers. The objective has been adopted to address Issue BRL.1.

Objective BRL.2 – Public access
Public access to, along and across lakes and rivers is maintained, and enhanced where necessary, in a strategic and co-ordinated manner, to ensure a level of public access appropriate to the values of the area.

Explanation/Principal Reasons
Maintenance and enhancement of public access is a matter of national importance under Section 6 of the Act, and all local authorities in Southland have responsibilities in relation to provision of public access. Co-ordinating a strategic approach to public access will better meet the requirements of the Act. The objective has been adopted to address Issue BRL.2.

4.11 POLICIES

Policy BRL.1 – Managing effects on values and physical processes
Regional plans shall include policies and methods that:

(a) while recognising the need for some structures to be located within the beds of rivers and lakes, avoid as far as practicable, and only where avoidance is not practicable, remedy or mitigate adverse effects of activities in the beds of lakes and rivers on:
    (i) natural character;
    (ii) instream ecological values, including bird habitat;
    (iii) historic heritage and cultural values, particularly tangata whenua cultural values, and spiritual values;
    (iv) amenity values;
    (v) recreational values;
    (vi) the performance and operation of critical infrastructure;
(b) manage adverse effects of activities in the beds of lakes and rivers on:
    (i) erosion and deposition processes;
    (ii) flooding risk, bank stability and drainage capacity;
    (iii) the social, economic, cultural and environmental wellbeing of the community;

(c) recognise the outstanding characteristics identified in water conservation orders applying to rivers within the region.

Explanation/Principal Reasons

All lakes and rivers have certain "instream" values. Flows and water levels contribute to the aesthetic appearance and natural character of water bodies. Flows, levels and water quality all contribute to the maintenance of instream habitat and aquatic life. With respect to activities in the beds of lakes and rivers, the appearance of structures can have effects on natural character and the amenity values of an area, and they can cause flooding and erosion problems if inappropriately located. Activities that disturb the beds of lakes and rivers can cause effects on instream habitat and aquatic life, and disturb cultural and heritage sites. Managing the effects of activities on the beds of lakes and rivers will help to achieve Objective BRL.1.

Policy BRL.2 – Existing uses of lake and river beds

Lawfully established structures and activities in the beds of lakes and rivers will be recognised, including the need for maintenance, enhancement and upgrading, while avoiding wherever practicable, mitigating or remedying, any adverse effects. Where the use, maintenance, enhancement and upgrading of such structures will have no more than minor adverse effects on the environment, these activities will be specifically provided for.

Explanation/Principal Reasons

Existing structures and activities in the beds of lakes and rivers are of benefit to the regional community. It is in the wider public interest to recognise existing structures and activities (and their maintenance) and it is therefore appropriate to include policy to that effect. It is also appropriate to provide for their use, maintenance, enhancement and upgrading where these activities will have no more than minor adverse effects on the environment.

Policy BRL.3 – Managing gravel resources

The region's fluvial gravel resources shall be managed sustainably and in such a way as to:

(a) manage adverse effects of removal of gravel on the ecological, recreational, amenity and cultural values, particularly tangata whenua cultural values, existing uses, natural character and physical processes of lakes and rivers;
(b) avoid or remedy the adverse effects of rivers on adjacent land; and
(c) provide for the social, economic and cultural wellbeing of people and communities.

Explanation/Principal Reasons

The removal of gravel from the beds of lakes and rivers can have both positive and negative effects, which can have impacts both in the immediate area and further downstream. Removal of gravel can reduce the potential for flooding and erosion, and provides raw material for construction and roading work essential to the region's ongoing economic growth. However, inappropriately executed gravel extraction can result in excessively deep cuts into river and stream beds, destabilisation of banks or river management works, or alteration of the course of rivers and streams. Effects can also be cumulative and may take some time to become apparent. In cases where adverse effects are likely to arise, there is a need to assess each proposal on a case by case basis, to ensure that removal of gravel will not cause erosion or issues with bed stability, or have adverse effects on recreational, amenity or ecological values. This policy has been adopted to give effect to Objective BRL.1.

Policy BRL.4 – Public access

Public access to, along and across lakes and rivers will be maintained and enhanced by:

(a) identifying, through regional and district plans, surface water bodies or locations that are a priority for access;
(b) providing direction about where and when additional access should be established;

(c) ensuring structures and bed disturbance activities in the beds of lakes and rivers do not impede public access, unless it is necessary to do so for safety reasons; and
(d) consulting with territorial authorities, tangata whenua, stakeholders and local landowners to develop non-regulatory methods to encourage retention or establishment of public access.

Explanation/Principal Reasons
The provision of access to the margins of lakes and rivers is a matter of national interest, reflected in the establishment of the New Zealand Walking Access Commission in 2008. While the margins of many lakes and rivers within Southland are held in public ownership, provision of access across private land remains an issue as there is no traditional right of access to these areas.

Previously, provision of access to lakes and rivers has been addressed by territorial authorities at the time of subdivision, and by the Southland Regional Council when considering effects of activities in the beds of lakes and rivers. Maintaining existing public access will continue to be managed in this way. In terms of enhancing public access, the primary way of doing this remains through the subdivision process administered by the region's territorial authorities. Identifying surface water bodies or locations that are a priority for access will provide guidance to the consideration of applications for subdivision. There may also be other non-regulatory methods that both the Southland Regional Council and the region's territorial authorities can use to encourage retention or establishment of public access. It is considered appropriate to take a co-ordinated approach to these non-regulatory methods wherever possible.

Policy BRL.5 – Social, economic and cultural benefits
Recognise the social, economic and cultural benefits that may be derived from the use, development or protection of river and lake beds.

Explanation/Principal Reasons
The use, development or protection of river and lake beds can result in social, economic and cultural benefits at local, regional and national levels. It is important to recognise these potential benefits when managing the beds of rivers and lakes.

4.12 METHODS

The Southland Regional Council will:

Method BRL.1 – Regional plans
Establish and maintain provisions in regional plans to avoid as far as practicable, remedy or mitigate adverse effects of activities in the beds of lakes and rivers on instream values and physical processes.

Method BRL.2 – Regional rules
Establish and maintain rules in regional plans relating to activities in the beds of lakes and rivers to:
(a) provide for the use, maintenance, enhancement and upgrading of existing structures where these activities will have no more than minor adverse effects on the environment;
(b) avoid, remedy or mitigate the adverse effects of gravel extraction and structures that are functionally dependent on a location in the beds of lakes and rivers;
(c) require that adverse effects of structures and activities on fish passage are avoided, remedied or mitigated;
(d) require that structures and activities do not unnecessarily impede public access.

Method BRL.3 – Collaboration
Collaborate with territorial authorities and other stakeholders to identify areas of flooding and erosion risk, and methods to address these risks.

Local authorities will:

Method BRL.4 – Regional and district plans
Establish provisions in regional and district plans to identify, in consultation with landowners, locations in the region that are a priority for providing public access through the subdivision and land development process.

Local authorities will be encouraged to:

Method BRL.5 – Investigations
Continue to gather information on instream values and physical processes to inform plan development and consideration of resource consent applications.

Method BRL.6 – Information, education and technical assistance
Provide information and technical support to territorial authorities, consent holders and the community to:

(a) increase awareness of:
    (i) the effects of gravel extraction activities;
    (ii) the effects of rivers on adjoining private land and infrastructure on public land, and how these effects can be managed by, for example, appropriate gravel extraction activities;
    (iii) how gravel resources can be sustainably managed including information on where and in what quantities of gravel can be extracted;
(b) promote and support good management practices for gravel removal.

Method BRL.7 – Public access strategy
In conjunction with any national initiatives, collaborate to develop a strategy to guide decisions on enhancing public access in the region.

Method BRL.8 – Consultation
(a) Consult with landowners, stakeholders, the community and tangata whenua, and take into account Te Tangi a Tauira and other relevant iwi planning documents when making resource management decisions that may affect access to rivers and lakes.
(b) Encourage applicants for resource consents to consult with landowners, stakeholders, the community and tangata whenua where appropriate.

Method BRL.9 – Other methods
Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons
Under Section 30 of the Act, the Southland Regional Council has a number of responsibilities in relation to managing the use of land, including for soil conservation, avoidance or mitigation of natural hazards, and for water quality and water quantity purposes. Land is defined by the Act as including land covered by water, and therefore management of issues relating to the use of the beds of lakes and rivers falls within the responsibilities of the Southland Regional Council. Section 13 of the Act contains a series of restrictions on activities in the beds of lakes and rivers, unless allowed by a regional plan or resource

consent. Methods in the RPS therefore play an important role in defining how these functions will be given effect to by the Southland Regional Council.

The regionally significant issues relating to use of the beds of lakes and rivers relate to managing effects of activities on instream values and biodiversity, sustainably managing gravel removal and maintaining and enhancing public access.

The Water Plan can set the framework within which management of activities should occur, and can be used as a means of protecting important values. Both regional and district plans have a role to play in identifying priority areas for public access and improving access through mechanisms such as esplanade reserves and strips, and access strips on subdivision consents. Other methods, such as investigations into specific values, provision of information on good practice for gravel removal activities and collaboration between all of the region's local authorities, with regard to public access provisions, will support the role of regional and district plans.

Chapter 5: Rural Land/Soils

Introduction

The land resource of Southland comprises 3,093,400 hectares of land, 23% of which is intensively farmed, and 53% that is legally protected.[30] The 'Rural Land/Soils' topic concerns activities that utilise the land resource, including intensive farm production, rural-residential activities, mineral extraction activities, and disposal fields for on-site wastewater treatment.

The rural land resource of Southland supports the economic and cultural life of Southlanders and must be safeguarded to provide for current and future generations. To achieve sustainable use of the rural land resource it is important to avoid:

- degradation or loss of soils through poor management, for example by avoiding heavy stocking of soils vulnerable to structural compaction during wet periods;
- soil erosion, sedimentation, landscape impacts, and loss of biodiversity during land development activities.

To achieve sustainable use of rural land resources, rural-residential subdivision must be undertaken in a way that achieves efficient use of soil and land resources. This means avoiding negative outcomes such as the loss of high value soils from productive use, inefficient use of transport networks, reverse sensitivity effects, or lack of available land following 'ring fencing' of urban areas by small landholdings.

A variety of mineral extraction activities take place in the region, ranging from small scale activities such as on-farm gravel extraction or 'hobby' gold mining to large scale activities such as commercial coal mining or gravel extraction. These mineral extraction activities need to occur in appropriate locations within the rural environment. Adverse environmental effects such as impacts on road networks, ecological water flows and levels, water quality, and health and safety may result from these activities.

The discharge of human waste from on-site wastewater systems into disposal fields may result in soils being overloaded with contaminants, untreated wastewater coming to the surface, or discharges to surface water or groundwater. Adverse effects on water quality, human health impacts, offence to tangata whenua spiritual values, or limitations on the use of land may result.

Some land use activities cause changes in water quality as microbiological contaminants, sediment, phosphorous, nitrogen, and other contaminants generated on the land move to water. Linkages between land use and water quality are discussed in Chapter 4: Water Quality.

Effects of rural land use on indigenous biodiversity and ecosystem services are further discussed in Chapter 6: Biodiversity.

Some land use activities such as the storage and use of hazardous substances can create contaminated land. Contaminated land can cause ongoing environmental risks or public health problems. Specific issues, objectives, policies and methods for land use activities that can result in contaminated land are included in Chapter 12: Hazardous Substances, and specific issues, objectives, policies and methods for management of contaminated land are contained in Chapter 11: Contaminated Land. Rural waste issues such as farm landfills are covered in Chapter 13: Solid Waste. Other chapters in the RPS also address issues that relate to, or influence, rural land/soils, such as Chapter 10: Natural Features and Landscapes, Chapter

[30] Ministry for the Environment (2010) Legally protected Conservation Land in New Zealand

15: Infrastructure/Transport, Chapter 16: Energy, and Chapter 17: Urban. This chapter should, therefore, be read in association with the other chapters of the RPS.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

Table 5: Overview of Rural Land/Soils provisions

Issues	Objectives	Policies	Methods
Issue RURAL.1	**Objective RURAL.1** Sustainable use of rural land resource	**Policy RURAL.1** Social, economic and cultural wellbeing	**Methods RURAL.1, 2, 3, 6, 8, 9, 13, 15**
	Objective RURAL.2 Life-supporting capacity of soils	**Policy RURAL.1** Social, economic and cultural wellbeing	**Methods RURAL.1, 2, 3, 6, 8, 9, 13, 15**
		Policy RURAL.4 Loss of high value soils from productive use	**Methods RURAL.1 - 10, 12, 13, 15**
		Policy RURAL.5 Effects of rural land development	**Methods RURAL.1 - 15**
Issue RURAL.2	**Objective RURAL.1** Sustainable use of rural land resource	**Policy RURAL.1** Social, economic and cultural wellbeing	**Methods RURAL. 2, 3, 6, 8, 9, 13, 15**
		Policy RURAL.2 Land use change and land development activities	**Methods RURAL.1, 4, 6, 9 - 12, 14, 15**
		Policy RURAL.3 Land development on steep, mid-altitude and high-altitude land	**Methods RURAL.1, 2 - 5, 8, 15**
Issue RURAL.3	**Objective RURAL.1** Sustainable use of rural land resource	**Policy RURAL.1** Social, economic and cultural wellbeing	**Methods RURAL.1, 2, 3, 6, 8, 9, 13, 15**
	Objective RURAL.2 Life-supporting capacity of soils	**Policy RURAL.1** Social, economic and cultural wellbeing	**Methods RURAL.1, 2, 3, 6, 8, 9, 13, 15**
		Policy RURAL.3 Land development on steep, mid-altitude and high-altitude land	**Methods RURAL.1, 2 - 5, 8, 15**
		Policy RURAL.5 Effects of rural land development	**Methods RURAL.1 - 15**

Issues	Objectives	Policies	Methods
Issue RURAL.4	**Objective RURAL.1** Sustainable use of rural land resource	**Policy RURAL.1** Social, economic and cultural wellbeing	**Methods RURAL.1, 2, 3, 6, 8, 9, 13, 15**
		Policy RURAL.2 Land use change and land development activities	**Methods RURAL. 1, 4, 6, 9 - 12, 14, 15**
Issue RURAL.5	**Objective RURAL.1** Sustainable use of rural land resource	**Policy RURAL.1** Social, economic and cultural wellbeing	**Methods RURAL.1, 3, 6, 8, 9, 13, 15**
		Policy RURAL.6 Adverse effects of on-site wastewater systems	**Methods RURAL.1, 6, 9 - 15**

5.1 ISSUES

Issue RURAL.1
Maintaining the productive capacity of rural land resources to sustain the agricultural and primary sector activities dependent on them is of critical importance to the future economic wellbeing of the Southland region.

Issue RURAL.2
Subdivision, land use change and development in rural areas of Southland, while important to economic and social wellbeing, can adversely affect soil, water, amenity, tangata whenua cultural values, landscapes, the transportation network, and can give rise to reverse sensitivity issues.

Issue RURAL.3
Some land uses and land management practices can reduce the health, life-supporting capacity/mauri and productive value of soil, and lead to soil loss from erosion, which can cause increased sedimentation of waterways and coastal water.

Issue RURAL.4
Mineral extraction activities within rural areas of Southland, while important to economic and social wellbeing can give rise to adverse environmental effects.

Issue RURAL.5
Use of on-site wastewater systems within rural areas of Southland can give rise to adverse environmental effects on water, soil, amenity and public health, particularly where the systems are poorly designed, not adequately maintained, or fail.

5.2 OBJECTIVES

Objective RURAL.1 – Sustainable use of rural land resource
Achieve sustainable use of Southland's rural land resource, in respect of:
(a) agriculture and primary sector activities;
(b) subdivision, use and development activities;
(c) earthworks and vegetation clearance activities;
(d) the use of soil resources;
(e) mineral extraction activities; and
(f) on-site wastewater systems.

Explanation/Principal Reasons
Objective RURAL.1 specifies land use activities that need to be carried out in a sustainable manner to maintain or enhance the productive capacity of the rural land resource. Such sustainable management is necessary to avoid or mitigate adverse effects on soil, water, amenity values, tangata whenua cultural values, outstanding natural features and landscapes, and the transportation network to enable Southland's rural land resource to continue to provide for the social, economic and cultural needs of current and subsequent generations. Use and development activities include infrastructure activities.

Objective RURAL.2 – Life-supporting capacity of soils
Safeguard the life-supporting capacity, mauri and health of soils in rural areas, and prevent or minimise soil erosion and sedimentation from land use soil disturbance.

Explanation/Principal Reasons
Rural land development activities can affect the soil resource. In order to achieve sustainable management and the purpose of the Act, the life-supporting capacity and quality of soil must be safeguarded. Preventing or minimising soil erosion and soil disturbance will also help to maintain or enhance water quality. Objective WQUAL.1 relates to the safeguarding of the life-supporting capacity of water and related ecosystems, and should be referred to in managing nutrient loss from soils within the rural areas of Southland.

5.3 POLICIES

Policy RURAL.1 – Social, economic and cultural wellbeing
Recognise that use and development of Southland's rural land resource enables people and communities to provide for their social, economic and cultural wellbeing.

Explanation/Principal Reasons
This policy recognises that use and development of rural land resources through land-based activities such as farming, forestry, mineral extraction, energy generation, manufacturing/industry and tourism provide for the wellbeing of people and communities within Southland. Use and development of rural land resources through these activities must be undertaken in a way that promotes the sustainable management purpose of the Act.

To give effect to Policy RURAL.1, decisions made relating to policies and rules intended to achieve sustainable management of Southland's rural land resource, must recognise social, economic and cultural wellbeing, as well as sustainably managing adverse environmental effects.

Policy RURAL.2 – Land use change and land development activities
Manage subdivision, land use change and land development activities in rural areas of Southland, in a way that maintains or enhances rural amenity values and character.

Explanation/Principal Reasons
Rural production activities are essential to the social, economic and cultural wellbeing of the people and communities of Southland. This policy supports the ongoing operation of rural production and service activities, including existing rural industries, mineral extraction, infrastructure and the wider transportation network, by maintaining or enhancing the rural amenity values and character of the areas within which these activities occur. Rural amenity values and character includes cultural values, in particular tangata whenua cultural values. The identification and management of natural features and landscapes which have cultural significance to tangata whenua are provided for in Chapter 10: Natural Features and Landscapes.

Within this policy there is general recognition that land use change, subdivision and land development activities in rural areas will need to be managed in a manner that takes into account the potential for reverse sensitivity issues that, in some parts of the region, could lead to constraints on the ability to access significant rural land resources and undertake reasonable productive uses of land. For example, when new land uses are developed near existing primary production activities that can create noise, dust, and odour effects, these changes can result in nuisance complaints that can then lead to constraints on the ongoing operation and/or expansion of rural production and service activities, including existing rural industries, mineral extraction, infrastructure and the wider transportation network. Rural amenity issues can also arise when new rural development takes place in close proximity to existing rural-residential activity.

Policy RURAL.3 – Land development on steep, mid-altitude and high-altitude land
Manage land development activities on steep, mid-altitude and high-altitude land to prevent or minimise the effects of erosion and sedimentation, and minimise changes in catchment water yield.

Explanation/Principal Reasons
A large portion of rural Southland consists of steep, mid-altitude and high-altitude land. In these areas, land development activities such as large-scale land disturbance/earthworks activities, vegetation clearance, agricultural practices and forestry activities can expose bare earth surfaces and result in soil loss and sedimentation of waterways, and changes in catchment water yield. Policy RURAL.3 provides for the management of land development activities on steep, mid-altitude and high-altitude land to minimise erosion and sediment runoff. Sustainable land management practices, particularly on vulnerable soils, can safeguard the health, life-supporting capacity/mauri and productive value of soils. Retention of vegetation on steep, mid altitude and high altitude land can minimise adverse effects on water quality and quantity and, where existing indigenous vegetation is retained, can also maintain and enhance biodiversity. The control of earthworks and vegetation disturbance is an area of overlapping jurisdiction between the Southland Regional Council and territorial authorities, and local authorities should collaborate to manage the effects of such activities.

Policy RURAL.4 – Loss of high value soils from productive use
Avoid the irreversible loss of high value soils from productive use, through inappropriate subdivision, use and development.

Explanation/Principal Reasons
Resource management decision-making needs to consider the irreversible effects of losing high value soils from productive use, and the need to retain the productive capability of the soil resource for future generations. To achieve this, land use change and land development must take place in a way that protects and sustains the productive value of high value soil, while also recognising that there are some land uses that require a location proximate to high value soils and which may therefore be considered appropriate within these areas. To give effect to Policy RURAL.4, it is appropriate to:

- avoid activities that permanently remove high value soils from food production;
- avoid the break-up of contiguous areas of high value soils;
- recognise that there may be land uses that require a location within areas of high value soils and may therefore be considered appropriate.

Policy RURAL.5 – Effects of rural land development
The effects of rural land development shall be sustainably managed and land management practices encouraged so that:
(a) soil properties are safeguarded;
(b) soil erosion is minimised;
(c) soil compaction and nutrient and sediment loss is minimised;
(d) soil disturbance is reduced;
(e) water quality is maintained or enhanced;
(f) indigenous biodiversity is maintained or enhanced;
(g) the mauri of water and soils is safeguarded.

Explanation/Principal Reasons
This policy promotes the sustainable use of Southland's rural resources by managing the effects of land development. Particular matters of focus include safeguarding soil properties, maintaining or improving soil properties, water quality, indigenous biodiversity and minimising erosion, compaction, nutrient loss and reducing soil disturbance. This will help ensure the soil resource is working to its full potential and provides a desirable range of productive uses while providing soil ecosystem services.

Healthy soils support the cultural use of land by tangata whenua who value and require the safeguarding of mauri or good health of the land.

Policy RURAL.6 – Adverse effects of on-site wastewater systems
Make provision for the use of on-site wastewater systems in rural areas, provided new systems are not located within a site which is culturally sensitive to tangata whenua and adverse effects, including cumulative effects, are avoided or mitigated.

Explanation/Principal Reasons
Appropriate design, siting, installation, operation, and maintenance is necessary to prevent on-site wastewater system failure and subsequent effects on human health, spiritually offensive mixing of human waste with food sources, and effects on water quality. On-site wastewater systems can have cumulative effects on the environment, particularly water quality, from the large number in the region that can discharge inappropriately to the receiving environment. By requiring appropriate design, siting, installation, operation and maintenance of these systems, adverse effects can be avoided or mitigated.

5.4 METHODS

The Southland Regional Council will:

Method RURAL.1 – Regional plans
Establish and maintain provisions in regional plans that:
(a) manage the effects of rural land development on:
    (i) indigenous vegetation, including the effects of aerial spraying;
    (ii) steep, mid and high-altitude land, and land that is structurally degraded or vulnerable to structural degradation, taking into account soil classification and land capability classes;
    (iii) water quality and quantity; and
    (iv) the beds and margins of lakes, rivers, streams and wetlands;
(b) manage the effects of mineral extraction activities on:
    (i) high value soils;
    (ii) water quality and quantity;
    (iii) air quality;
(c) control the quality and location of on-site wastewater discharges to rural land to avoid or mitigate adverse effects on the quality and life supporting capacity of soil and water resources;
(d) maintain or enhance soils that are prone to sediment loss or erosion, nutrient loss, or that are structurally degraded or vulnerable to structural degradation.

Method RURAL.2 – Research and investigation
Collaborate with territorial authorities, industry and landowners to identify for management purposes, soils that are:
(a) steep, and mid-altitude or high-altitude;
(b) structurally degraded or vulnerable to structural degradation;
(c) prone to nutrient loss.

Method RURAL.3 – Information, education, technical assistance and promotion

Provide information and technical support to land users, industry, territorial authorities and the community to:

(a) increase awareness of how land use activities can affect soil structure, retention, stability and health;
(b) promote and support sustainable soil and land management practices that are aligned with good practice, industry guidelines, standards or codes of practice;
(c) encourage the adoption of sustainable land and vegetation management, including management approaches that safeguard soil quality and maintain and enhance water quality;
(d) promote land uses or management techniques that are appropriate for identified soil types and topographies;
(e) promote and support soil stabilisation and rehabilitation on steep, high country or other erosion-prone land by:
    (i) providing technical assistance and education on erosion management;
    (ii) encouraging the retention of indigenous vegetation, particularly on erosion-prone land or soils.

Method RURAL.4 – District plans and resource consents

Make submissions on district plans and resource consent applications in relation to rural land management to encourage a consistent and integrated region-wide approach to rural land management.

Method RURAL.5 – Economic instruments

Consider financial assistance to land owners, landcare groups or community-based organisations to support erosion control, soil conservation, research and education programmes and community initiatives that avoid, remedy or mitigate the adverse effects of activities on rural land and soil resources.

Territorial authorities will:

Method RURAL.6 – Territorial Authority Management

Establish and maintain provisions in District Plans that:

(a) enable activities that sustainably use and develop the rural land resource while avoiding, remedying or mitigating adverse environmental effects;
(b) control the location, density, design and standard of urban expansion, residential and rural residential development on rural land, for example by:
    (i) developing subdivision and design standards to guide high quality land development, and guide resource management decisions that avoid or mitigate adverse effects on the community, landscapes and natural resources;
    (ii) promoting good practice and sustainable approaches to subdivision and development to landowners and developers;
(c) avoid, remedy or mitigate effects from earthworks, soil and vegetation disturbance;
(d) avoid, remedy or mitigate the effects of rural land use and development, and mineral extraction activities on:
    (i) high value soils;
    (ii) landscape and amenity values;
    (iii) indigenous vegetation and biodiversity;
    (iv) residential activities, community activities and rural productive land use;
    (v) tangata whenua values;
    (vi) transport networks;
(e) avoid, remedy or mitigate the effects of land-based mineral extraction activities;
(f) require appropriate design and operation of on-site wastewater systems in rural areas;

(g) maintain or enhance rural amenity values and character;
(h) manage reverse sensitivity effects.

Local authorities will be encouraged to:

Method RURAL.7 – Monitoring
Monitor general soil health and waterway sedimentation levels to:
(a) identify pressure on rural soil resources;
(b) inform effective land management decisions;

Method RURAL.8 – Information and education
Develop good practice guidelines for rural activities to:
(a) guide earthworks and land development practices to minimise the adverse effects of sediment discharges as a result of land or vegetation disturbance;
(b) prevent or minimise soil erosion or sedimentation.

Method RURAL.9 – Strategies
(a) Develop growth management strategies to guide urban growth, rural-residential development and the integration of infrastructure with land use.
(b) Collaborate with other local authorities, industry, research agencies and landowners to investigate, identify and implement sustainable land management strategies.

Method RURAL.10 – Investigation and collaboration
Collaborate to identify and map soils, important land and water resources and areas of valued rural character and amenity to assist in making decisions about future land management, including urban and rural-residential developments.

Method RURAL.11 – Consultation
Consult with land owners, the community, stakeholders and tangata whenua, and take into account Te Tangi a Tauira and other relevant iwi planning documents when making resource management decisions regarding the subdivision, use and development of rural land that may result in significant adverse effects on:
(a) the quality and life-supporting capacity of land or water;
(b) the integration of infrastructure with land use; or
(c) tangata whenua cultural and spiritual values, including effects on mauri and sites of significance.

Method RURAL.12 – Tangata Whenua involvement
Provide for tangata whenua involvement in resource management decisions on the subdivision, use or development of rural land and soils where tangata whenua values are affected.

Method RURAL.13 – Research, information and collaboration
Collaborate with other local authorities, industry, research agencies, landcare groups and landowners to:
(a) develop and implement collaborative approaches to research on rural land and soil management methods;
(b) exchange information and provide guidance on good practice land management methods to address the environmental effects of land use activities, including cultivation, forestry development and mineral extraction activities;
(c) investigate, develop and implement good practice approaches to land and soil rehabilitation;
(d) provide advice and information regarding good practice for on-site wastewater systems.

Method RURAL.14 – Promotion

Encourage decision makers when developing regional or district plans or considering resource consent applications, to consider the potential for new land use activities to:

(a) result in reverse sensitivity effects on existing mineral extraction activities;
(b) adversely affect the extraction of minerals from existing abstraction sites.

Method RURAL.15 – Other methods

Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons

Southland's rural land is a highly valued natural resource that underpins the region's economy and the viability of the natural and physical environment. Safeguarding soil health and carefully using land resources across the region is essential to the community's health and social, economic, cultural, and environmental wellbeing. It also plays an important part of ecosystem and biodiversity health and wellbeing that directly impacts on people and communities. Managing Southland's rural soil and land resources is therefore a regional priority.

Some land use activities can adversely affect soil quality and health, undermining its productive capability and life-supporting capacity. Poor land management practices can lead to soil loss through erosion, and can adversely affect water quality. Inappropriate land use can affect soil quality, soil structure, nutrient levels and general soil health effects, which can be difficult to rectify. Other land use activities such as subdivision and urban-scale development can result in significant loss of high value and versatile soils to non-productive activities, as well as resulting in potential reverse sensitivity effects. The methods provide direction for the development of objectives, policies and rules at regional and district levels to control activities that can result in significant adverse effects on rural productive activities, soil quality and health.

An important part of managing soil and land resources is to identify high value and vulnerable soils and other important land resources in order to target information and resources, and to apply appropriate land management techniques. Mapping soils, important land and water resources and areas of valued rural character and amenity provides information to help make decisions about future residential activities, particularly in relation to expanding urban areas and new rural residential development. Understanding Southland's soil and land resources enables decisions about future urban and infrastructure growth to be made that avoid significant loss of high quality soils while enabling sustainable growth of residential housing at a variety of scales and densities. Such planning can also help avoid adverse effects on rural character, amenity and environmental quality.

Providing support to rural land users, land management agencies and territorial authorities by providing technical information and advice on good practice land management, erosion control and other techniques is an effective non-regulatory method of improving the management of land and soil resources. This approach can be further supported where appropriate by promoting education and management programmes and providing financial assistance to support and encourage land management that can have immediate and tangible positive effects.

Managing the effects of rural residential settlement on rural land resources relies on rules in regional plans to protect soil and water resources. There is a deliberate link in these methods between infrastructure and residential development, since by providing for residential activities only where supporting infrastructure can be appropriately situated (such as wastewater disposal for example), or where the physical environment can support it, the effects on the wider environment can be minimised. A useful mechanism for leading and achieving this integration can be through structure planning or developing growth management strategies that anticipate and direct the location of appropriate residential development. In each particular district's circumstances, these types of documents can be used to define community expectations of high quality urban development. Setting

community expectations around where, how and when residential development may occur in the rural area encourages infrastructure to be developed prior to or in conjunction with residential activities, thereby avoiding or minimising many environmental effects, and discouraging ad hoc development.

Mineral extraction activities are important to the region's economy, and need to be considered in the context of environmental quality and other rural resource land uses. It is important to establish environmental bottom lines through regulatory frameworks in regional and district plans to avoid significant adverse environmental effects, and potentially incompatible land uses. Non-regulatory approaches include assisting the mining industry to develop and implement long-term Environmental Management Plans that help to manage, avoid or mitigate environmental effects.

Rural soil resources are a community resource and hence consultation is important to engage with the community and tangata whenua, gain support for management approaches, involve the community in resource management decisions, and benefit from community knowledge and expertise.

Chapter 6: Biodiversity

Introduction

Southland has a range of important habitats for native plants and animals. These include numerous watercourses, wetlands, estuaries, lagoons, limestone escarpments and outcrops, peatlands, red tussock grasslands, salt marshes, sand dunes, glacier-excavated lakes, native podocarp-hardwood forests, beech forests, shrublands and subalpine scrub. Southland also has a diverse coastline and coastal marine area. Together, these areas form a distinctive part of New Zealand's natural environment. Southland is fortunate to have large areas of indigenous ecosystems and habitats managed for conservation purposes, but some areas, such as the lowlands of Southland, have already lost significant indigenous vegetation and significant habitats of indigenous fauna, and more still remains unprotected and at risk of further loss. This chapter of the RPS concentrates on significant resource management issues associated with Southland's indigenous biodiversity. While indigenous biodiversity is the focus, it is important to recognise that some exotic plant species provide habitat and other resources for indigenous fauna.

There has been a major decline in Southland's indigenous biodiversity, especially since the arrival of Europeans. Most of Southland's remaining native vegetation occurs in high rainfall sub-alpine and alpine areas that have strong limitations for plant productivity, and therefore have not been subject to the same human development pressures as warmer, lower elevation areas. The most substantial loss of native vegetation and habitats has been in Southland's coastal, lowland, and montane environments, and much of the remaining native vegetation in these areas has little legal protection. Vegetation clearance and wetland drainage is on-going, and the highest rates of loss are occurring in the most threatened environments, i.e. those that have already suffered the most historic vegetation clearance and drainage. Landowners have a vital role in managing indigenous vegetation and habitats on private land, and partnerships with landowners are critical to the success of maintaining and, where possible, enhancing remaining indigenous biodiversity.

Aside from land development and clearance, there are many other pressures and threats to remaining areas of indigenous vegetation and habitats of indigenous fauna. Domestic stock (sheep, cattle and deer) can destroy indigenous vegetation and undergrowth, particularly in forest and wetland sites, and prevent regeneration. Feral animals (pigs, deer, goats and possums) also have detrimental impacts on biodiversity both through consuming native vegetation, and predating on native birds, lizards and invertebrates. Mustelids (ferrets, stoats and weasels), rodents (rats and mice), cats and, to some extent, possums are the main predators. All of these species are widespread and numerous in Southland. There are a number of pest free islands located in the Southland region that are essential to the maintenance of New Zealand's indigenous biodiversity. These include Codfish Island/Whenua Hou and Breaksea Island. Southland's weed species also pose a serious threat to the survival of indigenous plant species. Weeds can invade and displace indigenous species, particularly in open habitats where light conditions often allow them to quickly out-compete less vigorous native species. The edges of forest, shrubland, regenerating hillsides, river beds, wetland and coastal sites, are also vulnerable to the impact of invasive weeds.

A more diverse ecosystem is better able to withstand environmental stress and has a greater chance of adapting to environmental change. The more species comprising an ecosystem, the more resilient and stable the ecosystem is likely to be. Diverse ecosystems are important because they provide important "ecosystem services" including erosion control and flood mitigation, help moderate climate and the impacts from climate change, recycle nutrients, perform pollination and pest control functions and filter contaminants. New Zealand's biodiversity also provides direct economic benefits through harvesting (timber and fish for example), and tourism. New Zealand's indigenous biodiversity, or

native plants and animals, are internationally important because a large proportion of the species are endemic and found only in this country. If these species are lost here, they are lost to the world.

Indigenous biodiversity is of fundamental importance to Ngāi Tahu and forms part of "being Ngāi Tahu". Biologically diverse areas provide a number of materials which are fundamental to a way of life. The loss of taonga and other treasures such as mahinga kai is attributed to the loss or decline in biodiversity from habitat degradation, resource depletion and the introduction of pests that have severely reduced the traditional resources of Ngāi Tahu. Thus, an important focus for Ngāi Tahu is finding ways to protect, maintain, and enhance the biodiversity of ecosystems and habitats such as rivers, riparian margins, native bush and wetlands.

It is essential that councils, government agencies, landowners, tangata whenua and community groups continue to work together to ensure the long-term viability of indigenous ecosystems and habitats necessary to support life.

The Act outlines the responsibilities of local authorities with respect to indigenous biodiversity. Section 30(1)(ga) tasks regional councils with the establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biodiversity. Section 31(1)(b)(iii) assigns territorial authorities with the control of any actual or potential effects of the use, development, or protection of land for the purpose of maintaining indigenous biodiversity. Section 6(c) specifically recognises and provides for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna as a matter of national importance. Section 6(a) specifically recognises and provides for 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. In achieving the purpose of the Act, Section 7 also requires particular regard to be had to other matters, such as, intrinsic values of ecosystems (Section 7(d)) and the protection of the habitat of trout and salmon (Section 7(h)). Additionally section 62(3) requires effect be given to a national policy statement or *New Zealand Coastal Policy Statement 2010*.

The focus of this chapter is to outline the approach for the Southland region that aligns with the responsibilities outlined above. Other chapters in this policy statement also address biodiversity, including Chapter 5: Rural Land/Soils, Chapter 7: Coast, and Chapter 10: Natural Features and Landscape. Chapter 6: Biodiversity should be read in association with the other chapters of this policy statement.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

Statement of Local Authority Responsibilities

Section 62(1)(i)(iii) of the Act requires a regional policy statement to state the local authority responsible, in the whole or any part of the region, for specifying the objectives, policies and methods for the control of the use of land to maintain indigenous biological diversity.

The Southland Regional Council:

(1) will be responsible for specifying the objectives, policies and methods for the control of the use of land for the maintenance of indigenous biodiversity in the coastal marine area, wetlands, and lakes and rivers and their margins.

Territorial authorities:

(2) will be primarily responsible for specifying the objectives, policies and methods for the control of the use of land for the maintenance of indigenous biodiversity on all land excluding the coastal marine area, wetlands, and lakes and rivers and their margins.

Explanation/Principal Reasons

In accordance with Section 62(1)(i)(iii) of the Act, the local authorities of the Southland region have the option of undertaking a collaborative approach to maintaining indigenous biodiversity. The Southland Regional Council will be responsible for the control of the maintenance of indigenous biodiversity in the coastal marine areas, wetlands, and lakes and rivers and their margins, and the territorial authorities will be responsible for all land outside of the coastal marine area, wetlands, and lakes and rivers and their margins.

As part of the commitment to working together to implement objectives, policies and methods, including rules, for the use of land to maintain the region's indigenous biodiversity, the territorial authorities and the Southland Regional Council may consider whether it is appropriate to transfer any of the functions, powers, and duties relating to each of them, to the other, in accordance with Section 33 of the Act.

Table 6: Overview of Biodiversity provisions

Issues	Objectives	Policies	Methods
Issue BIO.1	**Objective BIO.1** Understand and identify	**Policy BIO.1** Identification of significant areas	**Methods BIO.1, 2, 3, 9, 11, 12, 15**
		Policy BIO.6 Gather, monitor, record and report information	**Methods BIO.1, 2, 3, 9, 11, 12, 15**
Issue BIO.2	**Objective BIO.2** Maintain and protect	**Policy BIO.2** Protect significant areas	**Methods BIO.2, 3, 4, 5, 6, 13, 14, 15**
		Policy BIO.3 Protect coastal indigenous biodiversity	**Methods BIO.2, 3, 4, 5, 6, 13, 14, 15**
		Policy BIO.4 Maintain indigenous biodiversity	**Methods BIO.2, 3, 4, 5, 7, 8, 10, 12, 13, 14, 15**
		Policy BIO.5 Support biodiversity initiatives	**Methods BIO.2, 4, 6, 7, 10, 12, 13, 14, 15**
		Policy BIO.7 Active management	**Methods BIO.2, 3, 4, 7, 10, 12, 14, 15**
		Policy BIO.8 Tangata whenua	**Methods BIO.2, 3, 6, 7, 11, 15**
		Policy BIO.9 Biodiversity offsets and environmental compensation	**Methods BIO.7, 9, 10, 15**
		Policy BIO.10 Role of landowners	**Methods BIO.1, 2, 3, 4, 6, 7, 8, 10, 11, 12, 13, 14, 15**
	Objective BIO.3 Enhance	**Policy BIO.5** Support biodiversity initiatives	**Methods BIO.2, 3, 4, 5, 7, 10, 13, 14, 15**
		Policy BIO.7 Active management	**Methods BIO.2, 3, 4, 7, 10, 12, 13, 14, 15**
		Policy BIO.8 Tangata whenua	**Methods BIO.2, 3, 6, 7, 11, 14, 15**
		Policy BIO.10 Role of landowners	**Methods BIO.2, 3, 4, 6, 7, 8, 11, 12, 13, 15**

6.1 ISSUES

Issue BIO.1
The full extent of indigenous biodiversity, its significance, and the loss of indigenous biodiversity within the Southland region has not been adequately identified or determined.

Issue BIO.2
Southland's indigenous biodiversity has been and continues to be reduced in diversity, condition and extent, as a result of loss and degradation to some of the remaining indigenous ecosystems and habitats.

6.2 OBJECTIVES

Objective BIO.1 – Understand and identify
Understand the extent of loss of indigenous ecosystems and habitats across the Southland Region and identify those at risk to further loss and degradation.

Explanation/Principal Reasons
Indigenous biodiversity loss and threats to the condition of remaining indigenous ecosystems and habitats are environmental issues for Southland. In order to achieve the sustainable management of indigenous ecosystems and habitats, it is important to improve our understanding of their distribution, spatial extent, resilience, condition and their ecological significance both nationally and regionally and the risk of further loss and degradation of ecosystems, habitats and species.

Objective BIO.2 – Maintain and protect
Maintain indigenous biodiversity in Southland and protect areas of significant indigenous vegetation and significant habitats of indigenous fauna for present and future generations.

Explanation/Principal Reasons
The purpose of the Act is to promote the sustainable management of natural and physical resources. Sections 30(1)(ga) and 31(1)(b)(iii) task regional councils and territorial authorities respectively with maintaining indigenous biodiversity.

Section 6(c) of the Act requires the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna to be recognised and provided for. In Southland, many areas are already formally protected but there are other areas of significant indigenous vegetation and significant habitats of indigenous fauna that are unprotected and remain at risk from further degradation and fragmentation. The protection of these areas needs to be prioritised through such means as active management or formal protection.

There are many tools available to local authorities to carry out their functions and it is important that these are investigated and where appropriate, implemented, in order to achieve a region wide approach to the management of indigenous biodiversity across Southland. These approaches could be regulatory, non-regulatory or a combination of both.

Objective BIO.3 – Enhance
Enhance the range, extent and condition of indigenous biodiversity in Southland, with a particular emphasis on those areas most at risk to further loss or degradation.

Explanation/Principal Reasons
A key way to achieve sustainable management of indigenous biodiversity is to enhance those ecosystems that are no longer healthy due to loss of indigenous biodiversity. In general, a greater diversity of constituent habitats supports greater biological diversity. Therefore, activities that enhance habitat complexity are beneficial to biodiversity values.

6.3 POLICIES

Policy BIO.1 – Identification of significant areas
Identify areas of significant indigenous vegetation and significant habitats of indigenous fauna using the following:

(a) the Schedule of Threatened, At Risk and Rare Habitat Types in Appendix 2, which provides an indication of areas likely to be significant;
(b) ecological assessments undertaken by a suitably qualified ecologist using the ecological significance criteria listed in Appendix 3 to ascertain whether an area listed is significant or otherwise;
(c) the ecological significance criteria listed in Appendix 3, which incorporate the following matters:
    (i) representativeness;
    (ii) rarity or distinctiveness;
    (iii) diversity and pattern; and
    (iv) ecological context;
(d) in collaboration with landowners, the investigation and identification of areas of indigenous vegetation on private land that are likely to be significant.

Explanation/Principal Reasons
The purpose of Policy BIO.1 is to identify areas of significant indigenous vegetation and significant habitats of indigenous fauna across the Southland region.

The first step in ascertaining significance has been the compilation of the Schedule of Threatened, At Risk and Rare Habitat Types (the Schedule) in Appendix 2. The Schedule describes the characteristics of habitat types as they are expressed at a regional scale and provides a broad brush approach to identifying areas that are potentially significant. The Schedule was developed using a desktop exercise based on the approach used by the Horizons Regional Council in developing the *One Plan* (19 December 2014)[31].

A technical working group including Southland Regional Council staff and external experts was used to compile the Schedule. It is important to note that the information in the Schedule will continue to be updated with the intent that the Schedule will develop into a comprehensive database of significant indigenous vegetation and significant habitat of indigenous fauna throughout the region. The Schedule will be supported by a GIS layer developed by Southland Regional Council to provide a visual representation of the habitat types across the region. This will be updated as information becomes available through ground truthing, ecological assessments and data provided by other agencies such as QEII, Landcare Trust and DOC.

[31] This encompassed the use of the Predicted Potential Natural Vegetation of New Zealand Dataset with the Land Cover Database 3 (LCDB3) as an overlay to calculate percentages remaining for primarily forest or treeland, and wetland habitat types and lowland tussockland habitats. The Schedule also includes a list of naturally uncommon or rare ecosystems/habitats for the region sourced from a national list compiled by Landcare Research.

The ecological significance criteria listed in Appendix 3 will be applied on a site specific basis where areas of indigenous vegetation and habitat of indigenous fauna are proposed for clearance or modification. The purpose of a site specific ecological assessment is to determine whether an affected area is ecologically significant and to establish the effects of, or magnitude of the effect of an activity and the measures required to avoid, remedy or mitigate the effects. Information arising from the assessment will be incorporated into the Schedule (Appendix 2).

Overall, there is limited knowledge of the ecological values of the areas of indigenous vegetation and habitats of indigenous fauna in the Southland region and therefore, a precautionary approach is required by local authorities when considering activities for clearance or modification to any areas of indigenous vegetation and habitats of indigenous fauna. This approach will be necessary until such time as a Regional Biodiversity Strategy is developed and as more information is gathered through the High Value Areas (HVA) programme and other local authority led initiatives.

Policy BIO.2 – Protect significant areas
Areas of significant indigenous vegetation and significant habitats of indigenous fauna in the Southland region will be protected and, where appropriate, enhanced.

In giving effect to this policy, particular regard will be had to the following potential adverse effects:
(i) fragmentation of, or reduction in the extent of, significant indigenous vegetation or significant habitats of indigenous fauna;
(ii) fragmentation or disruption of connections and linkages between significant ecosystems or significant habitats of indigenous fauna;
(iii) loss of, or damage to, buffering of significant ecosystems or significant habitats of indigenous fauna;
(iv) loss or reduction of rare or threatened indigenous species populations or habitats.

Explanation/Principal Reasons
Section 6(c) of the Act requires the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna to be recognised and provided for.

Areas identified as significant using the multifaceted approach set out in Policy BIO.1 will be protected to ensure no further loss of significant indigenous biodiversity as a result of land use activities.

The outcome of protection as defined by this policy is prevention of further loss and fragmentation of areas of significant indigenous vegetation and habitats of indigenous fauna. Protection will be recognised and provided for through regulation, education, stakeholder collaboration, information gathering, and partnerships with landowners and tangata whenua.

Protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna benefits the indigenous biodiversity of the protected areas, and benefits humans through the provision of ecosystem services such as improved water quality, erosion protection, flood attenuation, nutrient cycling, crop pollination and cultural resources.

Policy BIO.3 – Protect coastal indigenous biodiversity
Protect indigenous biodiversity from adverse effects in the coastal environment as set out in Policy 11 of the *New Zealand Coastal Policy Statement 2010*.

Explanation/Principal Reasons
Policy 11 of the NZCPS requires the protection of indigenous biodiversity in the coastal environment. In particular it makes reference to avoiding the adverse effects of coastal activities on certain taxa, ecosystems and vegetation types, habitats and areas. It also seeks to avoid significant adverse effects and to avoid, remedy or mitigate other adverse effects of activities on certain areas, ecological corridors, ecosystems and habitats.

Policy BIO.4 – Maintain indigenous biodiversity
Manage a full range of indigenous habitats and ecosystems to achieve a healthy functioning state, and to ensure viable and diverse populations of native species are maintained, while making appropriate provisions for lawful maintenance and operation of existing activities.

In giving effect to this policy, regard will be had to the following potential adverse effects:
(i) fragmentation of, or reduction in the extent of, indigenous vegetation or habitats of indigenous fauna;
(ii) fragmentation or disruption of connections and linkages between ecosystems or habitats of indigenous fauna;
(iii) loss of, or damage to, buffering of ecosystems or habitats of indigenous fauna;
(iv) loss or reduction of rare or threatened indigenous species' populations or habitats.

Explanation/Principal Reasons
Section 30(1)(ga) of the Act requires Regional Councils to establish, implement and review objectives, policies and methods for maintaining indigenous biodiversity.

Section 31(1)(b)(iii) of the Act requires Territorial Authorities to control any actual or potential effects of the use, development, or protection of land for the purpose of maintaining indigenous biodiversity.

Maintenance of indigenous biodiversity is required in addition to protecting identified areas of significant indigenous vegetation and significant habitats of indigenous fauna. This requires regulatory and non-regulatory measures that encourage retention and protection of remaining areas of indigenous biodiversity and their enhancement. It does not necessarily mean maintaining every individual specimen of plant or animal, rather it requires an understanding of the importance of an area or habitat and its contribution to maintaining genetic, species and ecosystem diversity. Measures that encourage the maintenance of indigenous biodiversity include recognition of: the range of ecosystem services provided by indigenous biodiversity; the importance of ecological connections/corridors and buffer areas; the need to control a range of potential adverse effects of land activities and discharges on indigenous biodiversity; the need to control animal and plant pests; and avoiding, remedying or mitigating adverse effects on indigenous biodiversity.

Policy BIO.5 – Support biodiversity initiatives
Encourage, promote and support biodiversity initiatives to retain, maintain and restore or enhance:
(a) coastal ecosystems and habitats;
(b) aquatic ecosystems and habitats; and
(c) terrestrial ecosystems and habitats.

Explanation/Principal Reasons
This policy recognises the importance of community initiatives in achieving sustainable management of Southland's indigenous biodiversity. Such initiatives are essential if the full range of Southland's ecosystems and habitats are to be maintained, and restored or enhanced. Local authorities are well placed to be able to support and co-ordinate efforts with the community including landowners, private

companies, land management agencies and tangata whenua, to work together to maintain, and restore or enhance ecosystems and habitats throughout Southland.

Policy BIO.6 – Gather, monitor, record and report information

Gather, monitor, record and report information on Southland's indigenous biodiversity including the effects of activities, pests and climate change. The focus will be on:

(a) identifying the current state of indigenous biodiversity, including extent and ecosystem health and functioning;
(b) identifying trends in the state of indigenous biodiversity;
(c) identifying threats to indigenous biodiversity.

Explanation/Principal Reasons

Through voluntary programmes such as the High Value Areas surveys and national tools such as the Threatened Environment Classification and Landcover Database, information on Southland's indigenous ecosystems and habitats has begun to be captured and recorded as outlined in the Schedule contained in Appendix 2. This includes the gathering, monitoring, recording and reporting on information such as the location, extent, pressures and condition of indigenous ecosystems and biodiversity through such means as state of the environment monitoring and reporting. The effects of land use activities, climate change and pests are not currently well known in Southland. Investigation into these effects will allow local authorities to make decisions about how indigenous biodiversity should be managed.

Policy BIO.7 – Active management

Promote an active and integrated management approach to maintaining and restoring or enhancing indigenous biodiversity through methods including the Regional Pest Management Plan for Southland, and advice and information on pest management, fencing and planting.

Explanation/Principal Reasons

Indigenous biodiversity is under threat not only because of human induced habitat loss, but also because of the spread of pest plants or the predation by pest animals. Southland has numerous introduced pest plant and pest animal species, which have and continue to degrade indigenous biodiversity. Regional pest management programmes and plans should help to maintain, and restore or enhance indigenous biodiversity. Additionally, provisions in regional and district plans can reduce the risk of areas of indigenous biodiversity being colonised by exotic invaders. Examples include wilding trees, garden plants and weeds, such as gorse and broom, entering areas where they are presently absent. Fencing can maintain areas of indigenous biodiversity by preventing domestic livestock access.

The need to maintain, enhance or restore indigenous riparian vegetation reflects the importance of its ecological functions. It can help to connect fragmented indigenous habitats for species to migrate along. Tall growing riparian vegetation minimises temperature fluctuations which can change the biodiversity of the stream. Streamside trees provide shade, stream bank stability, and organic material such as broken branches and fallen leaves, which provide shelter and food for stream organisms. Insects that fall from trees also provide food for fish. Streamside trees also provide cover for spawning fish, and habitat for nesting and juvenile birds.

Much of the indigenous vegetation in Southland has been reduced to 20% or less and in some cases 10% or less of its original extent. Therefore planting of indigenous species will be necessary to ensure indigenous biodiversity is maintained and restored or enhanced. Local authorities can encourage the planting and the re-creation of indigenous habitats in agricultural, horticultural, urban, residential, forestry and industrial environments through the use of measures such as rates relief and the coordination of volunteer planting programmes. Locally sourced species will help maintain the unique

local characteristics of native plants in Southland and ensure greater growing success because they are adapted to the local conditions.

Policy BIO.8 – Tangata whenua

Recognise the role of tangata whenua as kaitiaki, by providing for:

(a) tangata whenua values and interests to be incorporated into the management of indigenous biodiversity;
(b) consultation with tangata whenua regarding the means of maintaining and restoring or enhancing habitats identified in accordance with Policy BIO.1 that have particular significance to tangata whenua;
(c) active involvement of tangata whenua in the protection of cultural values associated with indigenous biodiversity;
(d) customary use of indigenous biodiversity according to tikanga.

Explanation/Principal Reasons

Policy BIO.7 recognises the relationship of tangata whenua with areas of indigenous biodiversity. Tangata whenua (Ngāi Tahu) have a number of particular interests in indigenous biodiversity which are considered in accordance with Part 2 of the Act. Traditional tangata whenua knowledge may be usefully applied in the management of indigenous biodiversity. Recognising and providing for this knowledge is important in having particular regard to the role of Ngāi Tahu as kaitiaki in accordance with Section 7 of the Act. It is also consistent with Te Tangi a Tauira. Some habitats identified in Policy BIO.1 will be of particular significance to Ngāi Tahu due to continuing Māori ownership, historical association or because of the resources they provide for traditional cultural practices. In respect of such habitats, specific consultation with Ngai Tahu, the Trustees of Māori owned land and the Titi Islands Rakiura Māori/Beneficial Owners as appropriate, will be of particular importance. Policy BIO.7 ensures that tangata whenua are involved in the maintenance of indigenous biodiversity when associated with particular cultural values. It is expected that this involvement could take a variety of forms, including partnerships in active management programmes or specific consultative/joint decision-making arrangements. Policy BIO.7 also ensures that protection of indigenous biodiversity provides for the customary use of indigenous species by Ngāi Tahu, provided that use is in accordance with traditional customs and practices.

Policy BIO.9 – Biodiversity offsets and environmental compensation

In addressing significant residual adverse effects (i.e. those effects left after all the appropriate avoidance, remediation, or mitigation actions have been taken), local authorities will consider the use of any biodiversity offset and/or environmental compensation measures offered by an applicant.

Explanation/Principal Reasons

Biodiversity offsets and/or environmental compensation measures apply only after avoidance, remediation, or mitigation measures have been exhausted. Biodiversity offsets and/or environmental compensation measures, when volunteered by applicants, will be considered by local authorities when dealing with significant residual adverse effects.

Both biodiversity offsets and environmental compensation provide for positive effects of an activity off-site, beyond any mitigation measures proposed within the site. Biodiversity offsets and/or environmental compensation can be an integral and important part of promoting enhanced biodiversity and ecosystem values, noting that it can take some time for benefits to be realised. For example, indigenous planting takes a long time to become a self-sustaining ecosystem.

There will be cases where the extent of loss of indigenous ecosystems and habitats is too great to offset or compensate for the loss. There are also situations where residual effects cannot be fully

offset or compensated for because the ecosystems and habitats are highly vulnerable or irreplaceable. In such cases the appropriate course of action may be to decline the application.

Any biodiversity offset proposed to manage adverse effects on biodiversity under this policy should be designed and implemented with regard to any current good practice guidance or direction from Government in relation to biodiversity offsets.

Policy BIO.10 – Role of landowners
Recognise the critical role of private landowners in maintaining or enhancing and actively managing the remaining indigenous biological diversity that occurs on private land.

Explanation/Principal Reasons
It is acknowledged that the co-operation of private landowners is vital to preventing further indigenous biodiversity losses, especially given their ability to maintain and enhance indigenous biodiversity at an individual level. Often the cost of maintaining and protecting indigenous biodiversity and the ecosystem services it provides falls to an individual, while the benefits accrue to the wider communities. There are a number of ways local governments can recognise and reward the role landowners play, for example free advice, and assistance with stock exclusion and pest animal and pest plant management.

6.4 METHODS

The Southland Regional Council will:

Method BIO.1 – Schedule of Threatened, At Risk and Rare Habitat Types
The Schedule of Threatened, At Risk and Rare Habitat Types shall be updated through the Schedule 1 process of the Act, or regional plan reviews. In particular, marine habitat types will be addressed in conjunction with the next Regional Coastal Plan review. The Schedule will be supported by Council's GIS which will provide a visual representation of the habitat types across the region.

Method BIO.2 – Biodiversity strategy
Develop a regional biodiversity strategy in collaboration with key stakeholders, including territorial authorities, who have a specific interest in the management of indigenous biodiversity in the Southland region. The purpose of the strategy will be to detail how the objectives, policies and methods outlined in this chapter will be achieved with a particular focus on maintaining indigenous biodiversity. It is to be a non-statutory document to guide biodiversity work in the region and could include:

(a) an inventory of biodiversity information;
(b) actions to be taken to maintain indigenous biodiversity;
(c) priorities for restoration and enhancement;
(d) priorities for reducing threats to indigenous biodiversity;
(e) monitoring tools and processes;
(f) performance targets to measure the achievement of indigenous biodiversity Objectives BIO.1, BIO.2 and BIO.3.

Method BIO.3 – Collaboration
(a) Work with the territorial authorities to develop provisions to manage Southland's biodiversity;
(b) Work with territorial authorities in defining the spatial extent of wetlands and riparian margins within threatened, at risk and rare habitat types;

(c) Collaborate with key stakeholder groups in addressing prevailing biodiversity issues within the region;
(d) Work with community groups, land care groups, central government agencies, QEII Trust, tangata whenua and individual land owners in implementing protection and enhancement measures, including pest management, covenanting, planting of indigenous species along riparian margins, and other restoration measures;
(e) Direct (one on one) consultation with land owners whose properties contain threatened, at risk or rare habitat types.

Method BIO.4 – Pest plant and pest animal management
(a) Implement regional pest management programmes and plans to maintain, enhance or restore indigenous ecosystems and habitats to a healthy functioning state.
(b) Assist individuals and groups with pest plant and pest animal management.

Method BIO.5 – Marine protected areas
Southland Regional Council will support, at its discretion, the introduction of marine protected areas that represent the region's marine biodiversity.

Local authorities will:

Method BIO.6 – Protect significant indigenous vegetation and significant habitats of indigenous fauna
Make provisions:
(a) in regional and district plans to provide for case-by-case assessments to determine whether an area of indigenous vegetation or habitat of indigenous fauna is significant and warrants protection, drawing on previous assessment(s) of the area of concern where these exist;
(b) in regional plans to control the clearance or modification of:
    (i) significant indigenous vegetation and significant habitats of indigenous fauna, associated with wetlands, and lakes and rivers and their margins;
    (ii) significant indigenous coastal ecosystems and significant habitats including, estuaries, lagoons, coastal wetlands, dunelands, rocky reef systems, and aquatic plant communities;
(c) in district plans to control the clearance or modification of significant indigenous vegetation and significant habitats of indigenous fauna (excluding the coastal marine area, wetlands, lakes and rivers and their margins) unless provided for in a regional plan.

Method BIO.7 – Maintain indigenous biodiversity
Maintain indigenous biodiversity by the use of regional and district plan provisions together with other appropriate regulatory and non-regulatory means.

Method BIO.8 – Lawful maintenance and operation of existing activities
Make provision in regional and district plans:
(a) except as required by Method BIO.6, for the appropriate clearance or modification of indigenous vegetation, including the purposes of providing for existing lawfully established:
    (i) plantation forestry activities;
    (ii) agricultural, pastoral, and horticultural activities;
    (iii) domestic or public gardens;
    (iv) nationally significant, regionally significant, and critical infrastructure, undertaken by or on behalf of the body responsible for the infrastructure.
(b) for landowners to harvest existing lawfully established exotic plantation forest.

Method BIO.9 – Resource consents

Require ecological assessments that are commensurate to the scale of the proposed activity to accompany a resource consent application for an activity or development that may affect areas of indigenous vegetation and habitats of indigenous fauna. The ecological assessment shall determine the ecological significance of such areas on the basis of the assessment criteria listed in Appendix 3.

Local authorities will be encouraged to:

Method BIO.10 – Enhancement, biodiversity offsets and compensation measures

(a) Encourage the establishment of additional indigenous riparian vegetation as a means of increasing connectivity; and creating and enhancing terrestrial and freshwater habitats for indigenous species through the planting of naturally occurring, locally sourced indigenous species; and

(b) Include objectives, policies and methods in regional and district plans that provide for biodiversity offsets and compensation measures as set out in Policy BIO.9.

Method BIO.11 – Consultation

(a) Consult with key stakeholders on a case-by-case basis with respect to a resource consent application for an activity or development affecting areas of significant indigenous vegetation and significant habitats of indigenous fauna including those identified in the Schedule of Threatened, At Risk and Rare Habitat Types in Appendix 2.

(b) Consult with tangata whenua and take into account Te Tangi a Tauira and other relevant iwi planning documents when making resource management decisions regarding activities affecting (either positively or adversely) indigenous biodiversity, and particularly for habitats that have significance to tangata whenua.

(c) Increase landowner awareness of significant indigenous vegetation and significant habitats of indigenous fauna.

Method BIO.12 – Investigations, research, monitoring and reporting

(a) Continue to expand upon the High Value Areas programme to address knowledge gaps, especially in areas facing biodiversity loss as identified in any regional biodiversity strategy for Southland.

(b) Undertake investigations with key research organisations to increase local authority knowledge of the implications of land use changes and development on terrestrial and aquatic ecosystems, particularly with respect to priority areas where ecosystem loss, fragmentation and ecosystem condition decline continues to occur.

(c) Monitor the state of indigenous biodiversity in Southland and report the information in State of Environment reporting.

Method BIO.13 – Education, public awareness and promotion

(a) Actively educate and raise awareness with the community, educational institutions, industry and land owners about the value of indigenous terrestrial, aquatic and marine ecosystems and habitats of indigenous fauna, particularly in terms of ecological processes and the benefits of ecosystem services and functioning.

(b) Use online facilities, the media and field days to promote land use practices that maintain, enhance and restore ecosystems and habitats.

(c) Actively support and promote community, tangata whenua and landowner initiatives and the role of key organisations that maintain and enhance indigenous biodiversity.

(d) Establish awards for individuals and groups undertaking protection, enhancement or restoration measures.

(e) Promote voluntary legal protection, restoration or enhancement of indigenous biodiversity.

(f) Undertake biodiversity maintenance, restoration and enhancement on public land.
(g) Monitor and evaluate the effectiveness of private land conservation initiatives.

Method BIO.14 – Financial assistance

(a) Provide rates relief in accordance with section 8 of the Local Government Rating Act 2002.
(b) Contribute towards regional programmes such as the High Value Areas Programme to address knowledge gaps, especially in areas facing biodiversity loss as identified in any regional biodiversity strategy for Southland.
(c) Assist individuals and groups with applications seeking funds from relevant agencies.
(d) Contribute towards the regional Environmental Enhancement Fund to assist with ecosystems and biodiversity maintenance, enhancement and restoration.

Method BIO.15 – Other methods

Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to effectively implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons

Key legislative drivers such as the 2005 amendment to the Act and central government initiatives, such as the Biodiversity Strategy and the National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land place explicit responsibilities on the Southland Regional Council for maintaining indigenous biodiversity and protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna in the region. The methods provide a comprehensive and diverse means of meeting these obligations through a combination of regulatory and non-regulatory means.

The methods seek to provide more clarity to local authorities in terms of adopting a regulatory framework that is more ecologically robust while recognising that the information gaps which exist at present pose an issue from a resource consent processing perspective. The inclusion of the Schedule (refer to Appendix 2) classifies habitat types as being threatened, at risk or rare. These categories are consistent, to a large degree, with the National Priorities for Protecting Rare and Threatened Biodiversity on Private Land. The Schedule is not intended to be definitive in terms of determining significance. To compliment the Schedule, assessment criteria (refer to Appendix 3) are included to provide more in depth assessment of significance of areas of indigenous vegetation and habitats of indigenous fauna.

The methods provide for the development of a region wide biodiversity strategy. The key reason for promoting this strategy is that biodiversity decline is a regional issue and needs to be addressed at a regional level. The strategy's purpose will be to ensure that a consistent approach to managing indigenous biodiversity is applied throughout the region through a collaborative process involving the key stakeholders in Southland. Additionally, this strategy approach can provide direction to resolve the issue of wetland management which requires an integrated land-use, water quantity and water quality management approach.

Information gaps in terms of the region's ecosystems, habitats and inherent biodiversity values and understanding impacts of land use changes and intensification are addressed in the methods. The methods recognise the importance of a collaborative approach to addressing the prevailing information gaps through programmed research and importantly the pooling of expertise and financial resources. The importance of the resource consent processes should not be underestimated in terms of the information furnished by applicants seeking to undertake activities that affect areas of indigenous vegetation and habitats of indigenous fauna.

A strong focus is placed on non-regulatory methods such as education, public awareness, promotion and partnerships with the community, landowners, tangata whenua and other groups. The methods recognise that landowners are critical to the future success of managing biological diversity on private land in the region and that tangata whenua and the community have an important role in maintaining, enhancing and restoring the region's biodiversity. Particular emphasis is placed on the non-tangible elements such as, ecological processes, services and functions that are largely overlooked or misunderstood. Developing a more comprehensive knowledge base and a greater understanding within the community is implicit in these methods. The methods draw attention to the importance of effective use of the electronic media as a means of encouraging involvement of the younger generations, our future policy makers.

The methods recognise the importance of encouragement (through provision of technical advice and financial incentives) of community groups and individual landowners in bringing about positive outcomes as well as contributing to raising community awareness.

Chapter 7: Coast

Introduction

The Southland region contains over 3,000 kilometres of coastline, from Awarua Point on the west coast to Waiparau Head on the south-east coast. Approximately 63% of that (1,892 km) is located within Fiordland and a further 26% (781 km) is the coastline of Stewart Island/Rakiura. Many of these areas are only accessible by sea.

The extent and character of the coastal environment varies from locality to locality, and the issues that arise may have different effects in different localities. The two distinct but interrelated parts to the coastal environment are the coastal marine area and the land margins (including land used for farming) directly affecting, and affected by, coastal activities. The land backdrop often provides a third but not immediately obvious interrelated part of the coastal environment, such as mountain ranges with elements and features that contribute to the natural character, landscape, visual qualities or amenity values of the coastal environment. Balancing the use and protection of the coastal environment requires recognition of this interaction between land and sea, taking into account the wider area (not just the location of a particular activity), and all the components and values that make up the area.

The coastal environment is very important in Southland. It contains natural and physical resources important to social, economic and cultural wellbeing. Many of us live near the coast, we go to the beach, we fish in the sea (some rely on the sea for their livelihood) and, for tangata whenua, there is a high concentration of sites of significance, with strong ancestral connections for Ngāi Tahu as tangata whenua. The coast is therefore of immense spiritual, historical, cultural and traditional importance to tangata whenua, with characteristics that hold special value. The coastal marine area contains two areas subject to a statutory acknowledgment in accordance with the Ngāi Tahu Claims Settlement Act 1998: Fiordland/Te Mimi o Tū Te Rakiwhānoa, and Foveaux Strait/Rakiura/Te Ara A Kiwa. There are also statutory acknowledgements for rivers and lagoons, parts of which are in the coastal environment. Coastal lagoons and estuaries are particularly important to Ngāi Tahu as tangata whenua, for mahinga kai and other cultural reasons. In addition, under the Fisheries (South Island Customary Fishing) Regulations 1999, a range of methods are available to recognise and make provision for customary management practices and food gathering such as mataitai and taiapure.

Because of the coast's importance to Southlanders and the long history they have with this environment, there can often be debate around how this area should be used and managed.

Public access to and along the coast is lacking in part, or is becoming fragmented as a result of activities, or management direction under different legislation, occurring along the coastal margin, in particular within the isolated parts of the region. The coastal environment contains the major port of Bluff, as well as other smaller harbour areas such as those servicing fishing, tourism and recreational users in Riverton/Aparima, Halfmoon Bay (Stewart Island/Rakiura), Deep Cove (Doubtful Sound/Patea), Freshwater Basin (Milford Sound/Piopiotahi) and Deepwater Basin (Milford Sound/Piopiotahi). Roads and railways around the region also border the coastal marine area.

There are numerous non-point and point source discharges of contaminants into the coastal environment, including those from catchments above and beyond the coastal environment that drain through freshwater bodies into coastal lagoons, lakes and estuaries, adversely affecting coastal water quality and its ecosystems. Such contaminants can be nutrients or faecal contamination that degrades the water quality, or sedimentation that smothers ecosystems and natural habitats.

The release or spread of harmful aquatic organisms can have adverse effects on the coastal environment, particularly on the ecosystems and indigenous biodiversity. This can happen by way of the introduction of structures likely to be contaminated with harmful aquatic organisms, the discharge of ballast water, the disposal of organic material from dredging, or from vessels and structures, the provision and ongoing maintenance of moorings, marina berths, jetties and wharves, and the establishment and relocation of equipment and stock required for, or associated with aquaculture. The management of harmful aquatic organisms involves an interagency response between the Ministry for Primary Industries and the Southland Regional Council. The Regional Pest Management Strategy for Southland is the current main tool for managing harmful aquatic organisms and contains rules about species classified as marine pests. A more targeted tool under the Biosecurity Act 1993, national and/or regional pathway management plans, is being developed to ensure activities do not result in the introduction of marine pests to an area where they are presently absent. These documents must be considered in conjunction with this chapter and the Regional Coastal Plan for Southland.

This chapter covers:

- what is appropriate occupation and use of the coastal marine area;
- maintaining and enhancing public access, while recognising certain activities must be located within the coastal environment even though they can affect natural character and public access; and
- non-point and point source discharges which result from land-based activities.

The New Zealand Coastal Policy Statement 2010 (NZCPS) states objectives and policies in order to achieve the purpose of the RMA in relation to the coastal environment of New Zealand. While all of the NZCPS must be given effect to by the RPS, in terms of the specific resource management issues for the region stated in this chapter, the RPS recognises that some NZCPS policies are more specific and directive.

It is important to refer to the other specific topic chapters that relate to the type of activity and location in question. Important chapters relevant for all activities are Chapter: 8: Natural Hazards and Chapter 10: Natural Features and Landscapes. Other important relevant chapters depending on the activity type/location are Chapter 5: Rural Land/Soils, Chapter 6: Biodiversity, Chapter 14: Historic heritage, Chapter 15: Infrastructure/Transport, Chapter 16: Energy and Chapter 17: Urban. The other chapters need to be considered on a case by case basis.

Management of indigenous biodiversity is woven throughout this chapter however it is important to refer to Chapter 6: Biodiversity, which sets out the resource management provisions to maintain indigenous biodiversity and protect significant indigenous vegetation and habitats, and restore or enhance Southland's indigenous ecosystems and biodiversity.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

Table 7: Overview of Coast provisions

Issues	Objectives	Policies	Methods
Issue COAST.1	**Objective COAST.1** Direction on activities within the coastal environment	**Policy COAST.1** Direction on locations for activities	**Methods COAST.1 - 5, 7 - 9**
		Policy COAST.2 Management of activities in the coastal environment	**Methods COAST.1 - 9**
		Policy COAST.3 Protection of the coastal environment	**Methods COAST.1, 3, 4, 6 - 9**
	Objective COAST.5 Aquaculture	**Policy COAST.1** Direction on locations for activities	**Methods COAST.1 – 5, 7 - 9**
		Policy COAST.2 Management of activities in the coastal environment	**Methods COAST.1 - 9**
		Policy COAST.3 Protection of the coastal environment	**Methods COAST.1, 3, 4, 6 - 9**
		Policy COAST.4 Infrastructure, port, aquaculture, mineral extraction and energy projects	**Methods COAST.1 – 5, 7 - 9**
		Policy COAST.7 Management of activities in the coastal marine area	**Methods COAST.1 - 3, 5 - 9**
Issue COAST.2	**Objective COAST.1** Direction on activities within the coastal environment	**Policy COAST.1** Direction on locations for activities	**Methods COAST. 1 - 5, 7 - 9**
		Policy COAST.2 Management of activities in the coastal environment	**Methods COAST.1 - 9**
		Policy COAST.3 Protection of the coastal environment	**Methods COAST. 1, 3, 4, 6 - 9**
		Policy COAST.6 Natural character	**Methods COAST.1 – 4, 6 - 9**

Issues	Objectives	Policies	Methods
		Policy COAST.7 Management of activities in the coastal marine area	**Methods COAST.1 - 3, 5 - 9**
Issue COAST.3	**Objective COAST.2** Activities in the coastal environment	**Policy COAST.1** Direction on locations for activities	**Methods COAST.1 - 5, 7 - 9**
		Policy COAST.2 Management of activities in the coastal environment	**Methods COAST. 1 - 9**
		Policy COAST.3 Protection of the coastal environment	**Methods COAST. 1, 3, 4, 6 - 9**
		Policy COAST.4 Infrastructure, port, aquaculture, mineral extraction and energy projects	**Methods COAST.1 – 5, 7 - 9**
		Policy COAST.7 Management of activities in the coastal marine area	**Methods COAST.1 - 3, 5 - 9**
	Objective COAST.4 Natural character	**Policy COAST.1** Direction on locations for activities	**Methods COAST.1 – 5, 7 - 9**
		Policy COAST.2 Management of activities in the coastal environment	**Methods COAST.1 - 9**
		Policy COAST.3 Protection of the coastal environment	**Methods COAST. 1, 3, 4, 6 - 9**
		Policy COAST.4 Infrastructure, port, aquaculture, mineral extraction and energy projects	**Methods COAST.1 – 5, 7 - 9**
Issue COAST.4	**Objective COAST.2** Activities in the coastal environment	**Policy COAST.3** Protection of the coastal environment	**Methods COAST. 1, 3, 4, 6 - 9**
		Policy COAST.4	**Methods COAST.1 - 4, 7 - 9**

Issues	Objectives	Policies	Methods
		Infrastructure, port, aquaculture, mineral extraction and energy projects	
		Policy COAST.6 Natural character	**Methods COAST.1 – 4, 6 - 9**
Issue COAST.5	**Objective COAST.3** Coastal water quality and ecosystems	**Policy COAST.5** Management of effects on coastal water quality and ecosystems	**Methods COAST.1 - 4, 6 - 9**

7.1 ISSUES

Issue COAST.1
The lack of clear identification or specification in the coastal environment of the locations that are appropriate and inappropriate for subdivision, use and development, especially in areas subject to intensive development or coastal hazards. This relates to a lack of understanding of coastal processes, resources and values in the coastal environment.

Issue COAST.2
The inadequate protection of the coastal environment that results from cumulative and precedent effects not being considered.

Issue COAST.3
Lack of, or fragmented, public access to and along the coast.

Issue COAST.4
Infrastructure, ports and energy projects often require a location within the coastal environment. However, they can have adverse effects on that environment, including on natural character and public access.

Issue COAST.5
Degradation of the region's coastal water and its ecosystems from discharges, and land-based activities.

7.2 OBJECTIVES

Objective COAST.1 – Direction on activities within the coastal environment
Provide clear direction on appropriate and inappropriate subdivision, use and development activities, the cumulative effect of an activity, and precedent effects of a decision, within the region's coastal environment.

Explanation/Principal Reasons
The Act requires many activities to be authorised by either a regional rule, or a resource consent. The activities that require a resource consent are considered on a case by case basis against the associated policy and rule framework that has been set up under the regime of the Act. Activities within sensitive areas are generally given a higher activity status. This framework gives guidance on how to assess activities, but lacks clear direction on the overall strategic approach that may be appropriate, and where necessary, inappropriate for the region's coastal environment. A strategic approach is required to sustainably manage the coastal environment. A strategic approach will also give direction on what is appropriate, and where necessary, inappropriate, regarding cumulative effects of an activity, and precedent effects of a decision, bringing these aspects to the forefront of the decision-making process.

Objective COAST.2 – Activities in the coastal environment
Infrastructure, ports, energy projects, aquaculture, mineral extraction activities, subdivision, use and development in the coastal environment are provided for and able to expand, where appropriate, while managing the adverse effects of those activities.

Explanation/Principal Reasons

There is a need to recognise that ports and some other infrastructure, mineral extraction activities, and renewable and non-renewable energy projects may need to be located in the coastal environment, and that their development will be in response to future growth in population and economic activity in the region. There is also the need to recognise that subdivision, use and development does occur and may want to expand along the coastal environment of the region. Making provision for development is important, while managing adverse effects (including temporary effects) and any conflicts of interest among different users of the coastal environment. Aspects that need to be balanced include the maintenance and enhancement of appropriate public access to and along the coastal environment and preserving the natural character of the area affected by the use and development, and protecting significant indigenous biodiversity and maintaining indigenous biodiversity, while taking into account any existing lawfully established developments.

Objective COAST.3 – Coastal water quality and ecosystems

Coastal water quality and ecosystems are maintained or enhanced.

Explanation/Principal Reasons

The values associated with coastal water quality and its ecosystems are maintained for a particular purpose, expressed through water quality standards. In many cases, the quality of the coastal water, and the health of its ecosystems, are good and meet the water quality standards. This includes large areas of coastal water in its natural state. However, in some circumstances, water quality and ecosystems are being degraded by contaminants or sediments that have resulted from land-based activities, including those from catchments above and beyond the coastal environment that drain through freshwater bodies into coastal lagoons, lakes and estuaries. This interaction between land-based activities and the adverse effects on coastal water quality and its ecosystems must be recognised when considering subdivision, use and development activities within the coastal environment.

Objective COAST.4 – Natural character

The natural character of the coastal environment is restored, rehabilitated or preserved.

Explanation/Principal Reasons

The preservation of the natural character of the coastal environment is a matter of national importance and must be recognised and provided for when managing the use, development and protection of natural and physical resources, while provision must also be made for the promotion of the restoration or rehabilitation of the natural character of the coastal environment.

Objective COAST.5 – Aquaculture

Recognise the contribution of aquaculture to the well-being of people and communities by making provision for aquaculture in appropriate locations while:

(a) protecting coastal indigenous biodiversity in accordance with Policy BIO.3;
(b) protecting outstanding natural features, landscapes and natural character in accordance with Policy COAST.3; and
(c) avoiding, remedying, or mitigating other adverse effects.

Explanation/Principal Reasons

Policy 8 of the NZCPS promotes planning for aquaculture alongside other coastal activities and values and requires local authorities to recognise the existing and potential contribution of aquaculture to their regions. The effects of aquaculture require appropriate management to ensure they occur within environmental limits. Conversely, aquaculture activities can be adversely affected by adjoining coastal uses and are particularly susceptible to changes in water quality. Planning for aquaculture in appropriate locations will allow for the effective management of conflicts with other uses and values.

7.3 POLICIES

Policy COAST.1 – Direction on locations for activities
Identify in regional and district plans locations within the coastal environment where particular activities and forms of subdivision, use and development:
(a) are appropriate;
(b) are inappropriate; and
(c) may be inappropriate without the consideration of effects through a resource consent application, notice of requirement for designation or a Schedule 1 process under the Act.

Explanation/Principal Reasons
It is important that local authorities identify locations that are appropriate and, where necessary, inappropriate for particular activities and forms of subdivision, use and development. The matters local authorities may consider when determining whether or not a subdivision, use or development is appropriate include but are not limited to:

- maintaining coastal margins in a natural state;
- avoiding the introduction or accumulation of man-made elements where none are planned (consented or designated) or where not previously present;
- avoiding significant adverse effects and avoiding, remedying or mitigating other adverse effects on identified landscape values; and
- encouraging efficient use of occupied space through intensification and clustering of developments, rather than sprawling, sporadic or unplanned patterns of settlement and urban growth.

This approach will help avoid sprawling or sporadic subdivision, use and development. It will also help avoid cumulative effects of an activity and precedent effects of a decision exceeding the carrying capacity of an area, protecting the natural character, outstanding natural features and landscapes, and amenity, social, intrinsic, ecological, indigenous biodiversity, cultural and historic heritage values of the coastal environment.

To implement Policy COAST.1 the provisions of the Act and the New Zealand Coastal Policy Statement 2010 (NZCPS) must be given effect to. The National Policy Statement for Freshwater Management 2014 (NPS-FM), National Policy Statement for Renewable Electricity Generation 2011 (NPSREG) and National Policy Statement on Electricity Transmission 2008 (NPSET) also must be given effect to where relevant. Particular aspects include, but are not limited to:

- taking into account the Treaty of Waitangi principles, providing opportunities for tangata whenua to exercise kaitiakitanga, and recognising Maori heritage, as set out in sections 6(e), 7(a) and 8 of the Act, and Policy 2 of the NZCPS. Additionally, the Crown has obligations under the Maori Commercial Aquaculture Claims Settlement Act 2004;
- having regard to the purposes for which land or waters are held or managed under other Acts, to avoid adverse effects of activities that are significant in relation to those purposes, or avoid, remedy or mitigate adverse effects that are not significant in relation to those purposes and to provide for the integrated management of the coastal environment;
- strategic planning of the coastal environment for aspects such as nationally and regionally significant infrastructure (including ports, shipping navigation routes and refuge areas for efficient national networks for transport within the coastal space), aquaculture, renewable resources, energy activities (including mineral activities), natural hazards (including sea level rise

and climate change), coastal settlements, significant indigenous biodiversity and historic heritage. Thresholds (for example, zones, standards or targets) or specified acceptable limits of change should be set for coastal processes, resources or values under threat or at significant risk from adverse cumulative effects, such as protection from coastal hazards, water quality degradation, sedimentation, provision of public access, indigenous biodiversity loss, natural character preservation, natural features and landscapes protection, and management of harmful aquatic organisms;

- ensuring reclamations are only appropriate if they provide significant regional or national benefit, with particular regard given if the intended purpose would provide for the efficient operation of infrastructure (including ports, airports, coastal roads, pipelines, electricity transmission, railways and ferry terminals) and of marinas and electricity generation;
- recognising natural defences such as beaches, estuaries, wetlands, intertidal areas, coastal vegetation, dunes and barrier islands protect coastal land uses, or sites of significant indigenous biodiversity, cultural or historic heritage or geological value from coastal hazards;
- preservation of natural character, including restoration or rehabilitation where priority is relevant;
- protection of natural features and natural landscapes, and historic heritage; and
- provision of public open space, walking access and vehicle access.

Policy COAST.2 – Management of activities in the coastal environment

Ensure adequate measures or methods are utilised within the coastal environment when making provision for subdivision, use and development to:

(a) protect indigenous biodiversity, historic heritage, natural character, and natural features and landscape values;

(b) maintain or enhance amenity, social, intrinsic, ecological and cultural values, landscapes of cultural significance to tangata whenua and coastal dune systems;

(c) maintain or enhance public access; and

(d) avoid or mitigate the impacts of natural hazards, including predicted sea level rise and climate change.

Explanation/Principal Reasons

Measures or methods (for example, buffer zones) are required to minimise the impact of subdivision, use and development on the coastal environment to a level that is appropriate. An activity can impact on the significant values of the coastal environment, impede or eliminate public access to and along that environment, or increase the impact from natural hazards or predicted sea level rise and climate change. Policy TW.4 relates to the recognition and provision for tangata whenua values in local authority resource management decision-making processes, and should also be referred to in managing activities in the coastal environment.

Policy COAST.3 – Protection of the coastal environment

Ensure that subdivision, use and development activities:

(a) avoid adverse effects on areas of outstanding natural features and landscapes, and/or outstanding natural character;

(b) avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects on other natural features and landscapes and/or natural character in the coastal environment;

(c) protect and provide for nationally significant, regionally significant, and critical infrastructure, including ports and energy projects for the region, including by:

  (i) recognising that new development of the National Grid should seek to avoid adverse effects on the values of outstanding natural features and landscapes, and/or areas of outstanding or high natural character located within rural coastal environments. In the

coastal environment, in some circumstances, adverse effects on those areas must be avoided.

Explanation/Principal Reasons

Policy 13 of the NZCPS seeks to preserve and protect the natural character of the coastal environment from inappropriate subdivision, use and development. Additionally, Policy 15 of the NZCPS also seeks to protect natural features and natural landscapes of the coastal environment from inappropriate subdivision, use and development. Any subdivision, use and development that cannot be absorbed by the surrounding coastal environment, or is not sensitive to the natural character of the coastal environment, can exceed the carrying capacity for the area and needs to be managed carefully. This inappropriate activity can result in an incremental loss of the coastal environment's natural character, outstanding natural features and landscapes, amenity, social, intrinsic, ecological, indigenous biodiversity, cultural, and historic heritage values. The intensity of activities, including the built development, along the coastline also has consequences for indigenous biodiversity and other direct and indirect effects, such as limiting opportunities for future development of necessary infrastructure and other resource uses both on land and in the coastal marine area. In considering if an activity is appropriate for a location, the criteria provided for the protection of outstanding natural features and landscapes in Chapter 10: Natural Features and Landscapes shall be part of the consideration, in order to assess the value of the landscape. All aspects of the natural and physical resources, including land, water, air, plants, animals and structures, and various factors relating to the viewers and their perception of the resources (affected by social, economic, aesthetic and cultural conditions), need to be taken into account.

Policy COAST.4 – Infrastructure, port, aquaculture, mineral extraction and energy projects

Recognise and make provision for nationally significant, regionally significant or critical infrastructure that has a functional, operational or technical need to be located within the coastal environment, and appropriate port, aquaculture, mineral extraction activities and energy projects that must be located within the coastal environment.

Explanation/Principal Reasons

Bluff port straddles the coastal marine area and the landward edges of the coastal environment, as do roads and railways around the region, while some renewable and non-renewable energy projects may need to be located within the coastal marine area. Constraints to manage the effects on the environment from these activities are appropriate, and could include conditions relating to structures, occupation of the area, discharges to water, discharges to air and noise. However, in accordance with Policies 6(1)(a), 6(2)(a) and 8 of the NZCPS these types of activities need to be given recognition for the activities they facilitate, to enable appropriate development and diversification to occur to meet the changing needs of the region. Additionally, there is a need for high water quality for aquaculture activities and a need for land-based facilities associated with aquaculture. Activities such as these can be economically and socially beneficial to the region, increasing the wellbeing of communities through employment or enabling growth of local businesses that utilise and/or support the activities. The ability to maintain and retain existing regionally significant, nationally significant and critical infrastructure located in coastal or sensitive environments is also required.

While recognising and making provision for these activities, tangata whenua interests need to be taken into account in accordance with sections 6(e), 7(a) and 8 of the Act, and Policy 2 of the NZCPS. Additionally, the Crown has obligations under the Maori Commercial Aquaculture Claims Settlement Act 2004.

Policy COAST.5 – Management of effects on coastal water quality and ecosystems
Avoid, remedy or mitigate adverse effects of land-based and marine activities on coastal water quality and its ecosystems.

Explanation/Principal Reasons
Non-point and point source discharges, including stormwater and sewage, from subdivision, development, farming, forestry and marine activities in the coastal environment are causing adverse effects on the intertidal zone, seabed and marine resources, especially in estuaries, as well as the social, economic and cultural wellbeing of the region. Significant adverse effects include sedimentation that smothers ecosystems and natural habitats, as well as nutrients and faecal contamination restricting existing lawful uses, such as water-based recreation, shellfish gathering, aquaculture and cultural activities, from occurring. The impacts of activities outside the coastal environment or within the natural hazard areas can exacerbate these effects. The impacts of activities in catchments above and beyond the coastal environment that drain through freshwater bodies into coastal lagoons, lakes and estuaries can also exacerbate these effects. In these areas the whole of catchment approach from the mountains into the sea - "ki uta ki tai" - must be taken into account. All adverse effects from land-based and marine activities need to be avoided, remedied or mitigated.

Policy COAST.6 – Natural character
In regional and district plans:
(a) assess the natural character of the coastal environment by identifying areas of high and outstanding natural character using the attributes outlined in Policy 13(2) of the NZCPS;
(b) identify areas where preserving natural character requires objectives, policies and rules and include those provisions;
(c) identify areas and opportunities for restoration and rehabilitation of natural character; and
(d) provide policies, rules and other methods directed at restoration or rehabilitation of the natural character of the coastal environment.

Explanation/Principal Reasons
The preservation of the natural character of the coastal environment is important to the social, cultural and economic wellbeing of the Southland community. It is the natural character and the values associated with that natural character that enable the community to have high quality recreation opportunities, provide for the ability of Ngāi Tahu to have a relationship with the coastal environment, and provide opportunities for commercial activities such as tourism, aquaculture, energy and fishing. Areas of high and outstanding natural character need to be identified so appropriate provisions can be put in place in regional and district plans to preserve them. Areas where natural character has been degraded should also be identified so provisions can be put in place to rehabilitate or restore the natural character values. Non-regulatory methods such as promoting land use practices and restoration projects can be effective ways of restoring or rehabilitating natural character.

Policy COAST.7 – Management of activities in the coastal marine area
Within the coastal marine area, provide a framework to avoid or mitigate adverse effects on the coastal environment for the following activities:
(a) the allocation, use and occupation of coastal space;
(b) the use and development of the natural and physical resources of the coastal marine area;
(c) the emission of noise;
(d) commercial activities on the water and on the foreshore and seabed.

Explanation/Principal Reasons

Activities involving the use of the natural resources of the coastal marine area (CMA) are directly controlled under Section 12 of the Act where such activities need to be authorised by a regional rule or resource consent. Management of these resources at a regional or central government level is necessary both to allocate and to protect them. Section 12 of the Act also restricts the occupation of coastal space unless there is a rule in a regional plan, or a resource consent, expressly allowing that occupation. The policy recognises that activities occurring within the CMA can adversely affect the wider coastal environment. The policy is intended to ensure that activities within the CMA are appropriately managed to avoid adverse effects on the significant natural resources of the coastal environment, and the values associated with those resources. By providing a framework, councils and the community will have a clearer idea on appropriate and inappropriate use and development activities, the cumulative effect of an activity, and precedent effects of a decision on the region's coastal environment.

7.4 METHODS

The Southland Regional Council will:

Method COAST.1 – Regional Coastal Plan

Implement plan reviews or changes to enable the inclusion in the Regional Coastal Plan of provisions that:

(a) provide clear direction as to:
  (i) the areas within the coastal marine area that are appropriate for use and development (including infrastructure, port facilities, aquaculture, mineral extraction activities, renewable energy and non-renewable energy projects); and
  (ii) the areas where use and development is inappropriate; and
  (iii) the areas where use and development may be inappropriate without consideration of effects through a resource consent application, notice of requirement for designation or Schedule 1 of the Act process;
  (iv) the areas of outstanding and high natural character in the coastal environment that require preservation through objectives, policies and rules;
  (v) the areas and opportunities for restoration and rehabilitation of natural character in the coastal environment and the ways to provide for them.

(b) identify:
  (i) the coastal processes, resources or values that are under threat or at significant risk from adverse cumulative effects;
  (ii) the areas where water quality has deteriorated from its natural state with significant adverse effects on ecosystems and habitats, recreational use or existing uses;
  (iii) the values of the coastal environment for which coastal water quality is to be managed;

(c) set water quality standards appropriate to the values identified in Method COAST.1(b)(ii).

(d) manage land use activities and discharges of contaminants to meet water quality standards set by Method COAST.1(c).

Method COAST.2 – Resource consents

Require marine effects assessments and natural hazard assessments to be included as part of resource consent applications for activities that may significantly affect the coastal marine area or would potentially be affected by coastal hazards, sea level rise and climate change.

Method COAST.3 – Protocols and accords

Formulate protocols and accords:

(a) with resource users such as territorial authorities, tangata whenua, industry and landcare groups to address effects of land use on water quality and ecosystem health in the coastal marine area, most notably harbours, estuaries and lagoons;

(b) with resource users of the coastal marine area to avoid or mitigate adverse effects associated with the allocation, use and occupation of coastal space, the use and development of the natural and physical resources of the coastal marine area, the emission of noise and commercial activities on the water and on the foreshore and seabed.

Territorial Authorities will:

Method COAST.4 – District plans

Establish and maintain provisions in district plans that:

(a) safeguard environmental, social, cultural and heritage values from inappropriate subdivision, use or development in the coastal environment;

(b) facilitate appropriate and sustainable development of the coastal environment through the safeguarding of indigenous biodiversity and the life-supporting capacity of land, air and water;

(c) retain the coastal environment and improve the understanding of its spatial extent;

(d) define the coastal environment in terms of its natural character and landscape definition, attributes that identify locations within the coastal environment that are appropriate for subdivision, use and development and those locations where necessary, subdivision, use and development is inappropriately based or may be inappropriate without the consideration of effects through a resource consent application, notice of requirement for designation or Schedule 1 of the Act process. Such provisions shall take account of natural (biotic) values, aesthetic values, expressiveness, transient values, values to tangata whenua and historical associations;

(e) identify coastal processes, resources or values that are under threat or at significant risk from adverse cumulative effects;

(f) preserve areas of outstanding and high natural character through objectives, policies and rules;

(g) identify areas and opportunities and provide policies, rules and other methods for restoration and rehabilitation of natural character of the coastal environment;

(h) ensure that the effects of climate change and, in particular, sea level rise are taken into account when determining the appropriateness or otherwise of subdivision, use and development within the coastal environment.

Method COAST.5 - Public access

Ensure that existing public access corridors to the coastal marine area are maintained when assessing proposals for subdivision, use and development within the coastal environment.

Local Authorities will be encouraged to:

Method COAST.6 – Education, public awareness and promotion

Proactively educate and raise awareness with the public, industry and landowners about the coastal environment in terms of its inherent values, the effects of land based activities, the effects of discharges, and the effects of recreational activities, and promote methods for avoiding, remedying and mitigating the effects of activities that may adversely affect the coastal environment.

Method COAST.7 –d Advocating

Work with individuals, communities, other councils, central government and other resource users in determining measures that can be implemented to address issues affecting the coastal environment.

Method COAST.8 – Resource consents
Require coastal hazard assessments that are commensurate to the scale and significance of the risk to be included in resource consent applications to assess risks coastal hazards and climate change pose to the proposed activity.

Method COAST.9 – Other methods
Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons
The Act and the NZCPS identify the local authorities' responsibilities in managing natural and physical resources within the coastal environment. The NPS-FM, NPSREG and NPSET also identify the local authorities' responsibilities in managing natural and physical resources within the coastal environment where relevant. These responsibilities include managing the effects of using, developing or protecting land, air and water resources through policy statements, regional and district plans. The methods seek to provide more clarity to councils and plan users by advocating a more prescriptive approach to the management of the coastal environment, including the use of more comprehensive assessment criteria in the district plans. The methods also allow for a review of the water quality standards in the Regional Coastal Plan to ensure they are the most appropriate for managing the values identified in the coastal environment.

The methods highlight the importance of the resource consent process in ensuring the provision of a sufficient level of information on coastal hazards, including the implications of climate change and thus guiding councils in determining the appropriateness or otherwise of developments being proposed within the coastal environment.

The Southland Regional Council is required to monitor the state of the environment and the effectiveness of plan provisions and resource consent conditions. The methods promote a collaborative approach to working with other agencies in prioritising research programmes targeting prevailing coastal issues, such as the effects of climate change and coastal water quality and thus improve the Council's level of understanding of the coastal environment and ability to manage adverse effects through appropriate resource management decisions.

The key to achieving many of the Southland Regional Council's statutory obligations is through building and maintaining active relationships with territorial authorities and other key stakeholders, including the general public. These relationships have been established over many years. The opportunity now exists through the second generation RPS to build on the existing relationships and strengthen the understanding of coastal environment values and effects of activities within the coastal environment. This is best achieved through collaboration with research organisations and other agencies with statutory responsibilities in the coastal marine area as well as organisations and individuals that can influence land use practices adversely affecting the coastal environment. A collaborative and consultative approach to resource management of the coastal environment is seen as an essential step forward and is reflected in the methods.

An equally important facet of coastal resource management, and one allied to a collaborative and consultative approach with stakeholders, is education and raising public awareness of the importance of the coastal environment. The methods in this chapter include proactive non-regulatory mechanisms that aim to foster a more sustainable ethic amongst the general public.

Chapter 8: Natural Hazards

Introduction

This chapter provides a framework for managing natural hazard risk in Southland. It also sets out the responsibilities of the local authorities in the region for the control of land use to avoid or mitigate natural hazards. It also recognises the need to work closely with Emergency Management Southland.

A natural hazard is any atmospheric, earth or water-related event or state which adversely affects (or may adversely affect) human life, property or the environment. Natural hazards can include earthquakes, tsunami, erosion, volcanic and geothermal activity, snow, frost, hail, landslips, subsidence, sedimentation, wind, drought, fire, flooding, marine inundation or rising sea level.

The aim is to reduce vulnerability to hazard events and build resilient communities that can cope with them should they occur. The vulnerability of any site to natural hazards is the sum of its vulnerability to one or several specific hazards. Risk is assessed by considering the probability of those hazards occurring and their potential effects on any proposed activity.

Understanding natural processes and how they have the potential to effect the built environment expands over time. When this knowledge is incorporated into planning processes, it allows a better understanding of the risks involved and how, or if it is necessary, to manage potential effects on the built environment.

Hazard management can take four forms:

1. seeking to ensure that the hazard itself does not arise;
2. undertaking physical works to reduce the severity or frequency of natural hazards and their adverse effects on people and property;
3. reducing the effects of hazards; and
4. taking action to reduce the social and economic costs of hazards when they occur.

The overall strategy employed to avoid, mitigate or remedy the adverse effects of natural hazards will use all four methods to a greater or lesser degree. Because the RPS is mandated by the Act, the focus is on avoidance, reduction or mitigation.

Other chapters in the RPS also address issues that relate to, or influence natural hazards, such as Chapter 7: Coast, Chapter 14: Historic Heritage, Chapter 15: Infrastructure/Transport and Chapter 17: Urban. The Natural Hazards topic, therefore, should be read in association with the other chapters of this policy statement.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

Statement of local authority responsibilities

Section 62 of the Act requires a regional policy statement to state the local authority responsible, in the whole or any part of the region, for specifying the objectives, policies and methods for the control of the use of land to avoid or mitigate natural hazards or any group of hazards.

Regional Council responsibilities:
The Southland Regional Council shall be responsible for specifying the objectives, policies and methods for the control of the use of land to avoid or mitigate:

- natural hazards in the coastal marine area, beds of lakes and rivers; and
- riverine inundation, marine inundation, erosion and sedimentation in areas covered by the Southland Flood Control Management Bylaw 2010.

The Southland Regional Council shall also be responsible for specifying the objectives, policies and methods (other than rules) for the control of the use of land to avoid or mitigate:

- natural hazards on all other land.

Territorial authorities' responsibilities:
Territorial authorities of the region shall be responsible, within their own district, for specifying the objectives, policies and methods for the control of the use of land to avoid or mitigate the following natural hazards:

- stormwater inundation, earthquakes, liquefaction, landslip and subsidence, wind, avalanche and tsunami, in all areas;
- riverine inundation, marine inundation, erosion and sedimentation in all areas excluding the beds of rivers and areas covered by the Southland Flood Control Management Bylaw 2010.

Explanation/Principal Reasons
Such an arrangement enables the principal consent authority for land use and subdivision within respective parts of the region to specify the objectives, policies, rules and other methods for the control of the use of land to avoid or mitigate natural hazards. In doing so, those consent authorities will have to give effect to the objectives, policies and methods in this RPS.

The Southland Regional Council and the territorial authorities have a shared responsibility in specifying objectives, policies and methods other than rules, for the control of the use of land (other than in the coastal marine area, beds of lakes and rivers, and land covered by the Southland Flood Control Management Bylaw 2010) for the avoidance or mitigation of natural hazards.

Table 8: Overview of Natural Hazards provisions

Issues	Objectives	Policies	Methods
Issue NH.1	**Objective NH.1** Communities becoming more resilient	**Policy NH.2** Identify and manage risks from natural hazards	**Methods NH.2 - 16**
		Policy NH.3 Precautionary approach	**Methods NH.1 - 3, 5 - 13, 15, 16**
		Policy NH.4 Management priorities	**Methods NH.1, 5, 7, 10, 12, 14, 16**
		Policy NH.8 Natural features and landforms	**Methods NH.1, 5, 7, 10, 16**
Issue NH.2	**Objective NH.1** Communities becoming more resilient	**Policy NH.1** Awareness and understanding of risks	**Methods NH.3, 4, 6, 8, 12, 13, 16**
		Policy NH.2 Identify and manage risks from natural hazards	**Methods NH.2 - 16**
		Policy NH.4 Management priorities	**Methods NH.1, 5, 7, 10, 12, 14, 16**
		Policy NH.6 Mitigate the effects of natural hazards	**Methods NH.1, 3 - 8, 10, 11, 16**
		Policy NH.8 Natural features and landforms	**Methods NH.1, 5, 7, 10, 16**
Issue NH.3	**Objective NH.1** Communities becoming more resilient	**Policy NH.1** Awareness and understanding of risks	**Methods NH.3, 4, 6, 8, 12, 13, 16**
		Policy NH.2 Identify and manage risks from natural hazards	**Methods NH.2 - 16**
		Policy NH.3 Precautionary approach	**Methods NH.1 - 3, 5 - 13, 15, 16**

Issues	Objectives	Policies	Methods
		Policy NH.4 Management priorities	**Methods NH.1, 5, 7, 10, 12, 14, 16**
		Policy NH.5 Avoid areas of significant risk from natural hazards	**Methods NH.1, 5, 9, 10, 11, 16**
		Policy NH.6 Mitigate the effects of natural hazards	**Methods NH.1, 3 - 8, 10, 11, 16**
		Policy NH.8 Natural features and landforms	**Methods NH.1, 5, 7, 10, 16**
Issue NH.4	**Objective NH.1** Communities becoming more resilient	**Policy NH.1** Awareness and understanding of risks	**Methods NH.3, 4, 6, 8, 12, 13, 16**
		Policy NH.2 Identify and manage risks from natural hazards	**Methods NH. 2 - 16**
		Policy NH.3 Precautionary approach	**Methods NH.1 - 3, 5 - 13, 15, 16**
		Policy NH.4 Management priorities	**Methods NH.1, 5, 7, 10, 12, 14, 16**
		Policy NH.5 Avoid areas of significant risk from natural hazards	**Methods NH.1, 5, 9, 10, 11, 16**
		Policy NH.7 Works may affect other land	**Methods NH.1, 5, 10, 14, 16**

8.1 ISSUES

Issue NH.1
Climate change will affect the intensity, frequency and risks of some natural hazard events, particularly:

(a) sea level rise, exacerbating the effects of coastal erosion and inundation and river flooding in low lying areas, especially during storm surge events;
(b) increased frequency and intensity of storm events, adding to the risk from floods, landslides, severe wind, storm surge, coastal erosion and inundation;
(c) increased frequency of drought, placing pressure on water resources and increasing the wild fire risk.

Issue NH.2
There is a lack of public awareness of, and contingency planning for, natural hazards.

Issue NH.3
The impacts of natural hazards on individuals, communities and businesses and the effects of natural hazards on infrastructure are ongoing.

Issue NH.4
There is ongoing development pressure in areas prone to natural hazards.

8.2 OBJECTIVE

Objective NH.1 – Communities becoming more resilient
The risks to people, communities, their businesses, property and infrastructure from the effects of natural hazards are understood and avoided, remedied or mitigated, resulting in communities becoming more resilient.

Explanation/Principal Reasons
When natural events occur they can cause adverse effects on the social, economic and cultural wellbeing of people and communities. Infrastructure and property may be damaged, economic and cultural activity can be disrupted and human health can be put at risk. This objective seeks that people, communities and businesses understand the potential natural hazards and associated risk. Managing these risks involves either avoiding these risks (where practicable) or using various mitigation measures to reduce their likelihood or their impact. Unless otherwise stated, this objective and the subsequent policies and methods that give effect to it apply to existing development, redevelopment, change of land use and future development. Where development exists already, mitigation measures can sometimes be put in place to lessen, but generally not totally avoid, the impacts from natural hazards.

8.3 POLICIES

Policy NH.1 – Awareness and understanding of risks
Raise public awareness and promote an understanding of the risks of natural hazards, and encourage people, businesses and communities to reduce their long term risk.

Explanation/Principal Reasons
Local authorities need to adopt good practice, inform communities of natural hazard risk, and promote decisions in terms of long term planning horizons. The public needs to be continually made aware and reminded of the risks of natural hazards and the impact of predicted climate change on those hazards. It is very important, especially when natural hazards have not occurred for a while or communities have changed, that the potential risks of future hazard events are not ignored.

Policy NH.2 – Identify and manage risks from natural hazards
Identify in district plans, where practicable, areas subject to known natural hazard risk, and actively engage with individuals and the community in managing those and other natural hazard risk areas, using the most up to date information available.

Explanation/Principal Reasons
It is important that local authorities identify areas at risk from natural hazards, and actively engage with individuals and the community in managing those identified risks using good practice and a long term focus. Hazard maps within district plans are the cornerstone of natural hazard management. However, it is impracticable to identify all hazards within district plans. As such, site based hazard assessments are required to take into account site geomorphology, geology, topography and proximity to hazard sources. Geotechnical, coastal hazard and full flood hazard assessments that take into account unmapped tributaries are examples.

Policy NH.3 – Precautionary approach
Take a precautionary approach towards managing the effects of climate change and sea level rise, and any associated changes in the scale and frequency of natural hazards, to ensure potential adverse effects are avoided or mitigated.

Explanation/Principal Reasons
All persons managing natural hazards need to be cautious if there is scientific and technical uncertainty about those risks, to ensure potential adverse effects are reduced (avoided, remedied or mitigated). Taking a precautionary approach will ensure that risk is reduced over the long term. Central government recommends that local authorities use a base value increase of 0.5 metres by 2100 when considering sea-level rise, and an assessment of the potential consequences from a range of possible higher sea-level rises. At the very least, all assessments should consider the consequences of a mean sea-level rise of at least 0.8 metres.[32] The 0.8 metre level of assessment should be the minimum assessment used when considering new dwellings and the placement of new infrastructure due to the high risk and permanency of the development. Note also that sea levels are projected to continue rising for several centuries.

Policy NH.4 – Management priorities
In managing natural hazards, the following implementation priorities are to be adopted:
1. avoid exposure to areas at significant risk from natural hazards where practicable by adopting a precautionary approach;
2. mitigate the effects of natural hazards by managing land use in areas known to be susceptible to the effects of natural hazards;
3. undertake physical works needed to reduce the potential for the natural hazard to affect people and infrastructure.

[32] Ministry for the Environment, Coastal Hazards and Climate Change: A Guidance Manual for Local Government in New Zealand, 2nd Edition 2008

Explanation/Principal Reasons

The above priorities are to be adopted in order for the region to work towards the objective of reducing risk over the long term. "Avoid exposure" refers to the need for consent authorities to exclude activities or refuse consent for development in areas at significant risk from natural hazards. "Mitigate" is the imposition of preventative conditions on some land use and infrastructure. Physical works should only be undertaken in situations where existing development and infrastructure is unable to be relocated, i.e. managed retreat. If physical works are to be done, priority should be given to the re-establishment of natural features. New Zealand Standard 9401 outlines a flood management process that should lead to the consideration of all above priorities.

Policy NH.5 – Avoid areas of significant risk from natural hazards

Avoid new subdivision, development and placement of critical infrastructure in areas at significant risk from natural hazards, unless:

(a) there is no reasonable alternative, in which case critical infrastructure must be designed to maintain, as far as practicable, its integrity and function during natural hazard events; or

(b) avoidance is impossible or impractical and adverse effects are mitigated to an acceptable level; or

(c) subdivision is solely for the purpose of boundary adjustments.

Explanation/Principal Reasons

It is important to avoid or exclude subdivision, development and placement of critical infrastructure in areas at significant risk from natural hazards unless there is no alternative, for example, wharves and hydro electricity generation facilities, or when the adverse effects can be completely mitigated. Some forms of development, residential for example, will be more at risk, and more inappropriate, than others, such as, agriculture or boundary adjustment subdivision that merely reconfigures lot boundaries without changing the land use.

Areas potentially at significant risk include but are not limited to:

- areas that have flooded to a depth of more than 100 millimetres previously (marine and riverine inundation but excluding urban stormwater inundation in reticulated areas) and for which the likelihood of inundation has not been reduced by flood alleviation works designed to protect the area from floods with a 2% or less annual exceedance probability (AEP);
- spillways, secondary flowpaths and ponding areas;
- areas immediately downstream of large dams (dams over 3 m in height and more than 20,000 m^3 in volume);
- unprotected areas less than 800 mm higher than land that has been previously been inundated by the sea;
- areas in close proximity to the coastline that, on the basis of past trends and/or the erosive effect of projected sea level rise, could erode in the next 100 years;
- areas prone to slipping, slumping, landslides, landslide runout, avalanche or rockfalls;
- areas subject to multiple hazards, none of which in themselves would constitute a significant risk;
- geomorphic floodplains of small watercourses whose flood history is unknown;
- alluvial fans and river deltas especially in steep, fast flowing, dynamic watercourses;
- areas in close proximity to identified active faults;
- land adjacent to lakes and less than one metre higher than the previous highest lake levels.

In areas where the risk from natural hazards is less than significant, Policy NH.6 below applies and techniques such as minimum floor levels or hazard separation distances may be used.

Policy NH.6 – Mitigate the effects of natural hazards
Mitigate the adverse effects of natural hazards on new subdivision and development in areas other than those at significant risk.

Explanation/Principal Reasons
Avoidance should always be the first option, but in many areas it is impossible or impractical to avoid natural hazard risks altogether, and some forms of development are less susceptible to that risk than others. In such areas flood risks can be mitigated to tolerable or acceptable levels by the following measures:

- building platforms that utilise the highest ground;
- minimum floor levels for dwellings, industrial and commercial buildings;
- site or land filling/raising;
- lower density development;
- elevation of flood sensitive equipment;
- restrictions on the activities that take place on the land;
- flood proofing;
- removable structures.

The degree to which the above measures are applied will depend on the type of development proposed and its susceptibility to natural hazard risks (for example, boundary adjustment subdivision that merely reconfigures lot boundaries without changing the land use will not generally affect the susceptibility of the development to natural hazard risks), the standard of flood protection provided by physical or structural flood alleviation activities and ultimately the extent to which an area is subject to actual or potential inundation. For other hazards such as land instability, liquefaction and coastal erosion, similar measures may be appropriate, especially the identification of building platforms and land use restrictions.

Policy NH.7 – Works may affect other land
Avoid, where practical, or mitigate the potential for activities to have adverse off-site natural hazard effects on other land.

Explanation/Principal Reasons
It is sometimes necessary to manage the type, location and design of activities and development that can exacerbate risks to life, property and the environment from the effects of natural hazards. It is important to avoid or mitigate these effects where it is likely to affect or increase the effects on other properties. Examples of activities of concern are earthworks across known stormwater and riverine flow paths, resulting in new ponding areas and diversion of water into new areas, land development that increases runoff, and gravel extraction that subsequently results in scour effects during floods.

Policy NH.8 – Natural features and landforms
Protect, recreate or enhance natural features and landforms that provide protection from natural hazards.

Explanation/Principal Reasons
Natural features and landforms, like sand dunes, beaches, wetlands and areas of native vegetation, often play an important role in mitigating natural hazards, and also often have additional values that include biodiversity, cultural, amenity and landscape values associated with them. The benefits of reinstatement, rehabilitation or re-creation of natural features to mitigate natural hazards should also be considered when hazard mitigation works are proposed.

8.4 METHODS

The Southland Regional Council will:

Method NH.1 - Regional plans and bylaws
Establish and maintain provisions in regional plans and bylaws, consistent with other relevant legislation, that:
(a) address the effects of natural hazards in riverbeds and the coastal marine area;
(b) manage development or land use activities within these areas that may be exposed to risk from natural hazards;
(c) manage land development or land use activities that may increase off-site flood risk;
(d) enable existing critical infrastructure to be suitably resilient and/or protected from reasonably anticipated natural hazard risk;
(e) require new critical infrastructure to be established in areas not subject to high natural hazard risk to the extent possible;
(f) recognise and make provision for infrastructure activities that have a functional, operational and technical need to be developed in an area at risk from natural hazards;
(g) maintain, restore or protect, as appropriate, natural features that mitigate the effects of natural hazards.

Method NH.2 - Research and investigation
Identify, investigate and/or monitor land that is subject to actual or potential:
(a) coastal inundation;
(b) freshwater inundation;
(c) riverbed, riverbank and coastal erosion and accretion;
(d) active fault lines, areas of liquefaction and tsunami;
(e) land instability.

Method NH.3 - Information, education and technical assistance
Maintain and provide information held on historic and projected natural hazard risk and the impact of predicted climate change on that risk, and provide technical assistance and information to land owners, territorial authorities, and the community to:
(a) increase awareness of the risk of natural hazards, and in particular land subject to known significant natural hazard risk;
(b) encourage appropriate land use activities according to the nature and degree of natural hazard risk;
(c) assist in identifying and mapping land subject to natural hazard risks;
(d) provide guidance on the design, construction and placement of physical mitigation measures;
(e) prepare and maintain natural hazard response plans and capabilities consistent with, and complementary to other relevant legislation and organisations;
(f) increase awareness of the role of hazard protection works within the region.

Method NH.4 - Monitoring
(a) Maintain a flood monitoring and warning system.
(b) Investigate and monitor coastal hazards.

Territorial authorities will:

Method NH.5 - District plans
Establish and maintain provisions in district plans that:
(a) identify and map land subject to known inundation;

(b) manage or avoid the subdivision, development or use of land in areas subject to natural hazard risk;
(c) require natural hazard risk assessments that are commensurate to the scale and significance of the risk to be completed as part of the consent application process for subdivision and development;
(d) manage the potential effects of subdivision, land development or land use activities that may increase off-site flood risk;
(e) avoid, to the extent possible, new critical infrastructure being established in areas subject to significant natural hazard risk;
(f) recognise and make provision for infrastructure activities that have a functional, operational and technical need to be developed in an area at risk from natural hazards;
(g) maintain, restore or protect as appropriate natural features that mitigate the effects of natural hazards;
(h) identify no build, open space and reserve or low density development areas as necessary to mitigate the effects of flooding and erosion on land use, development and infrastructure;
(i) exclude some activities from areas known to be subject to significant risk from natural hazards.

Local authorities will:

Method NH.6 - Information
(a) Provide information through Land Information Memoranda on the extent and nature of known natural hazards.
(b) Establish and maintain inundation hazards information in district plans and natural hazard information on Council websites, in collaboration with other local authorities and agencies.
(c) Provide information regarding the earthquake prone building policies developed by the territorial authorities in accordance with the Building Act 2004.

Local authorities will be encouraged to:

Method NH.7 - District plans and resource consents
Collaborate on district plans and resource consent applications in relation to the subdivision, use or development of land subject to natural hazard risk, to encourage a consistent and integrated region-wide approach to natural hazard risk management.

Method NH.8 - Promote
(a) Encourage the adoption of land use, development and management methods that reduce exposure to natural hazard risk, including the effects of predicted climate change on that risk.
(b) Encourage the development of community response plans.
(c) Promote the adoption of guidelines and strategies to mitigate potential effects on existing development on land subject to natural hazard risk.

Method NH.9 - Risk assessments
Undertake natural hazard risk assessments prior to the development of new critical infrastructure.

Method NH.10 - Resource consents
When considering applications for resource consent for activities or development that may be subject to known or potential moderate or high natural hazard risk, consider imposing conditions that avoid or mitigate adverse effects, such as:
(a) set back distances;
(b) minimum floor levels for buildings;
(c) building exclusion areas;

(d) esplanade reserves and open space/flood attenuation areas at subdivision;
(e) protecting, re-creating or enhancing natural features and landforms that provide protection from natural hazards;
(f) ensuring no increase in natural hazard risk to other property from the proposed activity.

Method NH.11 – Critical infrastructure
Enable existing critical infrastructure to be suitably resilient and/or protected from reasonably anticipated natural hazard risk to the extent possible.

Method NH.12 - Research, information and collaboration
Collaborate with central government agencies, other local authorities, industry, research agencies, and landowners to:
(a) assess and quantify the nature and extent of natural hazard risks in Southland;
(b) identify and map known natural hazard risks including areas of:
    (i) flood risk;
    (ii) coastal erosion and inundation;
    (iii) known fault lines, liquefaction risk and strong ground-shaking zones;
    (iv) tsunami and storm-surge inundation risk;
(c) provide access to information and records held on historic and projected natural hazard risk according to established protocols;
(d) provide advice and information to the community about how to prepare for, and increase individual and community resilience to natural hazards;
(e) identify, investigate, and/or monitor land that is subject to known:
    (i) marine inundation; and
    (ii) active fault lines, and areas prone to liquefaction and tsunami.

Method NH.13 - Collaboration
Work with other local authorities, emergency services, emergency management organisations, central government and critical infrastructure providers to prepare, maintain and implement emergency response plans in response to identified natural hazard risks.

Method NH.14 - Sharing and transfer of responsibilities
Provide for tangata whenua involvement in resource management decisions on natural hazard risk management where tangata whenua values are affected.

Method NH.15 - Strategies
Develop, implement and maintain natural hazard management and response strategies consistent with their functions and responsibilities, other relevant legislation and the roles of other agencies, setting out how local authorities will work with each other and with other agencies in the event of an emergency from a natural hazard event.

Method NH.16 – Other methods
Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons
One of the essential functions of local authorities under the Act is to have objectives, policies and methods which avoid or mitigate natural hazards in relation to the use, development and subdivision of land. The Civil Defence Emergency Management Act 2002 also requires local authorities to identify and analyse the long term risks to people and property from natural hazards, and to take steps to eliminate these risks where practicable and to reduce the likelihood and magnitude of their impact.

With this in mind, the methods have been developed to encourage local authorities to adopt good practice to avoid subdivision and development in natural hazard areas and to better inform communities of natural hazard risk so that they can undertake measures to respond to natural hazard events. The methods require the Southland Regional Council and local authorities to identify areas at risk from natural hazards in their plans under the Act and to actively engage with individuals and the community in managing those identified risks using good practice and a long term focus. Hazard maps within district plans are a critical component in reducing natural hazard risks to the community, and hence they are required to be updated including the latest flood hazard information.

The methods enable consent authorities to refuse consent for development in areas at significant risk from natural hazards. The methods also ensure that subdivision, development and the placement of critical infrastructure in areas at risk from natural hazards is avoided unless there is no alternative or the adverse effects can be completely mitigated. Mitigation includes establishing no build areas, set back distances, minimum floor levels and the provision of open space flood attenuation areas. This recognises that it is not always possible to avoid building within hazard prone areas.

The methods require that natural hazard risk assessments are carried out when subdivision or development of structures and critical infrastructure occurs. This should be carried out by those parties benefiting from these activities. In some cases this will shift the cost to the landowner or developer rather than the territorial authority or Southland Regional Council.

In recognition that councils will not at any given time have the most up to date information in their plans under the Act, the methods encourage the Southland Regional Council to submit or have input on plan changes or resource consent applications in order to respond to up to date information. It also ensures regional consistency and an integrated approach when viewed alongside emergency management activities.

Natural features and landforms, like sand dunes, beaches, wetlands and areas of native vegetation, often play an important role mitigating natural hazards, and also often have additional values that include biodiversity, amenity and landscape values associated with them. The methods also require provisions in district plans to address the reinstatement, rehabilitation or re-creation of natural features to mitigate natural hazards.

Chapter 9: Air Quality

Introduction

The prevailing south-westerly wind, relatively low population and the agricultural, rather than industrial, nature of the economy help to ensure that Southland generally enjoys good air quality. However, localised air quality problems do occur in Southland and these can have negative effects on health, wellbeing and amenity.

The Southland Regional Council's air quality monitoring has shown that during the winter months, particularly on cold calm nights, the cumulative effect of discharges to air from burning coal and wood for domestic heating result in significant air quality problems. These discharges can cause Southland's air quality to breach the National Environmental Standards for Air Quality 2011 (NESAQ), indicating that air quality is posing an unacceptable level of risk to human health. Reduced air quality because of burning solid fuel can occur in many parts of Southland; provided there is a cluster of discharges and certain atmospheric conditions prevail. However, the Southland Regional Council has identified areas where air quality is likely or known to exceed national air quality standards. These areas are called airsheds and two have been identified in Southland, covering Invercargill and Gore.

Other emissions to air (i.e. odour, smoke, dust, chemicals) from industry, traffic, rural land uses and private property can also affect people's health, social and cultural wellbeing, create annoyance, and cause poor visibility.

This chapter of the RPS aims to address these regionally significant issues by protecting human health and the environment from the adverse effects of air pollution, in particular smoke from domestic heating.

Other chapters in the RPS address issues that relate to, or influence air quality, such as Chapter 15: Infrastructure/Transport and Chapter 17: Urban. Therefore, Chapter 9: Air Quality should be read in association with the other chapters of this policy statement.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

Table 9: Overview of Air Quality provisions

Issues	Objectives	Policies	Methods
Issue AQ.1	**Objective AQ.1** Discharge of contaminants	**Policy AQ.1** Adverse effects of discharges	**Methods AQ.1 - 11**
		Policy AQ.3 Areas with poor air quality	**Methods AQ.1 - 11**
		Policy AQ.4 Maintain or enhance air quality	**Methods AQ.1 - 7, 10, 11**
		Policy AQ.5 Promote best practicable option	**Methods AQ.1, 5 - 8, 11**
	Objective AQ.2 New activities	**Policy AQ.1** Adverse effects of discharges	**Methods AQ.1 - 11**
		Policy AQ.2 Incompatible land uses	**Methods AQ.1, 4, 8, 9, 11**
		Policy AQ.4 Maintain or enhance air quality	**Methods AQ. 1 - 7, 10, 11**
Issue AQ.2	**Objective AQ.1** Discharge of contaminants	**Policy AQ.1** Adverse effects of discharges	**Methods AQ.1 - 11**
	Objective AQ.2 New activities	**Policy AQ.1** Adverse effects of discharges	**Methods AQ.1 - 11**
		Policy AQ.2 Incompatible land uses	**Methods AQ.1, 4, 8, 9, 11**
		Policy AQ.3 Areas with poor air quality	**Methods AQ.1 - 11**
		Policy AQ.4 Maintain or enhance air quality	**Methods AQ. 1 - 7, 10, 11**
		Policy AQ.5 Promote best practicable option	**Methods AQ.1, 5 - 8, 11**

9.1 ISSUES

Issue AQ.1
The discharge of contaminants to air (including odour, particulate matter, dust and chemicals) can have adverse effects on the environment, amenity values and community wellbeing.

Issue AQ.2
In Southland's airsheds, discharges to air from burning solid fuel for domestic heating can result in elevated levels of particulate matter and poor winter air quality, which has an adverse effect on human health and the environment.

9.2 OBJECTIVES

Objective AQ.1 – Discharge of contaminants
Enable the discharge of contaminants into air while managing the adverse effects of those contaminants on human health and wellbeing, and the environment.

Explanation/Principal Reasons
To provide for the health and wellbeing of the community and safeguard the life supporting capacity of our environment it is very important that our air is safe to breathe and conducive to a high level of amenity. It is also important that discharges to air are culturally appropriate.

Activities that involve discharges to air from industry, traffic, rural land uses and private properties are also important to the social and economic wellbeing of the community. While provision needs to be made for the ability to discharge, it is important not to adversely affect people, the environment and other values.

Objective AQ.2 – New activities
New activities established in Southland do not hinder the region's ability to achieve compliance with national environmental standards and guidelines for ambient air quality.

Explanation/Principal Reasons
The objective seeks to ensure that new activities do not compromise the region's ability to comply with air quality national environmental standards or guidelines.

9.3 POLICIES

Policy AQ.1 – Adverse effects of discharges
Avoid, remedy or mitigate the adverse effects of discharges of contaminants to air on human health, cultural and amenity values and the environment.

Explanation/Principal Reasons
Discharges to air from activities such as burning coal or wet wood for domestic heating, infrastructure, transport, outdoor burning, agriculture, industrial and trade activities, and mineral extraction activities can have adverse effects on air quality and amenities. These effects can include increased emissions of toxins and particulate matter, an increase in health problems (especially respiratory and cardiovascular illness), reduced visibility, nuisance, detrimental effects on biodiversity and tangata whenua environmental values and a general decline in cultural and environmental health.

Policy AQ.2 – Incompatible land uses
Avoid the establishment of new activities that are potentially incompatible with existing activities lawfully discharging to air.

Explanation/Principal Reasons
Within this policy there is general recognition that discharges to air will need to be managed in a manner that takes into account the potential for reverse sensitivity issues that, in some parts of the region, could lead to constraints on incompatible activities. For example, residential areas encroaching on activities that produce odour, such as certain industries.

Existing activities that lawfully discharge contaminants to air should not be adversely affected by the establishment of new/sensitive activities, such as residential properties.

It may also be culturally and environmentally inappropriate to have certain land uses in close proximity, for example a food outlet and a crematorium. Where the potential for cultural/spiritual concern arises, tangata whenua consultation and involvement in any decision-making processes is required.

Policy AQ.3 – Areas with poor air quality
Improve areas with poor air quality, focusing in particular on reducing the adverse effects of activities that discharge particulate matter.

Explanation/Principal Reasons
Particulate matter (PM_{10}) is particulates that are less than 10 microns in diameter. These particulates are small enough to penetrate deeply into the human lung and can cause coughs, asthma symptoms, bronchitis, respiratory illness and, in worst case, mortality. Some typical causes of human-made PM_{10} include:

- burning fuels such as wood or coal for domestic heating;
- vehicle exhaust emissions;
- industrial discharges; and
- outdoor burning.

In urban areas of Southland, the smoke discharged from burning solid fuel (especially coal or wet wood) for domestic heating is the main source of particulate matter in the air.

Where discharges from burning solid fuel for domestic heating:

- occur in proximity; and
- atmospheric conditions do not disperse PM_{10}, (for example in urban areas on calm frosty nights);

concentrations of the contaminant can rise to levels that expose public health to an unacceptable level of risk. Air quality management areas called “airsheds” have been delineated to identify these areas.

To address the most immediate public health concerns, it is appropriate to focus remedial action on the airsheds, and to seek an improvement in the quality of discharges to air from domestic heating.

Policy AQ.4 – Maintain or enhance air quality
Maintain or enhance air quality in areas where compliance with national environmental standards or guidelines for ambient air quality has been achieved or surpassed.

Explanation/Principal Reasons
Air quality in many areas of Southland meets or surpasses national environmental standards or guidelines for ambient air quality. However, discharges of contaminants to air can still have adverse effects on

human health and the environment. The current national environmental standards only aim to prevent exposing public health to an unacceptable level of risk, so enhancing already acceptable air quality leads to a lower risk to human health, improves the quality of the environment, enhances amenity values and benefits community wellbeing.

Policy AQ.5 – Promote best practicable option
Promote and facilitate the adoption of the best practicable option to improve air quality.

Explanation/Principal Reasons
Improving building insulation, installing clean heating devices (for example, heat pumps or wood burners that comply with the national environmental standards) and using cleaner renewable energy are practices that reduce levels of particulate matter in the air from domestic heating. However, some of these measures can be expensive and/or require a significant change in behaviour. Therefore, to ensure the widespread uptake of these and other best practicable options by the community, encouragement, support and incentives are appropriate.

Suppressing dust on roads is another example of a practice that prevents the discharge of dust to air. Proper construction and maintenance of roads that include dust reduction measures helps to improve air quality for people living or working near roads. It is important that the use of dust suppressants does not adversely affect water quality.

Encouraging the uptake of mitigation technologies and/or measures to reduce or offset the adverse effects of discharges to air from industrial and agricultural activities is also appropriate.

9.4 METHODS

The Southland Regional Council will:

Method AQ.1 – Regional plans
Establish and maintain provisions in regional plans to:
(a) control the discharge of contaminants to air;
(b) reduce PM_{10} emissions from domestic solid fuel heating as consistent with any national environmental standards that apply;
(c) encourage new discharge activities in existing airsheds where compliance with the national environmental standards or guidelines has not yet been achieved, or that will affect sensitive activities or environments, to adopt the best practicable option, including off-setting opportunities, to maintain or enhance air quality;
(d) achieve compliance with relevant national standards.

Method AQ.2 – Research and monitoring
Research, monitor and report on air quality indicators as necessary to:
(a) identify changes to air quality in airsheds;
(b) achieve compliance with relevant national air quality standards;
(c) establish and monitor new airsheds as necessary;
(d) ensure consented discharge activities comply with consent conditions;
(e) maintain effective conditions or review as necessary to improve ambient air quality.

Method AQ.3 – Information, education and public awareness
Provide advice and information on low or no-emission domestic heating alternatives to the community to:
(a) promote and improve awareness of air quality issues from domestic solid fuel heating;
(b) encourage the adoption of domestic heating that is compliant with national standards, to avoid or mitigate adverse effects of solid fuel heating on air quality.

Territorial authorities will:

Method AQ.4 – District plans
Establish and maintain provisions in district plans:
(a) to encourage the appropriate location of new land use activities that discharge contaminants to air that may adversely affect amenity, community and health or the quality of the environment;
(b) to control the location of sensitive activities (e.g. residential) that are potentially incompatible with existing activities that lawfully discharge contaminants to air, to avoid reverse sensitivity effects.

Local authorities will be encouraged to:

Method AQ.5 – Financial incentives
Consider providing support and financial incentives as necessary in airsheds to:
(a) improve domestic home heating efficiency;
(b) adopt forms of domestic heating compliant with national standards;
to improve ambient air quality and meet any relevant national standards.

Method AQ.6 – Support and promote
Support, encourage and promote the development of industry guidelines and programmes to avoid or mitigate adverse effects on air quality, including from:
(a) the spray application of agrichemicals, paints or other contaminants;
(b) odour discharged to air from industrial, agricultural or manufacturing processes;
(c) the discharge of particulates (including dust) or hazardous substances discharges from industrial, commercial, construction or extractive activities;
(d) combustion or other processes that discharge to air.

Method AQ.7 – Strategies
Establish, implement and promote strategies that:
(a) encourage commercial and industrial processes to adopt low or no-emission fuel or processes and where practicable renewable energy fuel combined with modern burning technologies;
(b) promote the progressive adoption of domestic heating alternatives compliant with national standards;
(c) encourage the installation of insulation into established housing stock, and the adoption of efficient low or no emission domestic heating alternatives;
(d) increase the efficiency, effectiveness and use of public transport services in urban areas;
(e) encourage walking and cycling;
(f) encourage the adoption of efficient vehicles and renewable energy transport fuels.

Method AQ.8 – Consultation
Consult with the community, industry, stakeholders and tangata whenua, and take into account Te Tangi a Tauira and other relevant iwi planning documents to inform resource management decisions that may affect air quality, amenity values, the quality and life supporting capacity of soils and water, cultural values and community wellbeing. Consultation may include, but is not limited to, tools such as Health Impact Assessments.

Method AQ.9 – Collaboration and protocols
Work with other local authorities and establish information and communication protocols to promote effective integrated management of air quality.

Method AQ.10 – Bylaws and legislation
Establish and maintain bylaws as necessary, and exercise authority under other legislation, to progressively improve the standard of domestic heating discharges and enhance overall air quality in the airsheds.

Method AQ.11 – Other methods
Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS.

Explanation/Principal Reasons
Poor air quality can adversely affect community health, amenity, and environmental quality. Poor air quality affects all parts of the community and is a truly cross-boundary issue. Aligning the approach that local authorities take through their regional and district plan provisions is a key method to achieving integrated management across the region. This alignment between plans is underpinned by the requirement for all plans to implement the minimum air quality standards of the NESAQ, although local authority rules may exceed the national environmental standards. The success of regulatory approaches through plans can be enhanced by engaging the community and stakeholders in plan preparation, and establishing communication and information sharing agreements between agencies. Regulatory approaches are effectively supported through non-regulatory methods such as providing information, technical guidance and education on air quality and supporting and encouraging positive changes in key parts of the community.

Air quality management is often considered a regional council role, however, territorial authorities can positively influence air quality by appropriately locating new land use activities that discharge contaminants to air and avoiding the establishment of activities that could result in reverse sensitivity effects.

By progressively upgrading older solid fuel heating appliances and requiring all new domestic heating to be compliant with national standards, air quality will steadily improve, particularly in regard to PM_{10} emissions. Other mechanisms such as education and financial incentives (such as penalties for offensive discharges, subsidies to replace non-compliant heating with compliant alternatives, or assistance to upgrade insulation) can be effective if used in parallel. A collaborative and coordinated approach by local authorities to upgrading domestic heating is necessary to effectively improve air quality in airsheds.

There is potential in the region to utilise renewable energy sources (such as bioenergy) combined with efficient technologies to reduce PM_{10} emissions across all sectors. The region has good quality wood energy resources, including wood processing residues, available as an energy source. In addition, there are opportunities to reduce emissions from the transportation sector through provision for more efficient vehicles such as electric vehicles and increased use of renewable transport fuels.

Separating discharge activities from sensitive receivers is an effective way of helping to manage the effects of new discharges on neighbouring activities. It can also help avoid sensitive activities encroaching on established activities. Locating dischargers away from sensitive receivers, or grouping discharges with similar or less sensitive activities, such as industrial or commercial operations, is one way to manage the effects of discharges. Awareness of the importance of air quality to the community and to tangata whenua cultural and spiritual values is also important. District plans, therefore, are an important part of managing

air quality, and help avoid or minimise air quality effects while protecting existing and legitimate resource users from potential reverse sensitivity.

Adopting best practicable options, and achieving the air quality values in the NESAQ as a minimum, presents opportunities to reduce existing effects on air quality. Monitoring and collecting information on air quality is also an important part of managing air quality. It not only allows a baseline of information to be collected from which change can be identified, but it informs future actions and decisions about how to maintain or improve air quality, identify problem emitters and locations, and inform approaches to managing the issues.

Providing technical support and information, education and guidelines to resource users and the public helps to raise awareness of how activities can influence and be affected by air quality. It also helps to support the implementation of the regulatory framework that guides resource users and sets environmental bottom lines. Improving the community's understanding of air quality issues is an important part of changing the public's perception and acceptance of the effects of discharges. Understanding air quality issues is an important part of fostering public support for changes to compliant domestic heating methods and fuels, and ultimately improving air quality.

Chapter 10: Natural Features and Landscapes

Introduction

"Landscape involves natural and physical resources, including land, water, air, plants, animals and structures, and various factors relating to the viewers and their perception of the resources.

Landscape provides a linkage between individual natural and physical resources and the environment as a whole, through considering a group of such resources together, and emphasising that our attitudes to these resources are affected by social, economic, aesthetic and cultural conditions." [33]

The Southland region encompasses a range of landscapes characterised by mountain ranges, foot hills, the Southland Plains, and the South Coast, which stretches from the Catlins to Fiordland. Historically these landscapes have been modified by the forces of glaciation and the action of large river systems. Climate change, and in recent times, human activities have further modified landforms to generate the landscapes seen today.

Landscapes are central to social, economic and cultural wellbeing. Southlanders depend on the natural features of landscapes both to maintain a connection to each other and the past, and for their economic wellbeing. A significant tourism industry has been established around Southland's natural features and landscapes which increases the connection of Southlanders and visitors to them. The development of Southland as a base for farming, tourism, heavy industry, electricity generation and mineral exploration is reflected in the landscape, and valued for the wealth it brings current and future people of Southland. Furthermore, the spiritual values and stories of tangata whenua and the sense of belonging, and heritage values that flow from them are embedded in landscapes. Landscape values are therefore a part of kaitiakitanga obligations in Southland. It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region, and Chapter 14: Historic Heritage, which provides for the management of historic heritage in Southland, including built heritage, sites of significance to tangata whenua, archaeological sites and the surroundings associated with these features.

In the past ten years increased development in certain areas has given rise to public concern about changes to natural features and landscapes. Consideration of options to better manage the increased development, and the establishment of "acceptable limits" are important to ensure landscape values and people's "sense of belonging" are not compromised. There are three key 'developments' occurring that have potential to adversely, and on occasion irreversibly, affect natural feature and landscape values. These are:

1. areas such as Riverton/Aparima, Colac Bay/Ōraka, Curio Bay and Porpoise Bay have all experienced significant levels of coastal residential development. Rural areas surrounding the townships of Te Anau and Winton, as well as other areas, have also been subject to an increase in the development of rural/residential lifestyle properties. These activities have been viewed as emerging landscape issues in Southland through inappropriate subdivision of land, and have potential to result in adverse effects;

2. extractive activities, such as mining for mineral use, and gravel and rock extraction involve temporary or permanent changes to landscapes as material is extracted from the ground or

[33] Peart, R (2002). Environmental Defense Society: *Community Guide to Coastal Development*.

processed. While these activities have always been undertaken in Southland, the scale and intensity of new and proposed extractive industries has increased markedly in recent times. Further, the location of this extraction has led to significant landscape concerns being expressed and a request for greater consideration of activities which can detrimentally affect landscape values;

3. electricity generation is associated with features such as wind farms, dams, and transmission lines that can for their lifespan permanently change landscapes. Future changes to the sources of power are very likely to result in increased development of Southland's energy resources, which may result in changes to Southland's existing landscapes.

The resource management context for landscapes is outlined in Part 2 of the Act. Section 6 of the Act requires that, as a matter of national importance, all persons exercising functions and powers under it shall recognise and provide for:

- the protection of outstanding natural features and landscapes from inappropriate subdivision, use and development;
- 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.

Part 2 of the Act also contains other matters which are relevant to the management of natural feature and landscape values including matters concerning:

- particular regard to be given to the maintenance and enhancement of amenity values;
- the relationship of Māori and their culture and traditions with their ancestral lands, waters, sites, wāhi tapu, and other taonga; and
- the protection of historic heritage from inappropriate subdivision, use, and development.

National policies statements also direct the management of natural features and landscapes for example, the National Policy Statement on Electricity Transmission 2008 and the New Zealand Coastal Policy Statement 2010.

The protection of outstanding natural features and landscapes, and management of locally distinctive and valued natural features and landscapes is a responsibility shared between all local authorities of the region.

The framework for the management of natural features and landscapes within the Southland region has three components as follows:

1. identification of outstanding natural features and landscapes and protecting these areas from inappropriate subdivision, use and development;
2. identification and management of locally distinctive and valued natural features; and
3. within the coastal environment, identification of outstanding natural features and landscapes, and other natural features and landscapes (refer to Chapter 7: Coast for provisions relating to the protection and management of these coastal landscapes).

Furthermore, natural features and landscapes identified as being of cultural significance to tangata whenua are to be managed as either outstanding natural features and landscapes or locally distinctive features and landscapes, depending on their values. For example, particular landscapes and natural features may hold values that make them culturally significant to tangata whenua, such as traditional mahinga kai sites (food and resource gathering sites), ara tawhito (traditional travel routes) and wāhi ingoa (traditional Māori place names), but they may not meet the criteria for outstanding natural

features and landscapes, in which case they will be managed as a locally distinctive and valued natural feature or landscape.

Tools such as landscape studies and assessments will support the identification process.

Other chapters in the RPS address issues that relate to, or influence natural features and landscapes, such as Chapter 7: Coast, Chapter 15: Infrastructure/Transport and Chapter 16: Energy. Chapter 10: Natural Features and Landscapes therefore, should be read in association with the other chapters of this RPS.

Table 10: Overview of Natural Features and Landscape provisions

Issues	Objectives	Policies	Methods
Issue LNF.1	**Objective LNF.1** Identification and protection of outstanding natural features and landscapes	**Policy LNF.1** Identify and assess outstanding natural features and landscapes	**Methods LNF.1 - 3, 5 - 8, 10 - 12**
		Policy LNF.3 Identify, assess and manage natural features and landscapes of cultural significance to tangata whenua	**Methods LNF.1 - 3, 5 - 8, 10 - 12**
		Policy LNF.4 Protection of outstanding natural features and landscapes	**Methods LNF.1 - 8, 10- 12**
Issue LNF.2	**Objective LNF.2** Identification and management of locally distinctive and valued natural features and landscapes	**Policy LNF.2** Identify, assess and manage locally distinctive and valued natural features and landscapes	**Methods LNF.1 - 3, 7, 9, 12**
		Policy LNF.3 Identify, assess and manage natural features and landscapes of cultural significance to tangata whenua	**Methods LNF. 1 - 3, 7, 9, 12**

10.1 ISSUES

Issue LNF.1
Southland has a number of outstanding natural features and landscapes which can be adversely affected by inappropriate subdivision, use and development.

Issue LNF.2
Southland has a number of locally distinctive and valued natural features and landscapes which can be adversely affected by inappropriate subdivision, use and development.

10.2 OBJECTIVE

Objective LNF.1 – Identification and protection of outstanding natural features and landscapes
Southland's outstanding natural features and landscapes are identified and protected from inappropriate subdivision, use and development.

Explanation/Principal Reasons
In developing this objective, the Southland Regional Council recognises that to achieve the intended environmental results it is necessary to identify outstanding natural features and landscapes and then use this information to assist in developing a management framework that ensures the provisions of the Act are met.

It is also acknowledged that within the Southland region there are a number of natural features and landscapes of cultural significance to tangata whenua that may also be considered outstanding natural features and landscapes. The management framework developed for outstanding natural features and landscapes will also ensure local authorities give effect to section 6(e) of the Act which provides for the relationship of Māori and their culture and traditions with their ancestral land, water, sites, wāhi tapu and other taonga.

In relation to activities requiring a resource consent, the framework can incorporate the nature of different activities and their likely effect both individually and cumulatively on outstanding natural features and landscapes.

Objective LNF.2 – Identification and management of locally distinctive and valued natural features and landscapes
Southland's locally distinctive and valued natural features and landscapes are identified, and managed so that subdivision, use and development is consistent with their values.

Explanation/Principal Reasons
Locally distinctive and valued natural features and landscapes are those landscapes and natural features that are distinctive or valued within the Southland region however, do not necessarily meet the criteria for protection as outstanding natural features and landscapes under section 6(b) of the Act. Locally distinctive and valued natural features and landscapes recognise amenity, social, intrinsic, ecological, cultural (including cultural values of significance to tangata whenua) and heritage values associated with natural features and landscapes within Southland, and may include natural features and landscapes of cultural significance to tangata whenua. Such features and landscapes are usually able to accommodate subdivision, use and development. However, activities have the ability to erode the inherent characteristics of the natural features and landscapes. Therefore, adverse effects of activities need to be managed to ensure subdivision, use, and development are consistent with the values of locally distinctive and valued natural features and landscapes.

10.3 POLICIES

Policy LNF.1 – Identify and assess outstanding natural features and landscapes

To identify and assess Southland's outstanding natural features and landscapes using, but not limited to, the following regional factors:

(a) natural science factors, which specifically includes the geological, topographical, ecological and dynamic components of the landscape;
(b) aesthetic values, including memorability and naturalness;
(c) expressiveness (legibility), which is how obviously the landscape demonstrates the formative processes which helped to create it;
(d) transient values, which specifically includes the occasional presence of wildlife or its values at certain times of the day or of the year;
(e) whether the values are shared and recognised;
(f) value to tangata whenua;
(g) historical and heritage association;
(h) the presence of water including in seas, lakes, rivers and streams;
(i) vegetation, particularly native vegetation; and
(j) wild or scenic values.

Explanation/Principal Reasons

Policy LNF.1 seeks to achieve a consistent process for the identification and assessment of outstanding natural features and landscapes across the region, including in the coastal environment. Whether a natural feature or landscape is considered 'outstanding' depends on its degree of naturalness and if it is conspicuous, eminent or remarkable. The factors listed in Policy LNF.1 should be used in the assessment of natural features and landscapes to identify the values associated with Southland's outstanding natural features and landscapes. Collaboration with tangata whenua will be particularly important to assist local authorities in identifying tangata whenua values associated with outstanding natural features and landscapes. Assessing the natural features and landscapes of the coastal environment should be done by land typing, soil characterisation and landscape characterisation and having regard to the factors listed in Policy LNF.1. This process, undertaken by local authorities, will enable the consistent identification and preparation of appropriate methods for sustainable management and protection of outstanding natural features and landscapes from inappropriate subdivision, use and development.

Policy LNF.2 – Identify, assess and manage locally distinctive and valued natural features and landscapes

To identify and assess Southland's locally distinctive and valued natural features and landscapes, and manage adverse effects, in particular significant adverse effects, from subdivision, use and development in a manner consistent with the values identified.

Explanation/Principal Reasons

Objective LNF.2 describes locally distinctive and valued natural features and landscapes as those landscapes that do not meet the criteria for protection under section 6(b) of the Act however, are valued locally for their amenity, social, cultural (including cultural values of significance to tangata whenua), ecological, intrinsic or heritage value or a combination thereof. The assessment of locally distinctive natural features and landscapes by local authorities and identification of their values will enable the development of appropriate provisions which manage adverse effects, in particular significant adverse effects, to ensure any subdivision, use and development is consistent with their values. Policy LNF.2 covers the range of potential adverse effects subdivision, use and development

may have on locally distinctive and valued natural features and landscapes, but specific reference is made to significant adverse effects due to the potential for these effects to be inconsistent with the values identified. In considering the adverse effects of any subdivision, use and development, a local authority may have regard to the following criteria:

(a) the scale, duration and frequency of the effects;
(b) the extent to which the identified values may be damaged or modified;
(c) the extent to which adverse effects can be remedied or mitigated; and
(d) the need for changes in land use and land management techniques, and associated man-made structures and elements.

Policy LNF.3 – Identify, assess and manage natural features and landscapes of cultural significance to tangata whenua

To identify, assess and manage natural features and landscapes of cultural significance to tangata whenua as either outstanding natural features and landscapes or locally distinctive and valued natural features and landscapes, depending on the values associated with them.

Explanation/Principal Reasons

There are a number of natural features and landscapes within the Southland region that are significant to the culture, identity and wellbeing of tangata whenua. Some of these natural features and landscapes may also meet the regional criteria for identification and assessment as outstanding natural features and landscapes under section 6(b) of the Act. Those that do not meet the criteria are identified as locally distinctive and valued natural features and landscapes.

These landscapes and natural features can be acknowledged through recognition of the cultural values that make the particular landscape or natural feature significant to tangata whenua, such as traditional mahinga kai sites (food and resource gathering sites), ara tawhito (traditional travel routes) and wāhi ingoa (traditional Māori place names), and through the creation of contemporary sites which recognise Ngāi Tahu culture through artistic endeavours and also through buildings, planting and landscaping. Recognition of landscapes and natural features of cultural significance to tangata whenua could include the development of interpretation panels and pouwhenua (traditional landmarks) to provide tangata whenua with a platform to tell Ngāi Tahu stories.

Policy LNF.4 – Protection of outstanding natural features and landscapes

Local authorities shall protect outstanding natural features and landscapes from inappropriate subdivision, use and development by having regard to the following:

(a) whether the adverse effects of inappropriate activities on outstanding natural features and landscapes are avoided;
(b) the extent to which the outstanding natural feature or landscape would be modified or damaged including duration, frequency, magnitude or scale of any effect;
(c) the irreversibility of adverse effects on outstanding natural features or landscape values;
(d) the resilience of the outstanding natural feature or landscape to change;
(e) opportunities to remedy or mitigate previous adverse effects on the outstanding natural feature or landscape;
(f) whether the activity will lead to cumulative adverse effects on the outstanding natural feature or landscape;
(g) the relationship of the landscape to the surrounding environment.

Explanation/Principal Reasons
The policy provides a framework and criteria to assess activities prior to the assessment and identification of outstanding natural features and landscapes in resource management plans. Secondly, it provides a framework and direction to assist local authorities in the establishment of provisions in regional and district plans to protect outstanding natural features and landscapes that have been identified under Policy LNF.1.

The consideration of the appropriateness of activities shall have regard to the provisions of Chapter 15: Infrastructure/Transport in relation to regionally significant, nationally significant and critical infrastructure and also recognise that some activities need to be located within the rural environment.

10.4 METHODS

The Southland Regional Council will:

Method LNF.1 – Regional plans
Establish and maintain provisions in regional plans to:
(a) protect outstanding natural features and landscapes from inappropriate land use and development; and
(b) manage effects on natural features and landscapes identified as locally distinctive and valued.

Method LNF.2 – Identify regional landscape character values
Develop and disseminate a regional landscape character description that describes and categorises the region's landscapes to assist with identifying outstanding natural features and landscapes, or natural features and landscapes identified as locally distinctive and valued.

Method LNF.3 – District plans
Submit on, or seek changes to, district plans as necessary to ensure provisions are in place to provide protection for outstanding natural features and landscapes, and management of adverse effects, in particular significant adverse effects, on locally distinctive and valued natural features and landscapes.

Method LNF.4 – Resource consents
Consider submitting on resource consent applications received by territorial authorities for land use or subdivision activities where there is potential for significant adverse effects on outstanding natural features and landscapes.

Method LNF.5 – Information sharing and collaboration
Work in collaboration with territorial authorities, tangata whenua and the community to:
(a) assess outstanding natural features and landscape values; and
(b) share information about outstanding natural features and landscapes and subdivision, use and development which may adversely affect outstanding natural features and landscapes.

Territorial authorities will:

Method LNF.6 – District plans
Identify outstanding natural features and landscapes, and establish and maintain provisions in district plans to protect them from inappropriate land use, subdivision or development.

Local authorities will:

Method LNF.7 – Consultation
Engage tangata whenua, the local community and stakeholders in identifying and protecting outstanding natural features and landscape values, or managing natural features and landscapes identified as locally distinctive and valued.

Local authorities will be encouraged to:

Method LNF.8 – Landscape assessments
Work collaboratively with other local authorities to develop and adopt consistent methods for assessing and identifying outstanding natural features and landscapes of the Southland region. The methods will include consideration of the criteria listed in Policy LNF.1.

Method LNF.9 – Identification, investigation and assessment of locally distinctive and valued natural features and landscapes
(a) Develop criteria in collaboration with tangata whenua, the community and stakeholders for the identification of locally distinctive and valued natural features and landscapes; and
(b) Establish and maintain provisions in plans that provide for the management of locally distinctive and valued natural features and landscapes.

Locally distinctive and valued natural features and landscapes may include natural character, amenity, social, cultural, intrinsic, ecological or heritage values.

Method LNF.10 – Areas and values
Require applicants for consent applications or plan changes to provide detailed assessments commensurate with the scale of the effects of the proposal or plan change, on:
(a) areas and values of outstanding natural features and landscapes prior to their identification; or
(b) effects on outstanding natural features and landscapes following their identification;
so that the effects of the proposal or plan change can be adequately assessed.

Method LNF.11 – Investigation and assessment
Work collaboratively to map outstanding natural features and landscapes while having regard to objectives and policies set out in the RPS as well as the findings of relevant landscape studies, including reasoning as to why areas are or are not (if under dispute) considered to be outstanding natural features and landscapes.

Method LNF.12 – Other methods
Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS.

Explanation/Principal Reasons
The Act identifies the Southland Regional Council's responsibilities in managing natural and physical resources. These responsibilities include managing the effects of using, developing or protecting land, air and water resources through policy statements and regional plans. The Southland Regional Council is also required to monitor the state of the environment and the effectiveness of plan provisions and resource consents. The Act clearly sets out the Southland Regional Council's obligations regarding the protection of outstanding natural features and landscapes from inappropriate subdivision, use and development as well as the management of other landscapes which are valued by Southland communities, including tangata whenua.

Section 6 of the Act requires that, as matters of national importance, all persons exercising functions and powers under it shall recognise and provide for the protection of outstanding natural features and

landscapes from inappropriate, subdivision, use and development, and the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, lakes and rivers and their margins from inappropriate subdivision, use and development. Part 2 of the Act also contains other matters which are relevant to the management of natural features and landscape values. These other landscapes and natural features are categorised as locally distinctive and valued natural features and landscapes.

Landscape management is a significant resource management issue for the region which requires integrated management by both territorial authorities and the Southland Regional Council. This chapter identifies the landscape issues for the region, along with objectives, policies and methods. The RPS is concerned primarily with outstanding natural features and landscapes in the Southland region. This chapter directs local authorities to work together to identify and assess outstanding natural features and landscapes within the region and establish provisions within their respective planning documents for the protection of outstanding natural features and landscapes. In addition, local authorities will be encouraged to develop criteria with tangata whenua, the community and stakeholders for the identification of locally distinctive and valued natural features and landscapes, including amenity and cultural landscapes, and manage significant adverse effects upon these natural features and landscapes. Particular landscapes and natural features may hold values that make them culturally significant to tangata whenua. These natural features and landscapes are to be managed as either outstanding natural features and landscapes, or locally distinctive features and landscapes, depending on their values. This approach prioritises the identification and protection of outstanding natural features and landscapes within Southland, as well as promoting a consistent integrated approach to their management. Landscape values contribute to social and cultural wellbeing by providing a sense of place and identity in New Zealand, and to our economic wellbeing through tourism.

The policies relating to outstanding natural features and landscapes seek to achieve consistent processes for the identification and assessment of outstanding natural features and landscapes across the region. The identification and assessment of outstanding natural features and landscapes, and locally distinctive and valued natural features and landscapes by local authorities will enable the development of appropriate methods for their sustainable management, and the protection of outstanding natural features and landscapes from inappropriate subdivision, land use and development. The direction in this chapter will assist in determining the level and type of subdivision, use and development that is appropriate, and inappropriate, within or near, outstanding natural features and landscapes, and locally distinctive and valued natural features and landscapes.

Chapter 11: Contaminated Land

Introduction

Inappropriate storage, transportation and use of hazardous substances and disposal of hazardous wastes can result in contaminated land. Industrial, domestic, and rural activities have all contributed to contaminated land in Southland. Many contaminated sites are due to historic agricultural, horticultural, industrial, energy and forestry practices. In particular, contaminated sites have often resulted from the past manufacture and use of pesticides and fertilisers, production of coal and gas, mining, timber treatment, waste disposal and sheep dipping.

People, animals and the wider environment can be exposed to hazardous substances in contaminated land in a number of ways. These include direct contact with contaminated soil, swallowing food or water from contaminated environments, and breathing vapours or contaminated dust. Exposure to hazardous substances can have significant adverse effects on human health and on soil, surface water, groundwater and ecosystems. As well as endangering health, these substances can limit the use of land, cause corrosion that may threaten building structures, and reduce land value. People may be especially vulnerable to contaminated land from a change in land use. For example, land that at one time had an industrial activity occur that involved the use or disposal of hazardous substances subdividing and changing to a residential land use. Without identification or investigations of contaminated land, people may end up living, working or undertaking recreation near or on contaminated land.

Contamination is not always limited to a specific site. Hazardous substances may seep through the soil into groundwater, or be carried to nearby land and waterways in rainwater or on dust particles. Vapour and gases from contaminated land may present additional risks of explosion and odour.

Regional councils and territorial authorities are responsible for the day-to-day management of contaminated land and have specific functions under Act. Local authorities are also in charge of controlling the effects of contaminated land, and also for controlling activities that cause land to become contaminated.

Significant resources are needed to identify contaminated sites and confirm the nature and extent of any contamination present. To date, there have been limited investigations within the Southland region to find sites that may be contaminated. Therefore, it is difficult to quantify the number and risks to people or the environment from land contamination in Southland. Most of the effort to identify and register contaminated sites has focused on urban and rural sites contaminated by activities and industries on the Hazardous Activities and Industries List (HAIL) developed by the Ministry for the Environment. The HAIL sets out activities and industries that are considered likely to cause contamination from hazardous substance use, storage, or disposal.

This chapter of the RPS focuses on the significant resource management issues associated with contaminated land and the responses regarding its management.

Other chapters in the RPS address issues that relate to, or influence contaminated land, such as Chapter 12: Hazardous Substances and Chapter 13: Solid Waste. Chapter 11: Contaminated Land therefore, should be read in association with the other chapters of this policy statement.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

Table 11: Overview of Contaminated Land provisions

Issues	Objectives	Policies	Methods
Issue CONTAM.1	**Objective CONTAM.1** Identify, investigate and manage contaminated land	**Policy CONTAM.1** Identify and prioritise land	**Methods CONTAM.2, 4, 5, 8**
		Policy CONTAM.2 Management of contaminated land	**Methods CONTAM.1 - 8**
		Policy CONTAM.3 Integrated management approach	**Methods CONTAM.2, 3, 5 - 8**
	Objective CONTAM.2 Avoid, remedy or mitigate adverse effects	**Policy CONTAM.2** Management of contaminated land	**Methods CONTAM.1 - 8**
		Policy CONTAM.3 Integrated management approach	**Methods CONTAM.2, 3, 5 - 8**

11.1 ISSUE

Issue CONTAM.1
Contaminated land that has not been adequately identified, assessed or managed may contribute to increased risk to the environment (including community health).

11.2 OBJECTIVES

Objective CONTAM.1 – Identify, investigate and manage contaminated land
Land affected by soil contamination is identified, investigated and managed.

Explanation/Principal Reasons
Sections 30 and 31 of the Act give regional councils and territorial authorities specific functions for managing contaminated land. Regional councils have a function to investigate land for the purposes of identifying and monitoring contaminated land. Territorial authorities have a function to prevent or mitigate any adverse effects of the development, subdivision or use of contaminated land. These functions enable local authorities to achieve sustainable management of natural and physical resources, and the purpose of the Act. Objectives CONTAM.1 and CONTAM.2 set up a management framework for Southland's local authorities to follow, to effectively carry out their functions under the Act. Policies CONTAM.1 and CONTAM.2 put into practice the framework for managing contaminated land. Policy CONTAM.3 prevents or mitigates any adverse effects through an integrated management approach.

Objective CONTAM.2 – Avoid, remedy or mitigate adverse effects
Adverse effects on the environment (including human health) from contaminated land are avoided, remedied or mitigated.

Explanation/Principal Reasons
Contaminated land can result in adverse effects on the environment (including human health). These adverse effects are a result of the discharge of hazardous substances from a contaminated site to groundwater, surface water, soils or to air. These discharges pollute the environment and can harm people or plant and animal species. Policies CONTAM.1, CONTAM.2 and CONTAM.3 are approaches a local authority can use to avoid, remedy or mitigate the adverse effects in order to comply with environment standards, such as water quality, and achieve the purpose of the Act.

11.3 POLICIES

Policy CONTAM.1 – Identify and prioritise land
Identify and prioritise for action, land within Southland that is subject to actual or potential contamination.

Explanation/Principal Reasons
Policy CONTAM.1 refers to the responsibilities of the Southland Regional Council to identify and monitor contaminated land. The lack of investigations and information about where activities that cause land contamination have occurred or are occurring, what contaminants are involved and therefore the extent of the risk to communities and the environment, exacerbates the potential or actual adverse effects from contaminated land. The HAIL, developed by the Ministry for the Environment, compiles a list of activities and industries that are considered likely to cause land

contamination resulting from hazardous substance use, storage or disposal. A Land Information Memorandum (LIM) is a report prepared by a territorial authority on request which provides a summary of property information as required to be included under the Local Government Official Information and Meetings Act 1987. A LIM provides information on the presence of hazardous contaminants which are likely to be relevant to land and is known to the respective territorial authority. The HAIL can be used for consistently reporting on site history and for identifying sites for inclusion on local government Land Use Registers and LIM reports. The Ministry for the Environment has also developed a series of Contaminated Land Management Guidelines for classifying sites on Land Use Registers according to their risk to people and the environment.

Policy CONTAM.2 – Management of contaminated land

(a) Protect human health when undertaking activities on land that is potentially, or known to be, contaminated.

(b) Manage contaminated land to avoid, remedy or mitigate adverse effects on the environment.

Explanation/Principal Reasons

The HAIL is intended to identify potentially contaminated land, or most situations in New Zealand where hazardous substances could cause, and in many cases have caused, land contamination. Contaminated land, by definition, has or is likely to have significant adverse environmental effects. Subdivision, use or development of land on a HAIL site and discharges from contaminated land could cause adverse effects on people or the environment if contamination is present. It is therefore appropriate to protect human health when undertaking activities on contaminated or potentially contaminated land, and manage contaminated land to avoid, remedy or mitigate adverse effects on the environment.

Part (a) of this policy refers to the responsibilities of territorial authorities under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012 (NESCS). It applies to assessing and managing the actual or potential adverse effects of contaminants in soil on human health when undertaking subdivision, land use change, earthworks, soil sampling or removing the underground portions of any fuel storage or dispensing systems.

The NESCS does not apply to assessing and managing the actual or potential adverse effects of contaminants on other receptors, including ecology, water quality or amenity values. Those matters continue to be managed through part (b) of this policy.

Priority of management action for contaminated land should be determined by the type of contaminants involved, the degree of contamination, the availability and practicality of appropriate technology for monitoring or remediation, existing and likely future use of the site, surrounding land uses, national standards or guidelines, and the potential for adverse environmental or public health effects off-site or downstream.

Policy CONTAM.3 – Integrated management approach

Promote public awareness, understanding and an integrated management approach between central government, local authorities, tangata whenua, landowners, developers and the community to the management of contaminated land.

Explanation/Principal Reasons

Reducing (avoiding, remedying or mitigating) adverse effects from contaminated land requires all parties involved in contaminated land management to work together. Local authorities such as the territorial authorities and the Southland Regional Council can access and share information on contaminated land. Landowners and developers aware of land contamination can come forth with the

information so the contamination can be safely managed. Central government can work with all parties to develop and implement standards or guidelines for the management of contaminated land.

11.4 METHODS

The Southland Regional Council will:

Method CONTAM.1 – Regional plans
Establish and maintain provisions in regional plans to:
(a) avoid, remedy or mitigate adverse effects of discharges from contaminated land on:
    (i) water, soil or air quality, including the coastal marine area, rivers or lakes;
    (ii) community health and safety;
    (iii) areas, sites or items of historic or cultural sensitivity;
(b) recognise and support the implementation of relevant national guidelines, codes of practice, and environmental accords, where these help achieve Objective CONTAM.1 and Objective CONTAM.2.

Method CONTAM.2 – Identify, investigate and manage
Work with territorial authorities, industry, landowners and the community to:
(a) identify, investigate and manage:
    (i) contaminated land in accordance with national standards and best practice;
    (ii) land where activities that are known to cause actual or potential land contamination have occurred or are currently occurring;
    (iii) the environmental effects from land identified as contaminated; and
(b) prioritise sites for:
    (i) management or remediation; or
    (ii) the mitigation of actual or potential environmental effects from land contamination.

Method CONTAM.3 – Information, education and assistance
Provide technical information, expertise and/or resources to territorial authorities, industry, landowners and the community to:
(a) help identify contaminated sites and assess contamination against national guidelines or standards;
(b) identify and understand the actual or potential adverse effects of subdividing, using or developing contaminated land, and how those effects may be addressed;
(c) where appropriate, assist landowners of contaminated land that is causing, or may cause significant adverse environmental effects if disturbed to remedy or mitigate the actual or potential environmental effects.

Territorial authorities will:

Method CONTAM.4 – District plans
Establish and maintain provisions in district plans to:
(a) give effect to the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012; and
(b) recognise and support the implementation of relevant national guidelines, codes of practice, and environmental accords, where these help achieve Objective CONTAM.1 and Objective CONTAM.2.

Local authorities will be encouraged to:

Method CONTAM.5 – Collaboration and information sharing

(a) Collaborate with each other, industry, tangata whenua and the community to develop, maintain, and actively share information including an integrated contaminated land register that identifies the scale, nature, extent and location of contaminated and remediated land in the Southland region;
(b) Use information on the register to identify land that is or may be contaminated when issuing Land Information Memoranda;
(c) Provide technical information and expertise to land owners and occupiers to support the safe management and use of contaminated land, land remediation and mitigation of effects where appropriate; and
(d) Take information in the register into account when making resource management decisions.

Method CONTAM.6 – Strategies and protocols

Establish strategies and agreements to:

(a) collaborate and share information on applications for resource consent for activities that involve contaminated land;
(b) inform plan users of provisions related to contaminated land in regional and district plans; and
(c) work together to avoid regulatory overlaps or gaps in implementation and between planning documents, including the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2012.

Method CONTAM.7 – Consultation

Consult with tangata whenua and take into account Te Tangi a Tauira and other relevant iwi planning documents when making resource management decisions regarding the subdivision, use or development of contaminated land which may adversely affect:

(a) the quality of land, coast, air or water;
(b) tangata whenua values.

Method CONTAM.8 – Other methods

Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons

The Act requires regional councils to identify and monitor contaminated land while territorial authorities have responsibilities to prevent or mitigate adverse effects that could occur from subdividing, developing or using contaminated land. A collaborative and integrated approach is key to avoid duplication, and ensure a comprehensive approach.

The Southland Regional Council has established the Sites Associated with Hazardous Substances (SAHS) register to hold information on land that is or may be contaminated, either by past or current activities. The Ministry for the Environment has published the Hazardous Activities and Industries List (HAIL), which identifies industries and land use activities that are likely to contaminate the land they occur on. These lists form an important part of the regional approach to managing contaminated land. Identification needs to be followed by investigations to identify the type and extent of contamination, following which the effects on the environment and community can be determined, and further investigations carried out where necessary. These steps are important in managing the environmental effects of contaminated land, which can adversely affect water, air or soil quality and community wellbeing.

Identifying contaminated land should be followed by a comprehensive risk assessment, and then monitoring of the effects on environmental quality. Understanding the location, nature and extent of contamination enables local authorities to manage the effects as necessary to protect community and environmental wellbeing. It also helps to prioritise sites for further investigation. The methods seek to give effect to the NESCS. The NESCS requires territorial authorities to control the development of land affected or potentially affected by contaminants. It provides a nationally consistent set of planning controls and soil contaminant values to ensure land affected by contaminants in soil is appropriately identified and assessed before it is developed.

Territorial authorities must prepare plans consistent with both the RPS and the NESCS. Consequently, the methods encourage local authorities to work together to identify, investigate, monitor and manage contaminated land. The methods rely on a regulatory approach at district plan level to trigger full site investigations prior to changes in land use. Changes in land use, or land subdivision or development, provide opportunities to carry out investigations and risk assessments, and to remedy contamination or mitigate its effects. An integrated approach by local authorities and the community in conjunction with legislation will enable development of better practices and greater community awareness that will enable existing contaminated land to be progressively identified, investigated, monitored and remediated where appropriate, and help avoid contaminating more land or other resources.

Chapter 12: Hazardous Substances

Introduction

Hazardous substances pose a risk to the environment (including human health and safety). They contain hazardous properties that are explosive, flammable, oxidising, toxic, corrosive, or ecotoxic.[34] If these substances are not handled properly, or if waste containing hazardous substances is not disposed of properly, there is potential for the environment to become contaminated, and for people to become sick. Inappropriate management of hazardous substances and disposal of hazardous waste in the past has left a legacy of contaminated land to clean up. The adverse effects of hazardous substances can have a direct impact on the cultural integrity of mahinga kai, wāhi tapu, wāhi taonga and cultural landscapes.

There are many types of hazardous substance storage in the Southland region. The following represents what can typically be found in Southland:[35]

- underground and above ground storage tanks holding petroleum hydrocarbons at, for example, bulk storage terminals, airports, transport businesses, service stations, for heating buildings, on farm properties;
- storage of hazardous substances associated with manufacturing and primary processing;
- hazardous substances stores on farms and at industrial sites;
- waste oil tanks at motor workshops;
- transformer oil in electricity transformers, power stations and switchyards;
- storage of timber treatment chemicals at timber treatment sites, and dry cleaning products at dry cleaning sites;
- storage of hazardous substances at scrap yards, for example, within discarded vehicles;
- waste transfer stations.

There are some major industries in Southland that are likely to store and/or use significant amounts of hazardous substances and dispose of waste containing hazardous substances.

The Hazardous Substances and New Organisms Act 1996 (the HSNO Act) is the main legislation that controls the lifecycle of hazardous substances and requires their storage, use, transportation and disposal to meet certain requirements irrespective of their location in the environment. Under the Act, local authorities may include additional controls in situations where environmental receptors such as groundwater, surface water, drinking water and wetlands may need more protection than given under the HSNO Act.

The storage of hazardous substances can be a risk to the environment from any leakage of hazardous substances. Hazardous substances must be used carefully to avoid any accidental spillages that contaminate the environment. Many leftover hazardous substances from industrial processes require special disposal. Additionally, household, farms or small businesses use hazardous substances that require special disposal. These commonly include historical agrichemicals or household chemicals, oil and paint. It is important facilities used for the storage or disposal of hazardous substances help protect the environment (including communities) from possible contamination. Hazardous substances are frequently transported in and out of the region from various sources. Any spillage of them could adversely affect the environment. This chapter of the RPS focuses on the significant resource

[34] http://www.mfe.govt.nz/issues/hazardous/hazardous-properties.html
[35] Pattle Delamore Partners Risk Assessment and Gap Analysis, prepared for Environment Southland September 2009.

management issues associated with the storage, use, transportation and disposal of hazardous substances and the responses to help manage those activities.

Other chapters in the RPS address issues that relate to, or influence hazardous substances, such as Chapter 11: Contaminated Land and Chapter 13: Solid Waste. Chapter 12: Hazardous Substances, therefore, should be read in association with the other chapters of this policy statement.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

Statement of local authority responsibilities
Local authorities of the region share responsibility for the control of the use of land for the purpose of prevention or mitigation of any adverse effects of the storage, use, transportation or disposal of hazardous substances.

Regional council responsibilities:
The Southland Regional Council will specify the objectives, policies and methods for the control of the use of land to prevent or mitigate the adverse effects of the storage, use, transportation or disposal of hazardous substances in the beds of lakes and rivers, and on land in the coastal marine area.

Territorial authorities' responsibilities:
The territorial authorities of the region will specify the objectives, policies and methods for the control of the use of land to prevent or mitigate the adverse effects of the storage, use, transportation or disposal of hazardous substances for all other land.

Explanation/Principal Reasons
Under this allocation of responsibilities, rules to restrict the use of land for activities such as petrol stations in residential areas, or the transportation of hazardous substances through tunnels could only be adopted in district plans, while a rule to restrict the installation of a gas pipe over a river, for example, could only be adopted in a regional plan. This allocation of responsibilities applies only to land use controls. Controls on the actual storage and use of hazardous substances are imposed by the Environmental Protection Authority. Controls on discharges of hazardous substances to the environment – as with controls on discharges of any contaminant to the environment – are imposed in regional plans.

Table 12: Overview of Hazardous Substances provisions

Issues	Objectives	Policies	Methods
Issue HAZ.1	**Objective HAZ.1** Protection of the environment (including human health and safety)	**Policy HAZ.1** Hazardous substance storage facilities and containers	**Methods HAZ.1 - 3, 6 - 13**
		Policy HAZ.2 Accidents involving hazardous substances	**Methods HAZ.1 - 3, 5, 10, 12, 13**
		Policy HAZ.3 Transportation of hazardous substances	**Methods HAZ.1 - 4, 7 - 9, 11, 13**
		Policy HAZ.4 Disposal of hazardous substances	**Methods HAZ.1 - 3, 5 - 13**
		Policy HAZ.5 Alternatives to hazardous substances	**Methods HAZ.9, 13**
		Policy HAZ.6 Improve knowledge	**Methods HAZ.3, 7 - 9, 11, 13**
		Policy HAZ.7 New contaminated land	**Methods HAZ.1 - 3, 6 - 13**

12.1 ISSUE

Issue HAZ.1
Adverse effects on the environment (including human health and safety) may arise from the storage, use, transportation and disposal of hazardous substances.

12.2 OBJECTIVE

Objective HAZ.1 – Protection of the environment (including human health and safety)
Adverse effects on the environment (including human health and safety) from the storage, use, transportation and disposal of hazardous substances are prevented or mitigated.

Explanation/Principal Reasons
Objective HAZ.1 aims to protect the environment (including communities) from the harmful effects of storing, using, transporting or disposing of hazardous substances while at the same time recognising that not all adverse effects can be completely avoided. Policy HAZ.1 sets out the approach for controlling the use of land that should be taken to achieve this protection.

12.3 POLICIES

Policy HAZ.1 – Hazardous substance storage facilities and containers
Ensure facilities and containers used to store hazardous substances are located, designed, constructed and managed to avoid, remedy or mitigate adverse effects, including unacceptable risks, to the environment (including human health and safety).

Explanation/Principal Reasons
The type and extent of environmental effects and risks associated with activities involving hazardous substances are influenced by their locations and management. Where there are high concentrations of people, sensitive ecosystems, or nearby sources of drinking water, the environment is particularly vulnerable to the potential impact of uncontrolled hazardous substances. Special consideration must also be given if locating facilities or containers used to store hazardous substances in natural hazard areas (such as flood plains), particularly emergency management, as natural forces are unpredictable and can lead to the uncontrolled exposure of hazardous substances in the environment. Appropriate management, site design and contingency plans for sites using or storing substantial volumes of hazardous substances are key aspects to avoiding adverse environmental effects. Site design should incorporate containment systems to control spillage on the originating site, thereby preventing hazardous substances from entering land or water bodies. Site management should include managing the removal of hazardous substance storage containers and any contamination present as a result of leakages.

Policy HAZ.2 – Accidents involving hazardous substances
Provide appropriate facilities and systems to avoid, remedy or mitigate the contamination of soil, water, and air in the event of accidents involving hazardous substances.

Explanation/Principal Reasons
The storage, use, transportation and disposal of hazardous substances can result in accidental discharges of the substances (such as spills, gas escapes, leakages). When these accidents occur, it is important the hazardous substances are removed as far as practicable, in order to prevent the

contamination of soil, air or water. When these hazardous substances are removed it is important they have somewhere they can be either stored temporarily or disposed of permanently that will not adversely affect the environment. These storage and/or disposal sites are currently limited in the Southland region, making resolving accidents difficult.

Policy HAZ.3 – Transportation of hazardous substances
Encourage transportation of hazardous substances to be undertaken in a safe manner, by modes and transport routes which minimise the risk of adverse effects on the environment (including people and other transport users).

Explanation/Principal Reasons
The transportation of hazardous substances has the potential to have adverse effects on the environment, particularly in the event of an accident or leakage involving the mode of transport. Minimising the risk of adverse effects from the mode of transport could mean using transport operators certified to handle hazardous substances.

Policy HAZ.4 – Disposal of hazardous substances
Ensure the disposal of hazardous substances is undertaken in an environmentally safe manner at authorised facilities or in accordance with Group Standards and Codes of Practice approved under the HSNO Act to avoid the risk of hazardous substances escaping into the environment, thereby creating adverse environmental effects.

Explanation/Principal Reasons
Hazardous substances sometimes require special treatment and should be disposed of carefully. Not all disposal facilities are designed to handle hazardous substances in a manner that avoids the risk of them entering water and/or soils and adversely affecting the environment (including human health and safety). Where hazardous substances require disposal, the facility should have treatment or controls in place to adequately handle the hazardous substances so they cannot adversely affect the environment during or after disposal. This will ensure it is not possible for hazardous substances to leach outside of the facility.

Policy HAZ.5 – Alternatives to hazardous substances
Promote the use of alternatives to hazardous substances where this is efficient and cost-effective to do so, and encourage greater levels of reuse, recovery and recycling of hazardous substances.

Explanation/Principal Reasons
By definition, hazardous substances are dangerous and can adversely affect the environment, including human health and safety, if they come into contact with them. Handling hazardous substances safely will reduce the risk of this occurring. However, using alternatives to hazardous substances, for example non-toxic household cleaners, further reduces the risk of damage to the environment (including communities) in the event of a discharge. Reuse, recovery and recycling of hazardous substances means less hazardous substances have to be produced, which helps to protect the environment including human health and safety.

Policy HAZ.6 – Improve knowledge
Improve knowledge in Southland of hazardous substance storage, use, transportation and disposal.

Explanation/Principal Reasons
Many sectors in Southland, such as industry, agriculture, small businesses and households store, use, transport and dispose of hazardous substances. Since these activities are widespread and frequent, it is important to have an understanding of the nature, quantities and locations of the activities. This will

enable coordinated and effective management of any emergencies in the event of an accident involving hazardous substances. It will also enable monitoring of the activities to ensure the protection of the environment (including human health and safety). Agencies and organisations can work together to collect and record information, and track the storage, use, transportation and disposal of hazardous substances. This may include sharing information from existing tracking measures.

Policy HAZ.7 – New contaminated land
Avoid to the extent practicable the creation of new contaminated land in Southland.

Explanation/Principal Reasons
Safe storage, use, transportation and disposal of hazardous substances can prevent land from becoming contaminated in the future. If done correctly, the discharge of hazardous substances is avoided, or minimised so land is less likely to become contaminated. Central government, local authorities, landowners, developers, the public and industry can all play a part in safely storing, using, transporting and disposing of hazardous substances.

12.4 METHODS

The Southland Regional Council will:

Method HAZ.1 – Regional plans
Establish and maintain provisions in regional plans to:
(a) avoid or mitigate adverse effects from the actual or potential discharge of hazardous substances to land, water and air;
(b) control the storage, use, transportation or disposal of hazardous substances in the coastal marine area, and the beds of rivers, lakes and other waterbodies.

Territorial authorities will:

Method HAZ.2 – District plans
Consider establishing and maintaining provisions in district plans to control the use of land for activities that store, use, transport, or dispose of hazardous substances, to avoid, remedy or mitigate adverse effects and manage risks from the storage, use, transportation and disposal of hazardous substances, including on:
(a) other land use activities;
(b) the health and safety of the community;
(c) amenity values, and community and tangata whenua resources, cultural and spiritual values.

Local authorities will be encouraged to:

Method HAZ.3 – Collaboration
(a) Collaborate with each other, industry and the community to:
    (i) establish and implement regional collection, recycling and disposal programmes for specified hazardous substances;
    (ii) establish and implement programmes to collect waste or surplus hazardous substances throughout Southland for safe reuse, recycling or disposal;

(b) Collaborate with each other, industry and public organisations, such as emergency services and health authorities:
    (i) to establish, maintain and access a register to track the transportation, storage, use and disposal of highly[36] hazardous substances in the Southland region;
    (ii) to prepare and maintain co-ordinated emergency response plans, and emergency equipment and facilities, where appropriate, to contain, manage and remedy accidental discharges;
    (iii) to contribute to resource management decisions, particularly resource consent processes involving more than one local authority.

Method HAZ.4 – Transport routes
Collaborate with transport companies and industry to identify transport modes and routes in the Regional Land Transport Strategy for the safe transportation of hazardous substances which avoid, to the extent possible, proximity to sensitive environments and land use activities.

Method HAZ.5 – Bylaws
Implement and maintain:
(a) trade waste bylaws to avoid adverse effects from the discharge of hazardous substances to municipal sewer systems;
(b) other regulations, as necessary, to prevent discharges of hazardous substances to municipal stormwater systems.

Method HAZ.6 – Collection programmes and facilities
Establish and promote hazardous substance reuse, recycling and disposal facilities and programmes for specified hazardous substances.

Method HAZ.7 – Protocols
Establish and maintain protocols between local authorities and public organisations including emergency services and health authorities to:
(a) coordinate the collection, reuse, storage or disposal of waste hazardous substances and information on hazardous substances;
(b) maintain, access and share information on hazardous substances in the Southland region.

Method HAZ.8 – Information, education and public awareness
Provide technical information, education and assistance to industry and the community on:
(a) the safe storage, use, transportation and disposal of hazardous substances to raise awareness of the actual and potential effects of hazardous substances, and the effects of inappropriate storage, use, transportation and disposal;
(b) collection, reuse, recycling and disposal opportunities, facilities and programmes for hazardous substances.

Method HAZ.9 – Promote, support and advocate
Encourage, support and advocate for:
(a) the reduction of hazardous substance storage and use;
(b) the use of less hazardous alternatives;
(c) the application of life-cycle management systems for hazardous substances;

[36] Highly Hazardous Substances are defined as those substances identified in the *Schedule of Tracked Substances*, HSNO Act 1996.

(d) the development and adoption of good practice and industry codes of practice for storing, using, transporting and disposing of hazardous substances;
(e) reference to Group Standards and Codes of Practice approved under the HSNO Act.

Method HAZ.10 – Financial incentives
Consider implementing and maintaining financial incentives to encourage the appropriate reuse, recycling or disposal of hazardous substances to discourage inappropriate use, storage or disposal of hazardous substances where existing incentives and/or requirements are insufficient.

Method HAZ.11 – Consultation
Consult with industry, the community and tangata whenua, and take into account Te Tangi a Tauira and other relevant iwi planning documents to identify areas and land use activities that may be sensitive to the effects of storing, using, transporting and disposing of hazardous substances.

Method HAZ.12 – Monitoring
Where appropriate to the scale and significance of effects associated with an activity, include resource consent conditions to monitor soil, water and air quality or other indicators as may be appropriate to:
(a) determine compliance with relevant national standards and resource consent conditions;
(b) identify hazardous substances discharges that may result in adverse effects on the environment (including the community).

Method HAZ.13 – Other methods
Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons
The Southland Regional Council has taken a joint management approach with territorial authorities, where each council is responsible for complementary functions to avoid or mitigate adverse effects from hazardous substances.

The methods state that the Southland Regional Council will establish and maintain provisions in regional plans that:
- avoid or mitigate adverse effects from the actual or potential discharge of hazardous substances to land, water and air; and
- control the storage, use, transportation or disposal of hazardous substances in the coastal marine area, and the beds of rivers, lakes and other waterbodies.

These functions are retained by the Southland Regional Council and consistent with other regional responsibilities under the Act.

Monitoring is necessary to determine compliance with relevant standards and consent conditions, to ensure hazardous facilities are operated appropriately, and to identify departures from appropriate practice that could cause adverse environmental effects.

The methods promote defining transport modes and routes for hazardous substances using the Regional Land Transport Strategy. Routes can be defined that avoid, as much as possible, sites, areas, activities such as schools or hospitals, or features that are particularly sensitive to hazardous substance discharges or spills. While these routes would not be binding, parties transporting hazardous substances would be encouraged to use them.

Under these RPS methods, territorial authorities will consider establishing provisions in district plans to control the location and establishment of activities that store, use, transport or dispose of hazardous substances. The provisions are intended to protect other activities, the health and safety of the community, environmental amenity, and social and cultural values from the effects of hazardous substances. Territorial authorities are encouraged to develop and implement bylaws to manage trade-waste discharges to municipal sewers. This can encourage better on-site management of discharges, and puts greater responsibility for quality control and hazard management at source. Uncontrolled discharges to municipal sewer systems can reduce the effectiveness of wastewater treatment, the quality of wastewater following treatment, and compliance with discharge consent conditions. In turn, this can place greater demands and costs on the territorial authority operating the treatment system. A bylaw approach transfers some responsibility to those discharging substances to the sewer. Discharges of hazardous substances to stormwater systems should be prevented, except where they are permitted by trade waste bylaws. Stormwater is not treated prior to entering surface water, and can be a direct pathway for hazardous substances to enter sensitive environments.

The joint management approach between local authorities is further reflected in the methods above.

Collaboration between the Southland Regional Council and the territorial authorities to provide opportunities to collect, reuse, recycle or dispose of substances is aligned with the councils' responsibilities for solid waste management, providing efficiencies. Collaboration between local authorities, industry and public agencies is essential to achieve integrated management of highly hazardous substances. Using the HSNO Act as a basis, the methods provide a framework for identifying and tracking highly hazardous substances region-wide. Understanding the type, nature, quantity and location of these substances enables a coordinated approach to managing the associated risks, by responding effectively to uncontrolled spillages or discharges.

Consultation enables access to stakeholder and community-held information, to inform local authorities of locations, activities or values that are sensitive to the effects of hazardous substances. This can inform resource management decisions and minimise the risk and potential of adverse effects from discharges or inappropriate management. Educating stakeholders and the community on the effects of inappropriate storage, use and disposal of hazardous substances intends to raise public awareness of the environmental consequences of poor management, but also highlight the options for safe management. Providing information on good practice and encouraging the development and adoption of industry guidelines are other mechanisms that seek positive change at source through technical guidance. Similarly, information and guidance on where and how hazardous substances can be disposed of, and implementing collection and disposal programmes helps stakeholders to better manage hazardous substances, and avoid or reduce effects on the environment (including the community). This is reinforced through financial incentives that reward positive behaviour and discourage unwanted behaviour that could lead to adverse effects on the environment (including communities).

Chapter 13: Solid Waste

Introduction

Solid wastes are those generated as solids, or converted to a solid form, for disposal. They include common household wastes such as paper, plastic, glass, metals, appliances, and kitchen and garden wastes, as well as a range of industrial and commercial wastes, such as construction and demolition wastes, organic wastes from agriculture and food processing, and mine and quarrying tailings. Most solid wastes are disposed of in landfills or cleanfills around the region.

Waste represents an inefficient use of our natural resources. Waste disposed to a landfill locks away the potential reuse of those resources resulting in the extraction of more natural resources (which are largely finite). Traditionally some solid waste has been burnt, releasing potentially harmful contaminants to air. Chapter 9: Air Quality provides direction on the management of air pollution. Improperly disposed of, waste can harm the environment (including human health) from the discharge of contaminants. Solid waste disposal is a significant environmental management issue for tangata whenua. Inappropriate solid waste disposal can have adverse effects on the mauri of water, sites of significance and taonga, such as food and weaving resources.

Until recently, solid waste management in Southland has focused on managing the environmental effects (including human health) of solid waste at the point of disposal. However, there is now a shift towards using natural resources more efficiently, reducing the amount of solid waste produced and reducing the costs associated with production and disposal of solid waste. Consumer choices will increasingly drive the 'green design' of products, including those which produce less solid waste throughout their life cycle.

What is known about the quantities and composition of solid waste generated in Southland comes from records and studies at the regional municipal landfill near Winton, which opened in 2004. Approximately 54,000 tonnes[37] of solid waste is disposed of in Southland each year at this landfill. Most of this waste is generated from domestic, commercial, industrial, and institutional sources in Southland. The shift to increased recycling and reprocessing, and the increased fees to dispose of waste, have helped reduce the volume of waste deposited in the landfill. However, reusable or recyclable organic (mostly garden and food) waste, timber, and construction and demolition waste make up nearly fifty percent of material sent to the landfill. Furthermore, the generation and disposal of waste is linked to economic growth. Therefore as the economy grows or recovers, the waste disposal trend usually follows.

Large industries and cleanfill sites also generate and dispose of large quantities of solid waste onsite. Individual farms generate solid waste from the maintenance of their farm and much of this waste is disposed to on-farm landfills. The quantity and composition of waste for those industrial or cleanfill sites with resource consents is gathered as a requirement to comply with consent conditions. However, information on these solid waste streams is not reported on a regional basis to provide an overall assessment of waste trends in the region. A lack of information and reporting on solid waste trends makes any reduction efforts difficult to implement and measure.

This chapter of the RPS focuses on the significant resource management issues and responses associated with solid waste generation and disposal. Other forms of waste are covered in Chapter 12: Hazardous Substances, Chapter 4: Water, Chapter 9: Air Quality and Chapter 11: Contaminated Land.

[37] Average tonnage received per annum at the regional municipal landfill from 2007 to 2012.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

Table 13: Overview of Solid Waste provisions

Issues	Objectives	Policies	Methods
Issue WASTE.1	**Objective WASTE.2** Avoid, mitigate, or where appropriate remedy adverse effects	**Policy WASTE.1** Adverse environmental effects	**Methods WASTE.1, 4, 11, 15**
		Policy WASTE.2 Cleanfill	**Methods WASTE.1, 4, 9, 11, 14, 15**
		Policy WASTE.4 Solid waste hierarchy	**Methods WASTE.1, 2, 4 – 8, 12, 13, 14, 15**
		Policy WASTE.5 Solid waste generation and disposal trends	**Methods WASTE.2, 9, 14, 15**
		Policy WASTE.7 Appropriate minimum standards	**Methods WASTE.2, 4, 7, 9, 15**
		Policy WASTE.8 Efficient use of landfills	**Methods WASTE.1, 3, 4, 6 – 8, 14**
Issue WASTE.2	**Objective WASTE.1** Reduce solid waste	**Policy WASTE.3** Collaborative approaches	**Methods WASTE.3, 7, 12, 14, 15**
		Policy WASTE.4 Solid waste hierarchy	**Methods WASTE.1, 2, 4 – 8, 12, 13, 14, 15**
		Policy WASTE.5 Solid waste generation and disposal trends	**Methods WASTE.2, 9, 14, 15**
		Policy WASTE.6 Education and awareness raising	**Methods WASTE.2, 3, 7, 8, 10, 14, 15**
	Objective WASTE.2 Avoid, mitigate, or where appropriate remedy adverse effects	**Policy WASTE.1** Adverse environmental effects	**Methods WASTE.1, 4, 11, 15**
		Policy WASTE.2 Cleanfill	**Methods WASTE.1, 4, 9, 11, 14, 15**
		Policy WASTE.4 Solid waste hierarchy	**Methods WASTE.1, 2, 4 – 8, 12, 13, 14, 15**

Issues	Objectives	Policies	Methods
		Policy WASTE.5 Solid waste generation and disposal trends	**Method WASTE.2, 9, 14, 15**
		Policy WASTE.7 Appropriate minimum standards	**Method WASTE.2, 4, 7, 9, 15**
		Policy WASTE.8 Efficient use of landfills	**Method WASTE.1, 3, 4, 6 – 8, 14**

13.1 ISSUES

Issue WASTE.1
The generation, storage, disposal, transportation, processing and handling of solid waste in Southland can result in adverse effects on the environment (including community health).

Issue WASTE.2
There is a lack of information on the types and quantities of solid waste being deposited in Southland and there is limited knowledge of the adverse environmental effects arising from different forms of solid waste disposal.

13.2 OBJECTIVES

Objective WASTE.1 – Reduce solid waste
Reduce the generation of solid waste in Southland.

Explanation/Principal Reasons
The generation of solid waste is an environmental issue for Southland. The purpose of the Act is to achieve sustainable management of natural resources and avoid, remedy or mitigate adverse effects associated with their use. A key way to achieve sustainable management of resources and reduce the adverse effects of solid waste is to reduce the generation of solid waste in the first place. Less solid waste means less adverse effects to manage, and this is what Objective WASTE.1 aims to achieve. This aim is then implemented by the associated policy framework. Policy WASTE.3 recognises that reducing solid waste can be achieved more efficiently through collaboration across sectors in Southland. Policy WASTE.4 provides a management framework for reducing solid waste generation. Policy WASTE.5 increases knowledge about solid waste quantities and composition, and Policy WASTE.6 raises awareness about the opportunities available to reduce solid waste generation.

It is not the intention of Objective WASTE.1 to limit economic growth and development by requiring an immediate reduction in overall volume of solid waste generated in the region. Instead it seeks to ensure that individual activities, both new and existing, are mindful of the need to reduce solid waste and develop appropriate methods to do so, thereby reducing the generation of solid waste in Southland.

Objective WASTE.2 – Avoid, mitigate, or where appropriate remedy adverse effects
Avoid, mitigate, or where appropriate remedy the adverse environmental effects of solid waste storage, disposal, processing, handling and transportation.

Explanation/Principal Reasons
The storage, disposal, processing, handling and transportation of solid waste has the potential to discharge contaminants such as leachate, odour, hazardous substances and harmful gases which can result in adverse effects on the environment. Adverse environmental effects can also include the depletion of natural resources. In order to achieve sustainable management and the purpose of the Act, it is appropriate for Objective WASTE.2 to avoid or mitigate adverse environmental effects from solid waste storage and disposal. Policies WASTE.4, WASTE.5 and WASTE.6 are associated with reducing solid waste which is a means to avoid adverse effects. Policies WASTE.1 and WASTE.7 provide a management framework to mitigate any adverse effects. Objective WASTE.2 seeks to avoid the adverse effects in the first place, and if that is not achievable then to mitigate them as far as possible. In some limited situations it may be appropriate to remedy the adverse effects of the storage, disposal, processing or handling of solid waste, for example visual effects. However, this will not be appropriate

in all situations as improper storage, disposal, processing or handling of solid waste can result in significant adverse effects on the environment and remedying them can be difficult. The improper disposal of solid waste can be either the discharge of specific types of waste to landfills or cleanfills that are not designed to handle them, and discharges of solid waste outside of landfills and cleanfills.

13.3 POLICIES

Policy WASTE.1 – Adverse environmental effects
Avoid, mitigate or where appropriate remedy the adverse environmental effects of solid waste storage, disposal, processing, handling and transportation through the development and use of appropriate rules and/or methods in regional and district plans including, but not limited to rules and/or methods on:

(a) location, such as proximity to sensitive receiving environments or historic heritage;
(b) operation, such as acceptable solid waste, leachate or dust management; and
(c) closing, such as site rehabilitation or monitoring.

Explanation/Principal Reasons
Solid waste storage, disposal, processing, handling and transportation should take place in a manner that avoids, mitigates or where appropriate remedies adverse environmental effects, including those associated with leachate, odour, vermin, visual intrusion, litter and contamination by hazardous substances.

Policy WASTE.2 – Cleanfill
Establish provisions in regional and district plans that provide for appropriately located cleanfill sites.

Explanation/Principal Reasons
Cleanfill can be disposed of as solid waste or discharged for a particular purpose, such as land-raising activities. Generally the discharge of cleanfill to land poses a low environmental risk. Therefore, regional and district plans should provide for appropriately located cleanfill sites, considerations include proximity to sensitive receiving environments, property boundaries, historic heritage and site rehabilitation. There are also operational considerations, such as stormwater management or hours of operation.

Policy WASTE.3 – Collaborative approaches
Promote the development and use of collaborative approaches to solid waste management in Southland.

Explanation/Principal Reasons
The development of regional initiatives and approaches to solid waste management in Southland can enable waste minimisation. Territorial authorities are required to develop waste management strategies under the Waste Minimisation Act 2008 (WMA) and, along with private operators, to provide and manage solid waste disposal services. It is appropriate that the Southland Regional Council works with the territorial authorities on the region's generic solid waste issues, to provide a consistent approach to solid waste management and solid waste minimisation where possible.

Policy WASTE.4 – Solid waste hierarchy
Solid waste shall be appropriately managed in accordance with the following hierarchy:

(a) prevent solid waste from being generated;
(b) reduce the amount of solid waste generated;
(c) reuse solid waste;

(d) recycle solid waste;
(e) recover resources from solid waste;
(f) dispose of residual solid wastes to authorised landfills or cleanfills.

Explanation/Principal Reasons
Establishing a hierarchy of activities for managing solid waste can encourage waste minimisation, which in turn can help to avoid or mitigate the adverse environmental effects of solid waste disposal. It is important that each activity in the waste hierarchy is undertaken appropriately so the environment is not harmed. This may mean activities further down the hierarchy are more appropriate than ones at the top, depending on the type of waste and other circumstances. For example, burial of carcasses and offal at an appropriate site on the property of origin is often appropriate for management of biosecurity and human health risks.

Policy WASTE.5 – Solid waste generation and disposal trends
Improve knowledge in Southland of solid waste generation and disposal trends, and the environmental effects of different forms of solid waste disposal.

Explanation/Principal Reasons
Researching, measuring, monitoring, and reporting on solid waste quantities and composition can help in the assessment of solid waste streams and behaviours and enable the development of management methods resulting in a reduction in solid waste. Solid waste studies should happen on a consistent basis to ensure waste reduction programmes can be targeted accordingly.

Policy WASTE.6 – Education and awareness raising
Use education to raise awareness of the adverse environmental effects of different forms of solid waste disposal and the opportunities available to prevent, reduce, reuse, recycle, recover or appropriately dispose of, solid waste.

Explanation/Principal Reasons
Development and use of good management practice guidelines with regard to solid waste disposal can help to reduce adverse environmental effects from these activities. Local authorities can also develop tools and programmes to raise awareness in the community and advise businesses of the opportunities to minimise solid waste.

Policy WASTE.7 – Appropriate minimum standards
Take into account appropriate minimum standards for landfills and other solid waste facilities, consistent with national good practice, to mitigate adverse environmental effects from these facilities.

Explanation/Principal Reasons
The use of minimum standards can mitigate the adverse environmental effects of landfills and other solid waste facilities, and ensure that solid waste is disposed of and managed appropriately. Central government and the solid waste industry have developed national guidelines on the siting, design and operation of solid waste facilities. Regional and district plans should use these guidelines when considering resource management proposals relating to the disposal and management of solid waste.

Policy WASTE.8 – Efficient use of landfills
Encourage the efficient use of existing landfills over the establishment of new landfills.

Explanation/Principal Reasons
Policy WASTE.8 encourages the efficient use of existing landfills. The use of existing landfills efficiently should occur before a new one is established, however, there may be circumstances when a new

landfill is necessary or desirable. Using existing landfills efficiently assists to limit the impact and geographical extent of any adverse environmental effects associated with landfills across the Region.

13.4 METHODS

The Southland Regional Council will:

Method WASTE.1 – Regional plans
Establish and maintain provisions in regional plans that adopt good practice waste minimisation principles to avoid, remedy or mitigate the environmental effects of solid waste management and disposal on water, land, coast and air.

Method WASTE.2 – Monitoring
Monitor and annually report the environmental effects of solid waste disposal at transfer and landfill facilities on air, land and water quality, including the coastal marine area where applicable.

Method WASTE.3 – Information, education and public awareness
Promote waste minimisation principles to territorial authorities, the community, industry and manufacturers to raise awareness of the effects of residual waste disposal and the environmental benefits of minimising solid waste through alternatives to landfill.

Territorial authorities will:

Method WASTE.4 - District plans
Establish and maintain provisions in district plans to:
(a) control the location of solid waste management and disposal activities;
(b) minimise adverse environmental effects on people, communities and tangata whenua values from solid waste management and disposal activities.

Local authorities will be encouraged to:

Method WASTE.5 – Advocate
Advocate to central government to develop mandatory product stewardship programmes for priority products.

Method WASTE.6 – Agreements and accords
Encourage the reduction of solid waste at source through actively supporting industry-led product stewardship programs and accords.

Method WASTE.7 – Promote and collaborate
(a) Promote the adoption of regional waste management strategies consistent with waste minimisation principles.
(b) Collaborate and provide technical information and support to each other, and the waste management industry to develop and implement strategies to avoid, mitigate or where appropriate remedy adverse effects on the environment from solid waste management and disposal.

Method WASTE.8 – Economic instruments
Implement financial incentives to:

(a) encourage the reduction of waste, and the diversion of recyclables, green waste, construction waste and cleanfill from the waste stream at source;
(b) discourage unsorted waste material from entering the waste stream where it could be reused, recycled or recovered.

Method WASTE.9 – Monitoring and regulation
Require solid waste facilities to monitor and record the type and amount of material entering the waste stream and solid waste deposited to landfills or cleanfills, and through the development of bylaws or other regulations require annual reporting of that information to territorial authorities for waste management purposes.

Method WASTE.10 – Information, education and public awareness
Provide information and expertise to increase community, industry and manufacturers' awareness of solid waste processes, programmes and facilities in each district.

Method WASTE.11 – Consultation
Consult with tangata whenua and take into account Te Tangi a Tauira and other relevant iwi planning documents when making resource management decisions regarding the management and disposal of solid waste which may adversely affect:
(a) the quality of land, coast, air or water;
(b) tangata whenua cultural or spiritual values.

Method WASTE.12 – Integration
Work with and support other local authorities, industry, the community and tangata whenua to implement good practice waste minimisation strategies.

Method WASTE.13 – Central government
Access central government funding to support waste minimisation initiatives, with priority for initiatives or programmes that best reduce residual waste quantities to landfill.

Method WASTE.14 – Regional waste strategy
Implement any regional waste strategy in accordance with the solid waste hierarchy contained in Policy WASTE.4.

Method WASTE.15 – Other methods
Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS.

Explanation/Principal Reasons
The Southland Regional Council and the territorial authorities are collectively responsible for managing solid waste and controlling the environmental effects of discharges on land, air and water. Current practices of discharging residual solid waste to land in regional landfills can have significant social, economic, cultural and environmental costs, including the costs of setting up and operating facilities and systems, transportation costs, and the effects of discharges on natural, cultural and biodiversity resource values.

The WMA encourages reductions in waste generation and disposal, and aims to reduce the adverse effects of waste on the environment. This is supported by the complementary function of the New Zealand Waste Strategy 2010 (NZWS) which focuses on reducing the harmful effects of waste and improving the efficiency of resource use. The WMA aims to achieve economic benefits through better use of materials throughout product life cycles, and promoting domestic reprocessing of

recovered materials. In light of the purpose of the WMA, current best practice focuses on avoiding or reducing waste generation, reusing waste products, and recycling and recovering resources. This is embodied in the "5R" hierarchy (reduce, reuse, recycle, recover, residual waste) as an internationally recognised waste minimisation approach. Under the 5R approach, only residual waste goes to landfill or cleanfill. Industry-led product stewardship programmes are a key way to reduce waste at its source. Local authorities can actively support industry-led product stewardship programmes by assisting with applications to the waste minimisation fund, for example. These applications are more successful if there is broad support for them from a range of organisations.

Integrating solid waste management across local authorities may reduce the volume of residual solid waste going to landfill, and reduce the associated effects on soil, air and water quality, ecosystem health and biodiversity, community health and safety, and cultural and economic effects. As solid waste management and disposal is a regional issue, an integrated approach to solid waste management between local authorities and with the community and industry is essential for effective waste management and efficient resource use. Integration can be achieved by aligning rules in regional and district plans, but also by sharing information and technical resources, combining efforts to educate the community, and by advocating common approaches to waste management. Integrating solid waste management across local authorities also improves efficiencies and lowers establishment and operational costs. Providing opportunities to divert materials from landfill in transfer and recycling centres could help reduce the amount of material that enters the regional waste stream, and be consistent with waste minimisation principles. Recording and reporting the type and amount of waste in each district against the same criteria, not only ensures transparency, but ensures accurate monitoring information is consistently gathered region-wide. This information can be used to monitor the success of waste management strategies, and can be used to inform future decisions.

The Southland Waste Management and Minimisation Plan 2012-2018 must be consistent with the WMA and the NZWS. That plan provides a regional framework for all Southland local authorities, helping to generate a consistent approach across territorial boundaries and setting waste minimisation targets. Adopting and implementing that plan through the RPS means regional and district plans need to be consistent and take it into account, and enables it to better influence future waste management decisions.

Chapter 14: Historic Heritage

Introduction

Southland's historic heritage encompasses the material traces of past and present culture. These traces may be in the form of built heritage, cultural landscapes and sites of significance to Māori, archaeological sites and the surroundings associated with these features. Historic heritage holds knowledge about the past not recorded in any other way and gives us an opportunity to learn from and connect with our past, and to learn about the attitudes and values that have shaped our society and environment. This information helps define the character of the region, the community and of individuals. Historic heritage can also enrich the experiences of visitors to Southland. Tangata whenua, Southlanders' and visitors', connections with historic heritage in Southland assists in the management of these values for future generations, as it raises awareness of the value of historic heritage.

A significant proportion of the region's heritage is associated with Māori occupation. The definition of historic heritage in the Act specifically recognises cultural heritage and sites of significance to Māori. Archaeological sites, including middens, flaking floors, kainga and pā sites, and nohoanga, provide evidence of early Māori occupation in Southland. They can also provide information about the climate in Southland, food sources, trade routes and the local flora and fauna. Southland's coast is rich in archaeological sites, but many are threatened by coastal erosion, sea level rise and development. The management of other resources such as biodiversity, water and natural features and landscapes can have an impact on cultural heritage of significance to tangata whenua. It is important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region. The identification and management of natural features and landscapes which have cultural significance to tangata whenua are provided for in Chapter 10: Natural Features and Landscapes.

Southland's historic heritage also includes evidence of European and Chinese settlement. For example, musterers' huts, remnants of whaling stations and gold and coal mining activities, sawmills, flaxmills, sites relating to early communications and transport, as well as municipal facilities and private residences, all provide information about how previous generations lived and worked in Southland. Many examples of built heritage also house current commercial and residential activities. Southland's local authorities take an active role in the management of historic heritage with many publicly owned assets holding heritage value, for example cemeteries and war memorials.

Section 6(f) of the Act recognises that protecting historic heritage from inappropriate subdivision, use and development is a matter of national importance, as is the relationship of Māori and their culture and traditions with their ancestral sites, wāhi tapu and other taonga under section 6(e) of the Act. This chapter, read in conjunction with the other chapters of the RPS including, Chapter 3: Tangata Whenua, Chapter 8: Natural Hazards and Chapter 10: Natural Features and Landscapes will help Southland's local authorities to fulfil their responsibilities with respect to Historic Heritage.

Table 14: Overview of Historic Heritage provisions

Issues	Objectives	Policies	Methods
Issue HH.1	**Objective HH.1** Protection of historic heritage	**Policy HH.2** Protection of historic heritage	**Methods HH.1 - 4**
		Policy HH.5 Collaborative management	**Methods HH.2 - 4**
	Objective HH.2 Built heritage	**Policy HH.1** Public awareness and appreciation	**Methods HH.1 - 4**
		Policy HH.3 Integration with new use	**Methods HH.1 - 4**
		Policy HH.5 Collaborative management	**Methods HH.1 - 4**
		Policy HH.6 Adaptive reuse	**Methods HH.1 - 4**
Issue HH.2	**Objective HH3** Historic heritage values	**Policy HH.4** Natural processes and climate change	**Methods HH.1 - 4**
		Policy HH.5 Collaborative management	**Methods HH.1 - 4**

14.1 ISSUES

Issue HH.1
Inappropriate management, including the neglect of historic heritage in Southland, can lead to the degradation or deterioration of the resource, resulting in a loss of tangible connections to the community's social, economic and cultural past.

Issue HH.2
Natural processes and climate change (i.e. earthquakes, coastal erosion, sea level rise and river flooding) can have adverse effects on historic heritage values.

14.2 OBJECTIVES

Objective HH.1 – Protection of historic heritage
Historic heritage values are identified and protected from inappropriate subdivision, use and development.

Explanation/Principal Reasons
Historic heritage supports the social, economic and cultural wellbeing of the community. For example, many community activities celebrate the historical characters, industries and other activities in the region. Protecting this resource will ensure that the opportunity to benefit from historic heritage is open to both current and future generations. Historic heritage in Southland also contains knowledge about the past not recorded elsewhere. Research can assist in the identification and protection of historic heritage values. Identification and protection of historic heritage allows current and future generations to understand and connect with their social and cultural past.

Objective HH.2 – Built heritage
The built heritage of Southland is appropriately recognised and where possible utilised in a sustainable manner.

Explanation/Principal Reasons
Southland's built heritage supports community identity and wellbeing and is integral to the character of the region. Recognising Southland's built heritage and utilising it in a manner that integrates the resource into the streetscape and landscape, yet ensures that the values of the resource are retained, will increase the community's understanding and appreciation of built heritage and enable the resource to be protected for future generations.

Objective HH.3 – **Historic heritage values**
Historic heritage values are appropriately managed to avoid or mitigate the potential adverse effects of natural processes and climate change.

Explanation/Principal Reasons
Natural hazards, such as flooding, earthquakes and storms, may pose a risk to historic heritage. Climate change may intensify the effects of certain natural hazards (for example, coastal erosion because of sea level rise). Avoiding these effects may be achievable in certain circumstances, but it may be impractical and even undesirable in others. Therefore, it is important to improve knowledge around the threats natural hazards and climate change pose to Southland's heritage and the values of at risk historic heritage. Priority and resources can then be given to protecting and managing the region's most important historic heritage. In circumstances where adverse effects cannot be avoided

or mitigated, it may be appropriate to focus the management of important historic heritage on recording their values before they are lost.

14.3 POLICIES

Policy HH.1 – Public awareness and appreciation
Promote public awareness and appreciation of Southland's historic heritage.

Explanation/Principal Reasons
Raising public awareness and increasing the understanding of historic heritage will help protect the resource for future generations. Community heritage groups play an important role in enhancing appreciation and awareness of heritage values. Non-regulatory methods such as providing information, education and financial incentives for protection are important because much of Southland's historic heritage is on privately owned land.

Policy HH.2 – Protection of historic heritage
Avoid, mitigate and, where appropriate, remedy adverse effects on historic heritage values from inappropriate subdivision, use and development. On a case-by-case basis take into account factors such as the significance of heritage values, financial cost and technical feasibility when making decisions relating to the protection of historic heritage.

Explanation/Principal Reasons
In Southland, there is a wide range of historic heritage resources including built heritage, heritage trees, archaeological sites and cultural heritage resources, including natural features and landscapes significant to tangata whenua (refer to Chapter 10: Natural Features and Landscapes). The contribution of an historic heritage resource to Southland's identity and culture will depend on the nature and significance of the resource. Some heritage values are being modified or damaged by subdivision, use and development. Local authorities have an obligation under Section 6(f) of the Act to protect historic heritage values.

It may be appropriate for local authorities to allocate funding and tailor the management of historic heritage to the significance of the historic heritage. Such decisions should be made on a case-by-case basis and take into account and balance the values of the resource, the cost of protecting the resource and the technical feasibility. Specialist expertise in heritage protection and management should be used to assist in historic heritage management decisions.

Policy HH.3 – Integration with new use
Encourage the integration of historic heritage with new subdivision, use and development in both rural and urban areas.

Explanation/Principal Reasons
Integrating historic heritage with new subdivision, use and development can help retain heritage values as well as enhance contemporary developments. Maintaining the value and integrity of historic heritage is an important consideration when integrating historic heritage with new subdivision, use and development. Provided that the values and integrity of the historic heritage site are not compromised, redevelopment should sympathetically extend the life and enhance appreciation of the site's historic heritage. For example, upgrading an old house may involve the restoration of the original design, material and fabric of the building, or restoring the surrounding gardens.

Policy HH.4 – Natural processes and climate change
Encourage and make provisions for the use of appropriate techniques to manage historic heritage at risk of the adverse effects of natural processes and climate change.

Explanation/Principal Reasons
Many of Southland's historic heritage sites are located along the coastline, so they are particularly vulnerable to coastal erosion. Natural processes such as flooding and changing weather patterns, and alterations associated with climate change, such as sea level rise, can erode and break down the physical structure of heritage sites and modify the surroundings associated with the natural and physical resources. Natural hazards may also pose a risk to historic heritage (for example flooding, earthquakes and storms). Local authorities shall encourage and make provision for the use of techniques to avoid and mitigate adverse effects of natural processes and climate change on historic heritage. A number of techniques are available to manage at risk historic heritage values, for example salvage, relocation, excavation, upgrading and repairs of built heritage; and techniques to obtain information from the site for records, such as augering and radio carbon dating.

Policy HH.5 – Collaborative management
Provide for Southland's historic heritage resources to be managed in a regionally consistent, collaborative and integrated manner.

Explanation/Principal Reasons
A number of agencies including the Southland Regional Council, the territorial authorities, the Department of Conservation, Heritage New Zealand Pouhere Taonga and Te Ao Mārama Incorporated have roles and responsibilities regarding the management of historic heritage in Southland. For example:

- tangata whenua have occupied Southland for 800 years or more. Therefore, a significant proportion of the region's heritage (including wāhi tapu, wāhi taonga and other sites of cultural significance) is associated with Māori occupation. To recognise the sensitivity associated with some historic heritage resources collaboration with tangata whenua, as kaitiaki, is important when managing Southland's historic heritage resources. Only tangata whenua can identify their relationship and that of their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga. The matters listed in Policy TW.4 of Chapter 3 are applicable to the implementation of this policy.
- Heritage New Zealand Pouhere Taonga is the Crown entity that promotes the recognition, protection and promotion of New Zealand's historic and cultural heritage and operates under the Heritage New Zealand Pouhere Taonga Act 2014. Heritage New Zealand Pouhere Taonga maintains a list of historic, wāhi tapu and wāhi tupuna places and historic and wāhi tapu areas. This aids the management of historic heritage by providing information to local authorities and the community. Heritage New Zealand is also the consenting authority for all pre-1900 archaeological sites and must, along with Te Ao Marama Inc. and the Police, be contacted in relation to the discovery of koiwi tangata (human skeletal remains). Consultation with Heritage New Zealand Pouhere Taonga is not only valuable, it is often a legal requirement.

However, each agency has skills, interests and values that contribute to heritage management. To ensure the resources of each agency are employed to greatest effect and the best outcome is achieved, open communication and the free flow of information between all parties is important.

Many historic heritage values are determined at a community level. These values may also be significant at a local level. Local significance should not necessarily be considered as of lesser importance than regionally, nationally or internationally recognised values. To determine local values and their significance, collaboration with the community is also important and local authorities will need to determine what consultation with stakeholders who have an interest in the management of

historic heritage within Southland is required. This will be dependent on factors such as the location, significance and type of historic heritage.

Policy HH.6 – Adaptive reuse
Encourage the adaptive reuse and maintenance of built historic heritage.

Explanation/Principal Reasons
Adaptive reuse involves modifying historic heritage buildings or structures that may require new architectural interior/exterior features to allow for a compatible new use with the least possible loss of historic heritage. Alongside ongoing maintenance, it is an effective way to prevent historic heritage buildings and structures from becoming degraded and unsafe due to neglect and to retain the usefulness of the building or structure to conserve historic heritage for future generations. The ICOMOS New Zealand Charter[38] provides support for managers of historic heritage by setting out principles to guide the conservation of places of cultural heritage value in New Zealand.

14.4 METHODS

Local authorities will:

Method HH.1 – District plans and regional plans
Establish and maintain provisions in regional plans and district plans that:
(a) provide for the use of appropriate techniques to protect historic heritage from the potential adverse effects associated with natural processes and climate change;
(b) identify and provide for the protection of historic heritage from inappropriate subdivision, use and development. Mechanisms may include:
    (i) archaeological and heritage assessments;
    (ii) heritage alert layers;
    (iii) accidental discovery protocols;
    (iv) cultural value assessments and/or cultural impact assessments;
    (v) conservation, open space and other appropriate covenants;
    (vi) heritage orders;
    (vii) financial and other incentives; and
    (viii) heritage schedules.

Local authorities will be encouraged to:

Method HH.2 – Collaboration
Collaborate with tangata whenua, Heritage New Zealand Pouhere Taonga, the Department of Conservation, Te Ao Mārama Incorporated, the New Zealand Archaeological Association, the community and other stakeholders (as relevant) to:
(a) identify, evaluate and prioritise known historic heritage sites, structures, areas, places, and their associated surroundings, that require protection from inappropriate subdivision, use and development; and
(b) develop and assess options for a regional framework for the management of historic heritage. This framework may include recommendations such as:
    (i) the development and management of the Southland Coastal Heritage Inventory Project;

[38] The International Charter for the conservation and restoration of monuments and Sites (ICOMOS) New Zealand Charter, *Te Pumanawa o ICOMOS o Aotearoa Hei Tiaki I Nga Taonga Whenua Heke Iho o Nehe,* revised 2010, can be sourced here: http://www.icomos.org.nz/nzcharters.htm

(ii) the development of a Regional Heritage Inventory for Southland;
(iii) new or additional provisions in regional or district plans;
(iv) the development of regional and local heritage strategies;
(v) the development of protocols for dealing with cross-boundary issues;
(vi) identification of available incentives or grants;
(vii) identification and monitoring of threats and recommendations to address or respond to those threats.

Method HH.3 – Education, information, advocacy and consultation

(a) Advocate for appropriate recognition and consideration of specialist assessment and other resources, including the Heritage New Zealand Pouhere Taonga Guidance Series.
(b) Undertake and support education programmes and the provision of information that promote awareness, understanding and conservation of historic heritage.
(c) Consultation shall be undertaken to ensure the views of interest groups and the public are taken into account in preparing documents and prior to making decisions on non-statutory matters.
(d) Advocate for the protection and, where possible, the enhancement of historic heritage to landowners and developers, and consult and engage with Heritage New Zealand Pouhere Taonga, tangata whenua, the Department of Conservation and other relevant interest groups concerned with historic heritage.
(e) Actively encourage and support tangata whenua to identify areas and values of cultural, spiritual and traditional significance (including appropriate protocols and access) and to monitor and manage such areas by providing technical advice, information and/or administrative support.
(f) Investigate the provision of incentives for private owners of historic heritage to encourage and support heritage protection and adaptive reuse.

Method HH.4 – Other methods

Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons

The methods provide a means of achieving a council's objectives and policies in relation to meeting their statutory obligations under the Act. The costs of adopting these methods are outweighed by the benefits, particularly where the sustainable management of the natural and physical environment in relation to historic heritage is concerned. These methods are considered to be most appropriate for achieving the Southland Regional Council's objectives and policies, and meeting their wider statutory obligations.

Local authorities will need to work with tangata whenua, communities, landowners and relevant stakeholders to determine appropriate provisions in plans to protect historic heritage. It is recognised not all historic heritage will be able to be protected. Under Policy HH.2 local authorities are required to take into account factors such as significance, cost and feasibility when making decisions about historic heritage protection. The evaluation of known historic heritage will assist local authorities when making decisions regarding the protection of historic heritage and enable the prioritisation of historic heritage of importance to the tangata whenua and the community. Tools such as heritage assessments, inventory projects and area studies can be used to carry out such evaluations.

The identification of historic heritage is important to enable the establishment of appropriate provisions in their plans for its protection. In some situations it may be beneficial for local authorities to collaborate on the identification of historic heritage. This will enable information and cost sharing and avoid any duplication amongst local authorities. In determining what level of subdivision, use and development is appropriate, local authorities should take into account factors including, but not

limited to, context, significance, extent of modification, damage or destruction and resilience of the historic heritage.

Historic heritage is particularly vulnerable to adverse effects associated with natural process and climate change. Local authorities shall establish provisions within their plans to enable appropriate mitigation from the adverse effects associated with natural processes and climate change such as repairs, upgrading, adaptive reuse, protection works or salvage, excavation or augering.

Southland's museums and public libraries hold valuable information on Southland's historic heritage. This information can be used by local authorities in the management of historic heritage as well as promoting awareness, understanding and conservation of historic heritage. Along with other agencies such as Heritage New Zealand Pouhere Taonga, local authorities need to provide education on historic heritage including, its value, the accidental discovery protocol and the legal framework relating to historic heritage. Local authorities are also encouraged to provide incentives for heritage protection, for example, grants or loans. Education and incentives will enable the landowners, communities, tangata whenua and stakeholders to take an active role in the protection of historic heritage within Southland.

Chapter 15: Infrastructure/Transport

Introduction

This chapter focuses on:

1. development which results in changes to urban, rural-residential, rural areas and land use, together with the infrastructural services which support this development;
2. the strategic integration of land use and regionally significant infrastructure across the region.

This chapter is in two parts. Part A contains provisions that apply to all types of infrastructure, including transport infrastructure. Part B contains provisions specific to transport infrastructure that are not covered by the generic provisions in Part A. In addition Chapter 16: Energy contains provisions specific to energy infrastructure that are not covered by the generic provisions in Part A.

Infrastructure can form part of national, regional or local networks. Transport infrastructure such as road, rail, airports, sea ports, and other utilities, including energy transmission and distribution networks, telecommunications, water, sewerage and storm water are significant physical resources. This infrastructure enables communities to provide for their social, economic, and cultural wellbeing and their health and safety. As stipulated in the National Policy Statement for Renewable Electricity Generation 2011 and the National Policy Statement on Electricity Transmission 2008, the benefits of renewable electricity generation, and the need to operate, maintain, develop and upgrade renewable electricity generation activities and the electricity transmission network, are matters of national significance.

Development results in changes in the places we work, live and associate with. Change can be positive or negative, depending on where, when and how it occurs. It can enable people and communities to provide for their social, economic and cultural wellbeing and can promote positive changes to the environment. However, if not appropriately managed, development can result in changes to natural and physical resources that do not promote sustainable management.

It is also important to have consistent cross boundary jurisdictional management in addressing the adverse effects of and on lineal infrastructure corridors, particularly where infrastructure traverses site, district or regional boundaries.

The Southland Regional Council has a statutory requirement under Section 30(1)(gb) of the Act to make provision for the strategic integration of infrastructure with land use. The strategic integration of land use with regionally significant infrastructure is important for the functioning of communities at the national, regional and local scale. Without effective regionally significant infrastructure, the benefits of development will decline or development will result in unacceptable adverse effects on the environment. While there is a need to make provision for the development, expansion and maintenance of this infrastructure, it is also important to manage the way this occurs in order to ensure the way in which it changes the environment is appropriate.

There are opportunities to improve energy efficiency through the efficient design, location and function of development and in particular minimising energy use, promoting healthier transport options and providing for the efficient use of existing infrastructure.

Other chapters in the RPS address issues that relate to, infrastructure or transport, such as Chapter 9: Air Quality, Chapter 8: Natural Hazards, Chapter 16: Energy and Chapter 17: Urban. Therefore, Chapter 15 should be read in association with the other chapters of this policy statement.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

Part A: Infrastructure

Table 15: Overview of Infrastructure provisions

Issues	Objectives	Policies	Methods
Issue INF.1	**Objective INF.1** Southland's infrastructure	**Policy INF.1** Regional, national and critical infrastructure	**Methods INF.1 - 6**
		Policy INF.2 Infrastructure and the environment	**Methods INF.1, 2, 4 - 6**
		Policy INF.3 Infrastructure protection	**Methods INF.1 - 6**
		Policy INF.5 Development, subdivision and land use	**Methods INF.1 - 6**
		Policy INF.6 Promoting consistent and integrated management of infrastructure across the region	**Methods INF.1 – 3, 5, 6**
Issue INF.2	**Objective INF.1** Southland's infrastructure	**Policy INF.2** Infrastructure and the environment	**Methods INF.1, 2, 4 - 6**
		Policy INF.4 Natural hazards	**Methods INF.1, 2, 4 - 6**
Issue INF.3	**Objective INF.1** Southland's infrastructure	**Policy INF.1** Regional, national and critical infrastructure	**Methods INF.1 - 6**
		Policy INF.2 Infrastructure and the environment	**Methods INF.1, 2, 4 - 6**
		Policy INF.4 Natural hazards	**Methods INF.1, 2, 4 - 6**
		Policy INF.6	**Methods INF.1 – 3, 5, 6**

		Promoting consistent and integrated management of infrastructure across the region	
Issue INF.4	**Objective INF.1** Southland's infrastructure	**Policy INF.1** Regional, national and critical infrastructure	**Methods INF.1 - 6**
		Policy INF.3 Infrastructure protection	**Methods INF.1 - 6**
		Policy INF.5 Development, subdivision and land use	**Methods INF.1 - 6**
		Policy INF.6 Promoting consistent and integrated management of infrastructure across the region	**Methods INF.1 – 3, 5, 6**

15.1 ISSUES

Issue INF.1
Land use change and development is not always integrated with local, regional and national infrastructure and this can affect the communities' social and economic wellbeing or health and safety.

Issue INF.2
The impact of climate change and natural hazard events are a risk to critical infrastructure.

Issue INF.3
The provision of infrastructure and associated activities are important to enable people and communities to provide for their social, economic and cultural wellbeing, but, where not appropriately managed, can result in significant adverse effects on land use and the environment.

Issue INF.4
Subdivision, use and development can result in adverse effects, including reverse sensitivity effects, on existing or planned infrastructure development and activities.

15.2 OBJECTIVE

Objective INF.1 – Southland's infrastructure
Southland's regionally significant, nationally significant and critical infrastructure is secure, operates efficiently, and is appropriately integrated with land use activities and the environment.

Explanation/Principal Reasons
Southland's regional, national and critical infrastructure is essential to enable the wellbeing, health and safety of people and communities. Infrastructure in the wider region has the following characteristics:

1. it significantly contributes to the social, economic and cultural wellbeing of people and communities;
2. it is the subject of considerable financial investment;
3. it is unlikely to be readily replaced or duplicated;
4. it requires integrated management with other natural and physical resources.

Recognition of the importance of significant infrastructure will lead to greater weight being given to its requirements. As a consequence, it is desirable to manage the location and form of the surrounding development to reduce incompatibility and conflicts. It is also desirable to control any effects infrastructure may have on the environment.

The term 'appropriately' is used in this objective to recognise that the extent to which adverse effects may be avoided, remedied, mitigated, or where appropriate, and such measures are volunteered by the resource user, offset or compensated for, may vary depending on the particular circumstances of each particular case.

15.3 POLICIES

Policy INF.1 – Regional, national and critical infrastructure
Recognise the benefits to be derived from, and make provision for, the development, maintenance, upgrade and ongoing operation of regionally significant, nationally significant and critical infrastructure and associated activities.

Explanation/Principal Reasons
It is essential that provision be made for continued operation, maintenance and upgrades of new and existing critical infrastructure services, including the region's lifeline infrastructure. This should include targeted planning for future needs because robust infrastructure underpins the social, economic, cultural and environmental wellbeing of our region.

Policy INF.2 – Infrastructure and the environment
Where practicable, avoid, remedy or mitigate the adverse effects of infrastructure on the environment. In determining the practicability of avoiding, remedying, or mitigating adverse effects on the environment, the following matters should be taken into account:

(a) any functional, operational or technical constraints that require the physical infrastructure of regional or national significance to be located or designed in the manner proposed;
(b) whether there are any reasonably practical alternative designs or locations;
(c) whether good practice approaches in design and construction are being adopted;
(d) where appropriate, and such measures are volunteered by a resource user, whether any significant residual adverse effects can be offset or compensated for; and
(e) the need to give effect to the NPSET (2008) including that planning and development of the transmission system should seek to avoid adverse effects on outstanding natural landscapes, areas of high natural character and areas of high recreation value and amenity and existing sensitive activities.

Explanation/Principal Reasons
While public infrastructure provides communities with essential services, this infrastructure should not unnecessarily detract from the environment in which it is placed. For example, the construction or maintenance of a road should not cause adverse effects on people's health from dust or on water quality from dust suppressants. This is especially important when looking to install new infrastructure. Careful consideration of all infrastructure types and possible locations should be completed to determine which option will have the least impact to the environment, and ensure that infrastructure is integrated with surrounding land use and maintained to avoid, remedy, mitigate, or where appropriate, and such measures are volunteered by the resource user, offset or compensated for adverse effects. Assessments of environmental effects should have regard to all matters of national significance, including the significance of the infrastructure activity itself.

Policy INF.3 – Infrastructure protection
Protect regionally significant, nationally significant and critical infrastructure, particularly from new incompatible land uses and activities under, over or adjacent to the infrastructure.

Explanation/Principal Reasons
Southland's significant infrastructure requires protection from land use and development changes that may result in damage to existing or planned infrastructure or reverse sensitivity issues. Existing infrastructure may also be located in coastal or sensitive environments and should be protected to allow for its maintenance and retention.

When managing new incompatible land uses and activities under, over, or adjacent to the infrastructure, local authorities shall take into account the benefits of the existing infrastructure and the constraints imposed by the technical and operational requirements of infrastructure. Local authorities shall also apply a consistent and coordinated approach to providing for the operation, maintenance and upgrade of regionally significant infrastructure and nationally significant infrastructure.

Policy INF.4 – Natural hazards
The risks to infrastructure from natural hazards and climate change effects are avoided, remedied, or mitigated including through design and construction.

Explanation/Principal Reasons
New regionally significant infrastructure and upgrades to existing regionally significant infrastructure shall be located to avoid, or designed to mitigate, known natural hazard risks and climate change effects. Planning, where possible, should consider the placement of infrastructure to avoid natural hazards because of the need for essential services to be as robust as they can be in the face of the uncertainties created by climate change.

Policy INF.5 – Development, subdivision and land use
Management of development, subdivision and landuse shall ensure:
(a) development does not result in adverse effects on the efficient operation, use, maintenance and development of infrastructure;
(b) the nature, timing and sequencing of new development is coordinated with the development, funding, implementation and operation of infrastructure, as appropriate for the type of development being undertaken;
(c) the efficient and effective functioning of infrastructure, including the ability to develop, maintain, remove, decommission and upgrade infrastructure, is retained;
(d) a coordinated and integrated approach across regional and district boundaries, and between agencies.

Explanation/Principal Reasons
Subdivision, use and development activities can lead to a range of undesirable and unsustainable effects on the functioning of infrastructure. The policy seeks a coordinated and managed approach between development activities and infrastructure planning so that land use change does not result in unplanned effects on the functioning of infrastructure.

Policy INF.6 – Promoting consistent and integrated management of infrastructure across the region
Provide for the integrated management of the region's infrastructure by:
(a) recognising the interconnected nature of natural and physical resources; and
(b) promoting a collaborative and consistent approach to managing infrastructure, particularly infrastructure networks that crosses zone and/or territorial boundaries.

Explanation/Principal Reasons
The physical nature of infrastructure, particularly lineal infrastructure, is often relatively constant but there can be varying and inconsistent planning methods where infrastructure crosses different receiving environments, planning zones and/or jurisdictional boundaries. Agencies and organisations with resource management responsibilities should therefore adopt a collaborative approach to promote the efficient and integrated management of infrastructure and receiving environment.

15.4 METHODS

The Southland Regional Council will:

Method INF.1 – Regional plans
Include objectives, policies and methods in regional plans that will:
(a) enable the development, use, maintenance and upgrading of infrastructure, whilst ensuring the management of any associated adverse effects;
(b) help ensure that the nature, timing and sequencing of new development is coordinated with the development, funding, implementation and operation of infrastructure, as appropriate for the type of development being undertaken;
(c) ensure that adverse effects, including reverse sensitivity effects, of development and land use on existing and/or planned regionally and nationally significant infrastructure are avoided, remedied or mitigated by identifying:
    (i) what activities and development may be incompatible with this infrastructure; and
    (ii) how this infrastructure should be protected from such activities;
(d) promote the efficient and effective use of infrastructure;
(e) take into account the potential adverse effects of natural hazards and climate change on infrastructure;
(f) facilitate long-term planning for investment in infrastructure and its integration with land uses.

Territorial authorities will:

Method INF.2 – District plans
Include objectives, policies and methods in district plans that will:
(a) enable the development, use, maintenance and upgrading of infrastructure, whilst ensuring the management of any associated adverse effects;
(b) help ensure that the nature, timing and sequencing of new development is coordinated with the development, implementation and operation of infrastructure, as appropriate for the type of development being undertaken;
(c) ensure that adverse effects, including reverse sensitivity effects, of development and land use on existing and/or planned regionally and nationally significant infrastructure are avoided, remedied or mitigated by identifying:
    (i) what activities and development may be incompatible with this infrastructure; and
    (ii) how this infrastructure should be protected from such activities;
(d) promote the efficient and effective use of infrastructure;
(e) take into account the potential adverse effects of natural hazards and climate change on infrastructure;
(f) facilitate long-term planning for investment in infrastructure and its integration with land uses.

Local authorities will be encouraged to:

Method INF.3 – Consistent approach
To the extent applicable to the district, apply a regionally consistent and coordinated approach to the development, establishment, operation, maintenance and upgrade of local, regional and national infrastructure.

Method INF.4 – Monitoring
Monitor and report the environmental effects of the development, maintenance and operation of infrastructure. The environmental effects of infrastructure on the air, land, water quality and the

coastal marine area will be monitored where appropriate. The effects of other development on the effectiveness and efficiency of infrastructure will also be monitored where appropriate.

Method INF.5 – Consultation

(a) Consult with tangata whenua and take into account Te Tangi a Tauira and other relevant iwi planning documents when making resource management decisions regarding the use or development of land for infrastructure which may adversely affect the life supporting capacity of air, land or water, or tangata whenua cultural or spiritual values.

(b) Consult with the owners and operators of national and regional significant infrastructure to identify an appropriate buffer area or corridor within which it can be expected that sensitive activities will generally not be provided for.

Method INF.6 – Other methods

Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS.

Explanation/Principal Reasons

The requirement to include objectives, policies and methods in regional and district plans will make provision for infrastructure while avoiding, remedying, mitigating, or where appropriate, and such measures are volunteered by the resource user, offsetting or compensating for effects arising from the establishment, maintenance and operation of that infrastructure, while providing certainty to the community.

District Plans have a role to play in infrastructure planning, determining where development goes and managing effects. District methods could include structure plans, spatial plans or zoning tools.

The methods will protect infrastructure which is a regionally significant resource, which is unlikely to be easily replaced or duplicated. This infrastructure is significant in terms of the contribution that it makes to the social, economic and cultural wellbeing of people and communities of the wider region, and protection of it is ensuring the effects on this environment, which would arise from replacement, are avoided.

It is not always possible to “internalise” all adverse effects on the environment when developing or operating infrastructure e.g. airports, and in some cases the infrastructure influences the quality of the surrounding environment.

Methods which require the identification of natural hazards and the requirement to identify the extent to which proposals will avoid, remedy or mitigate effects will ensure the development of infrastructure development minimises the risks arising from natural hazards.

Part B: Transport

Table 16: Overview of Transport provisions

Issues	Objectives	Policies	Methods
Issue TRAN.1	**Objective TRAN.1** Transport and land use	**Policy TRAN.1** Transport decision making	**Methods TRAN.2, 4, 6, 8**
		Policy TRAN.2 Strategic planning	**Methods TRAN.2, 4, 6, 8**
		Policy TRAN.3 Integration of existing and future transport infrastructure	**Methods TRAN.1 - 4, 6 - 8**
Issue TRAN.2	**Objective TRAN.1** Transport and land use	**Policy TRAN.4** Protection of health and environmental values	**Methods TRAN.1, 3, 5 - 8**
Issue TRAN.3	**Objective TRAN.1** Transport and land use	**Policy TRAN.2** Strategic planning	**Methods TRAN.2, 4, 6, 8**
		Policy TRAN.3 Integration of existing and future transport infrastructure	**Methods TRAN.1 - 4, 6 - 8**
Issue TRAN.4	**Objective TRAN.1** Transport and land use	**Policy TRAN.2** Strategic planning	**Methods TRAN.2, 4, 6, 8**
		Policy TRAN.3 Integration of existing and future transport infrastructure	**Methods TRAN.1 - 4, 6 - 8**

15.5 ISSUES

Issue TRAN.1
Ineffective integration of land use and transport networks can have adverse effects on the safety, efficiency, effectiveness and accessibility of Southland's transport infrastructure.

Issue TRAN.2
Transport corridors and related transport movements can give rise to adverse public health and environmental effects.

Issue TRAN.3
Regional pressures on Southland's transport infrastructure including demographic changes, increased freight projections, tourism demand and land use change.

Issue TRAN.4
There are limited transportation options available to address changes in technology and demographics in Southland.

15.6 OBJECTIVE

Objective TRAN.1 – Transport and land use
Development of transport infrastructure and land use take place in an integrated and planned manner which:

(a) integrates transport planning with land use;
(b) protects the function, safety, efficiency and effectiveness of the transport system;
(c) minimises potential for reverse sensitivity issues to arise from changing land uses;
(d) provides for positive social, recreational, cultural and economic outcomes;
(e) minimises the potential for adverse public health and environmental effects;
(f) enhances accessibility and connectivity, maximising transport choice for users of the transport system.

Explanation/Principal Reasons
Land use and transport infrastructure require coordination and integration in order to ensure potentially significant benefits to people and the community are achieved, and that the adverse effects on the environment are appropriately controlled. If the strategic integration between land use and transport infrastructure does not occur, this may result in:

(a) constraints on the use and development of transport infrastructure;
(b) the untimely, inefficient and costly provision of transport infrastructure;
(c) transport infrastructure unnecessarily adversely affecting the surrounding land uses;
(d) adverse effects on the environment caused by the lack of, or unsuitable provision of appropriate infrastructure;
(e) limited accessibility and lack of transport choice to promote efficient transport systems.

15.7 POLICIES

Policy TRAN.1 – Transport decision making
Strategic decision making processes relating to the transportation network shall be undertaken in a collaborative manner between local authorities, key stakeholders, and the community.

Explanation/Principal Reasons
There are a number of statutory and non-statutory processes, plans and strategies which influence land use and transport planning. A collaborative approach in the development and management of these processes and documents will be required to ensure land use changes are planned and delivered in an integrated manner. Local authorities will therefore be directed to ensure the community and key stakeholders (such as other local authorities, road controlling authorities, infrastructure providers, affected landowners, the transport industry, and tangata whenua) are provided with the opportunity for strategic involvement in transport decision-making processes.

Policy TRAN.2 – Strategic planning
Develop and maintain, in collaboration with local authorities, key stakeholders and the community, a strategic transportation network plan or other appropriate strategic transport planning tool, for Southland that provides for existing and future transport requirements.

Explanation/Principal Reasons
The function of the individual road types needs to be planned for, and their use protected from, inappropriate development. A strategic network plan will:
(a) guide adjacent land use by ensuring development is appropriate to the transport infrastructure available;
(b) recognise the limitations that may be placed on maintenance and/or use of the transport network from restrictions on the supply of oil or increases in the supply cost of oil and fuel;
(c) recognise the importance of transport infrastructure in the region's lifeline recovery planning;
(d) promote opportunities to improve transport energy efficiency.

Policy TRAN.3 – Integration of existing and future transport infrastructure
Integrate land use planning with transport infrastructure planning and make provision for future transportation requirements.

Explanation/Principal Reasons
Integrated planning will ensure the safe, efficient and effective use of the existing transport infrastructure is maintained and allow for future transport infrastructure needs where these can be determined. Measures are required to prevent development along the transport routes radiating from human settlements (ribbon development), avoid the need for additional access points to strategically important roads, and to provide or maintain buffer zones between development and existing transport infrastructure, so as to prevent reverse sensitivity issues arising.

Policy TRAN.4 – Protection of health and environmental values
Manage transport activities to avoid, remedy or mitigate adverse effects on public health and environmental values.

Explanation/Principal Reasons
Public health can be affected by such issues as noise, emissions, vibration and dust resulting from transport activities. Poorly designed or constructed infrastructure can cause road safety issues potentially leading to injuries or fatalities. Other environmental effects can result from waste discharges from stock trucks, campervans and other vehicles; dust resulting from vehicle movements;

increased greenhouse gas levels in the atmosphere associated with vehicle emissions; and stormwater discharges from the road surface, vehicles and road maintenance, and earthworks activities.

15.8 METHODS

The Southland Regional Council will:

Method TRAN.1 – Regional plans and strategies
Having regard to the Strategic Transportation Network Plan or other appropriate strategic transport planning tool, include objectives, policies and methods in regional plans which, to the extent applicable, protects national and regional transportation infrastructure from inappropriate development and activities by:

(a) making provision for the establishment, operation and maintenance of multi modal transportation infrastructure appropriate to the level and type of development anticipated;
(b) protecting public health and environmental values from inappropriate discharges of contaminants to air, water and land during the operation, development and maintenance of transportation infrastructure;
(c) promoting improved energy efficiency in the transport sector;
(d) promoting implementation of the Regional Road Safety Strategy.

Method TRAN.2 – Strategic transportation network plan
Develop and maintain a strategic transportation network plan, in conjunction with territorial authorities, which will:

(a) identify the existing strategic land transport network and transport facilities (air, land and sea);
(b) identify future upgrade and development needs to efficiently service current and planned future land and transport use and mode patterns;
(c) identify opportunities for integrated land use and transport planning.

Territorial authorities will:

Method TRAN.3 – District plans
Include objectives, policies and methods in district plans which:

(a) identify existing and proposed strategic transport infrastructure;
(b) make provision for the establishment and continuing operation and maintenance of transport infrastructure;
(c) avoid, remedy or mitigate the adverse effects, including reverse sensitivity, on transport infrastructure arising from subdivision, use and development of land;
(d) ensure the safe and efficient operation of the transport network is not adversely affected by subdivision, land use and development;
(e) avoid, remedy or mitigate the adverse effects of transport infrastructure and associated activities on the environment;
(f) make provision for development which enables all transport modes to be well connected and provides for public transport, walking and cycling;
(g) ensure public health and environmental values are considered;
(h) promote the use of energy efficient transport modes and technologies.

Local authorities will be encouraged to:

Method TRAN.4 – Regional Land Transport Strategy
Identify the strategic land transport network in the Southland Regional Land Transport Strategy.

Method TRAN.5 – Promotion and information
Promote, inform and encourage the farming industry and transport operators to adopt good practices, including the avoidance of stock effluent being deposited on roads during transportation.

Method TRAN.6 – Collaboration
Work collaboratively with road controlling authorities, infrastructure providers, the Southern District Health Board, contractors, affected landowners, and tangata whenua during transport decision-making processes and when developing strategic transportation documents. This will provide the opportunity for strategic input and integrated planning and decision making. It will also provide the opportunity to investigate and adopt good practice methods for the construction, maintenance and improvement of roads and other infrastructure which will avoid, remedy or mitigate effects on the environment e.g. the investigation of alternative dust suppressants for gravel roads. Participation from the Southern District Health Board should also ensure consideration of a health in all policies (HiAP) approach can be included in relevant decision-making processes.

Method TRAN.7 – Monitoring
Monitor and report the environmental effects of infrastructure, development, maintenance and operation. The environmental effects of infrastructure on the air, land, water quality and the coastal marine area will be monitored where appropriate. The effects of other developments on the effectiveness and efficiency of infrastructure will also be monitored where appropriate.

Method TRAN.8 – Other methods
Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal Reasons
The requirement to include objectives, policies and methods in regional and district plans will make provision for transport infrastructure while avoiding, remedying and mitigating effects arising from the establishment, maintenance and operation of that infrastructure, while providing certainty to the community.

It is not always possible to "internalise" all adverse effects on the environment when developing or operating infrastructure e.g. airports, and in some cases the infrastructure influences the quality of the surrounding environment. Development of a Strategic Transportation Plan, through a collaborative process, will contribute to sustainable management of the physical resource and integrated management of the surrounding environment in terms of the nature, development and form is desirable to reduce incompatibility and conflicts.

Methods which require development patterns to provide for all modes of transport be well connected, and provides for public transport, walking and cycling will enable over time, a reduction in the reliance on cars for journeys and enable attractive environments in which to live, work and play.

Chapter 16: Energy

Introduction

The purpose of this chapter is to recognise resource management issues regarding energy within the region, and provide policy guidance for addressing those issues that are not addressed elsewhere in the RPS.

This chapter contains provisions specific to energy infrastructure that are not covered by the generic provisions in Chapter 15: Infrastructure/Transport (Part A: Infrastructure).

Energy is a critical factor in enabling Southland's communities to provide for their wellbeing, health and safety. Southland's economy depends on access to a reliable supply of energy. Energy is an essential resource for the transport, agricultural, industrial, commercial and residential sectors. Demand for energy from all sectors is expected to continue to grow into the future.

While access to energy is vital to the social, economic and cultural wellbeing of the region and New Zealand, adverse effects from the generation, transmission, distribution and use of energy can occur. Generation facilities may cause adverse effects, through modification of natural resources such as water or ecosystems, or by impacting on important values associated with landscapes or recreation. The transmission or distribution of energy can cause adverse effects on people and communities, for example diminishing existing landscape values and restricting land use development options. The use of energy can also cause adverse effects, for example the use of energy in the transport sector may adversely affect local air quality.

Southland contains significant renewable and non-renewable energy resources. The Manapōuri Power Scheme involves the largest Hydro Power Station in New Zealand. It supplies a major proportion of the electricity to the Tiwai smelter (New Zealand's largest electricity user). The construction and operation of the Manapōuri Power Scheme is authorised by the Manapōuri – Te Anau Development Act 1963. Section 4(1) of the Act gives Meridian Energy Limited "full power and authority" to undertake the activities described in that section. A High Court decision in 2014[39] held that section 9(3) of the Act does not apply to authorised land use activities that are necessary or requisite to operate the Scheme and associated works.

Other significant electricity generation activities in the region include the Monowai hydro scheme and the White Hill Wind Farm. These renewable electricity generation activities are of regional and national significance. Despite this generation, Southland still imports electricity from other regions.

Making better use of energy, through new technology, increased energy efficiency and conservation measures, can reduce demands on energy resources, and thereby delay the need for investment in new energy supplies and infrastructure. It can also improve energy security and reliability by reducing the possibility of demand exceeding the supply of energy, reduce business and household energy costs, improve transport energy efficiency and reduce greenhouse gas emissions.

In addition to improving energy efficiency, other actions need to be taken in order to achieve the government's electricity generation targets. Such actions include maintaining output of existing renewable electricity generation and developing new renewable electricity generation activities.

[39] Meridian Energy Limited v Southland District Council [2014] NZHC 3178.

The Southland region contains under utilised energy resources, which can be used and developed to increase the regions' contribution towards local, regional and national energy needs. However, there can be significant practical constraints associated with the use and development of energy resources.

Technology for the generation, transmission, distribution and use of energy is evolving. This new technology may have an important role in promoting sustainable energy development and use. As finite resources, such as oil, become scarce, more expensive and harder to extract due to environmental concerns, new technologies for producing energy from renewable sources will continue to be necessary to enable continued economic growth.

The protection, use and development of energy resources is inextricably linked to Chapter 15: Infrastructure/Transport. Chapter 15 provides for the use and development of infrastructure, focusing on the provision for strategically planned and integrated infrastructure of national, regional and critical significance. The other chapters within this RPS are also relevant to the use and development of energy resources, in terms of protecting environmental values and providing for other types of regionally significant development. If there are competing issues, objectives and policies, the provisions of all the chapters will be evaluated and reconciled to reach an outcome that promotes sustainable management.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

Current and potential energy resources within Southland include fossil fuels, and renewable energy resources such as water, wood, wind, solar, tidal and wave. The use and development of renewable energy resources enables continuation of supply without depleting the source, while fossil fuel sources such as Southland's coal and lignite resources, have significant potential for future development, but are finite resources and the use of them contributes to greenhouse gas emissions.

Table 17: Overview of Energy provisions

Issues	Objectives	Policies	Methods
Issue ENG.1	**Objective ENG.1** Efficient use of energy resources	**Policy ENG.1** Energy efficiency and conservation	**Methods ENG.1 - 6, 9 - 11**
		Policy ENG.3 Small and community-scale distributed generation	**Methods ENG.1, 2, 8, 11**
Issue ENG.2	**Objective ENG.2** Use and development of energy resources	**Policy ENG.5** Mineral and non-renewable energy resources	**Methods ENG.1, 2, 6, 7, 10, 11**
		Policy ENG.6 Offsetting and/or environmental compensation	**Methods ENG.2, 4, 11**
		Policy ENG.7 Effects on local communities	**Methods ENG.2, 4, 10, 11**
Issue ENG.3	**Objective ENG.3** Generation and use of renewable energy	**Policy ENG.2** Benefits of renewable energy	**Methods ENG.1, 2, 5, 6, 8, 11**
		Policy ENG.4 Potential sites and sources for renewable electricity generation	**Methods ENG.1, 2, 6, 7, 11**
	Objective ENG.4 National significance	**Policy ENG.2** Benefits of renewable energy	**Methods ENG.1, 2, 5, 6, 8, 11**
		Policy ENG.4 Potential sites and sources for renewable electricity generation	**Methods ENG.1, 2, 6, 7, 11**
Issue ENG.4	**Objective ENG.1** Efficient use of energy resources	**Policy ENG.1** Energy efficiency and conservation	**Methods ENG.1 - 6, 9 - 11**
		Policy ENG.3	**Methods ENG.1, 2, 8, 11**

Issues	Objectives	Policies	Methods
		Small and community-scale distributed generation	
	Objective ENG.2 Use and development of energy resources	**Policy ENG.5** Mineral and non-renewable energy resources	**Methods ENG.1, 2, 6, 7, 10, 11**
	Objective ENG.3 Generation and use of renewable energy	**Policy ENG.2** Benefits of renewable energy	**Methods ENG.1, 2, 5, 6, 8, 11**
		Policy ENG.4 Potential sites and sources for renewable electricity generation	**Methods ENG.1, 2, 6, 7, 11**

16.1 ISSUES

Issue ENG.1
Energy can be lost through inefficient use, which can place pressure on existing energy infrastructure and create unnecessary demand for new energy infrastructure, which can cause adverse environmental effects.

Issue ENG.2
Development and use of Southland's energy resources is of regional and national importance, but may have adverse environmental effects.

Issue ENG.3
There are energy resources that are under utilised in Southland and their ability to be used can be subject to logistical, technical and locational constraints.

Issue ENG.4
There is a need to reduce the risk of energy supply disruptions and energy shortages.

16.2 OBJECTIVES

Objective ENG.1 – Efficient use of energy resources
Efficient use of energy resources.

Explanation/Principal Reasons
The efficient use of energy minimises the pressure on energy production and infrastructure, and results in a range of benefits, including reduced business and household energy costs, improved transport energy efficiency and reduced greenhouse gas emissions. Additional co-benefits include improved mobility, improved health in insulated homes and increased comfort of commercial buildings. The use of energy can be made more efficient if development is designed and located to reduce the need to commute over significant distances, and services are closer to the population base. Self-sufficient energy activities are particularly efficient and should be encouraged. Transport planning can encourage more efficient transport options and technologies, such as electric vehicles. Energy efficient urban design principles, such as orientating and placing housing so that solar gain is maximised can provide long-term energy efficiency. The uptake of new energy efficient technologies and the replacement of old inefficient infrastructure can reduce pressure and cost of providing for our ongoing energy needs.

Objective ENG.2 – Use and development of energy resources
Use, development, transmission and distribution of local and regional energy resources is undertaken where the adverse effects on the environment (including communities) are avoided, remedied, mitigated, or where appropriate, and such measures are volunteered by the resource user, offset or compensated for.

Explanation/Principal Reasons
Energy use and development has measurable adverse effects on the environment and on communities. These effects include, but are not limited to, discharges, indigenous biodiversity, and landscape impacts. On the other hand, a secure supply of energy is required to provide for social, economic and cultural wellbeing and the health and safety of the people of Southland. Therefore, where the adverse effects of the use and development of local and regional energy resources can be avoided, remedied, mitigated or, where appropriate, and such measures are volunteered by a

resource user, offset or compensated for, these activities should be seen as a positive for our communities.

The extent to which adverse effects may be avoided, remedied, mitigated, offset or compensated for, may vary depending on the particular circumstances of each particular case. The potential locations of these activities are limited by the location of the natural resource the activities are reliant on, and in some cases, practical constraints can limit the ability to avoid, remedy or mitigate all adverse effects. When this is the case for activities that have benefits of a national scale, the adverse effects should be carefully managed to ensure they are avoided, remedied, mitigated or, where appropriate, and such measures are volunteered by a resource user, offset or compensated for.

Objective ENG.3 – Generation and use of renewable energy
Generation and use of renewable energy resources is increased.

Explanation/Principal Reasons
Maximising the ability to appropriately harness the region's renewable resources to provide energy for Southland communities will ensure there is a suitable supply of energy into the future and will not reduce future generations' ability to provide for their energy needs. Renewable energy resources such as wind, water, solar, biomass, tidal, wave and ocean current can be used to generate electricity. Other renewable energy resources, for example biofuel and wood, can be used as fuel for transport and sources of heat for manufacturing and processing. Meeting or exceeding the New Zealand Government's national target for the generation of electricity from renewable resources will require the significant development of renewable electricity generation activities.

Objective ENG.4 – National significance
Recognise and make provision for the national significance of renewable electricity generation activities.

Explanation/Principal Reasons
The contribution of renewable electricity generation, regardless of scale, towards addressing the effects of climate change, plays a vital role in the wellbeing of New Zealand's people and environment.

The National Policy Statement for Renewable Electricity Generation 2011 (NPSREG) requires local authorities to recognise the national significance of renewable electricity generation activities to ensure increased national consistency in addressing the competing values associated with the development of New Zealand's renewable energy resources, providing greater certainty to decision-makers, applicants, and the wider community.

This objective recognises the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation.

16.3 POLICIES

Policy ENG.1 – Energy efficiency and conservation
Promote energy efficiency and conservation.

Explanation/Principal Reasons
Energy, in all its different forms, is a core part of everything we do, so it is extremely important that we continue to have a secure supply in the future. Improving energy efficiency can reduce pressure on existing energy production and infrastructure. Energy efficiency improvements can reduce business and household energy costs, improve transport energy efficiency and reduce greenhouse gas emissions. There are also a range of co-benefits associated with improved mobility, improved health in insulated homes and increased comfort of commercial buildings. Local authorities should actively promote the conservation and efficient use of energy when considering subdivision design, building design, site layout, and location of land use developments. Energy conservation and efficiency should be promoted in domestic, residential, commercial, transport and industrial planning.

Policy ENG.2 – Benefits of renewable energy
Recognise and make provision for the development of renewable energy activities, and their benefits, which include:

- maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;
- maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;
- using renewable natural resources rather than finite resources;
- the reversibility of the adverse effects on the environment of some renewable electricity generation technologies;
- avoiding reliance on imported fuels for the purposes of generating electricity;

while appropriately addressing adverse effects.

Explanation/Principal Reasons
Preferring the development and use of renewable energy resources over non-renewable energy resources when forming policy and making decisions on resource consents will provide for future generations by maintaining the resource and help reduce the risks associated with climate change. Decision-making should recognise the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities.

In recognising and providing for these benefits:

- consented and existing renewable electricity generation activities should, to a reasonably practicable extent, be protected against future reverse sensitivity issues by managing the effects of development and land use to avoid such issues;
- renewable energy sources that are only located at a particular site may require protection for the purpose of generating electricity by appropriately managing the adverse effects of development and land use to avoid activities that would not allow that resource to be used;
- the assets, operational capacity and continued availability of the renewable energy resource may require protection for the purpose of maintaining the generation output of existing renewable electricity generation activities; and
- decision-makers should have regard to the fact that even minor reductions in the generation output of existing renewable electricity generation activities can cumulatively have significant adverse effects on national, regional and local renewable electricity generation output.

Policy ENG.3 – Small and community-scale distributed generation
Encourage and make provision for the development, operation, maintenance and upgrading of small and community-scale distributed renewable electricity generation.

Explanation/Principal Reasons
Small and community-scale distributed renewable electricity generation has the benefit of increasing reliability of energy supply and reducing risk of energy supply failure for individuals and communities. There are real opportunities for individuals, businesses and community groups to provide for their own needs through small and community-scale distributed renewable electricity generation. There are particular opportunities for remote communities. Local authorities should encourage and make provision for the use of small scale energy production for individual domestic use where proven to be suitable, i.e. solar hot water systems for homes. Sometimes small and community-scale distributed renewable electricity generation can lead to a surplus of energy relative to requirements. Local authorities should encourage any surplus electricity produced to be returned to the national grid. This can also help ensure a secure supply of energy for the region.

Policy ENG.4 – Potential sites and sources for renewable electricity generation
Make provision for activities associated with the investigation, identification, and assessment of potential sites and energy sources for renewable electricity generation by existing and prospective generators.

Explanation/Principal Reasons
The NPSREG seeks to recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities so that the proportion of New Zealand's electricity generated from renewable sources increases. One way to increase that proportion, and provide for the development of renewable electricity generation, is to allow for energy prospectors to investigate, identify and assess potential sites and energy sources, for renewable electricity generation. The NPSREG requires regional policy statements, and regional and district plans to make provision for these activities. This will also help achieve Objective ENG.3 because if more suitable sites are found and assessed then this may lead to increased generation and use of renewable energy sources.

Policy ENG.5 – Mineral and non-renewable energy resources
Make provision for the development of mineral and non-renewable energy resources where the adverse effects can be avoided, remedied or mitigated.

Explanation/Principal Reasons
Because energy has such an important role in our society, consideration needs to be given to all energy sources to ensure the best outcome for people living in Southland. The potential benefits outside of the local area or region need to be taken into account when considering the development of regional and nationally significant mineral resources. It is also important that nationally significant resources are protected against future reverse sensitivity issues by managing development and land use to avoid conflict.

Policy ENG.6 – Offsetting and/or environmental compensation
When considering any residual environmental effects (including social effects) arising from the use and development of new energy resources that cannot be avoided, remedied or mitigated, decision-makers shall have regard to offsetting measures or environmental compensation where appropriate, and such measures are volunteered by the resource user, including measures or compensation which benefit the local environment and community affected, including tangata whenua.

Explanation/Principal Reasons

Energy (both renewable and non-renewable) use and development has measurable adverse effects on the environment and communities where energy projects occur. These adverse effects include, but are not limited to, discharges, water and mineral depletion and landscape impacts. The adverse effects from the use and development of the energy resources should first be avoided, remedied or mitigated. However, if there are residual adverse effects after these steps have been taken then decisions on consent applications shall have regard to offsetting measures or compensation which benefits the local environment and community affected. This is required by the NPSREG for renewable electricity generation projects. This policy applies to any new use or development of energy resources, and any increase in capacity of electricity generation.

Policy ENG.7 – Effects on local communities

Ensure any potential adverse effects on local communities from the ongoing operation and subsequent closure of energy facilities are:

(a) appropriately addressed as part of associated resource consent processes; and

(b) avoided, remedied, mitigated, or where appropriate, and such measures are volunteered by the resource user, offset or compensated for.

Explanation/Principal Reasons

Electricity generation can have effects that span local, regional and national scales, often with adverse effects manifesting locally and positive effects manifesting nationally. Decision makers need to deal with any local effects on the community during the lifetime of those energy facilities as well as following the closure of those energy facilities.

16.4 METHODS

The Southland Regional Council will:

Method ENG.1 – Regional plans

(a) Establish and maintain provisions in regional plans to encourage:
  (i) energy efficiency and conservation;
  (ii) the identification, investigation, assessment and development of renewable energy resources, including those within the coastal marine area;
  (iii) the use of small and community-scale distributed renewable electricity generation for residential, commercial, industrial and agricultural purposes.

(b) Establish and maintain provisions in regional plans that recognise and provide for the local, regional and national benefits of a secure supply of electricity and electricity generated from renewable energy resources, including Monowai and the nationally significant Manapōuri hydroelectric generation scheme activities.

Territorial authorities will:

Method ENG.2 – District plans

(a) Establish and maintain provisions in district plans to encourage:
  (i) the use of small and community-scale distributed renewable electricity generation for residential, commercial, industrial and agricultural purposes;
  (ii) compact urban form;
  (iii) energy efficient urban design;
  (iv) the use of more energy efficient products and technologies;
  (v) passive solar gain, wind energy or other renewable energy sources;

(vi) the identification, investigation, assessment and development of renewable energy resources.

(b) Establish and maintain provisions in district plans that ensure that the potential adverse effects on communities from the ongoing operation and subsequent closure of energy facilities are:
   (i) appropriately addressed as part of associated resource consent processes; and
   (ii) avoided, remedied, mitigated or, where in the opinion of the territorial authority it is appropriate, and such measures are volunteered by the resource user, offset or compensated for.

(c) Establish and maintain provisions in district plans that recognise and provide for the local, regional and national benefits of a secure supply of electricity and electricity generated from renewable energy resources, including Monowai and the nationally significant Manapōuri hydroelectric generation scheme activities.

Method ENG.3 – Promotion of efficient transport choices

Establish and maintain provisions in district plans to encourage the promotion of efficient transport choices.

Local authorities will be encouraged to:

Method ENG.4 – Resource consents

Include provisions in regional and district plans to ensure decision-makers, when making a decision on an activity to use or develop an energy resource, can have regard to environmental compensation measures or offsets where appropriate, and such measures are volunteered by the resource user, that benefit the environment (including the community).

Method ENG.5 – Collaboration

Co-operate, coordinate and participate with central government, each other, energy conservation authorities and groups, industry, tangata whenua and the community to promote:

(a) better understanding of energy efficiency and how this may be achieved;
(b) use of energy efficient products and technologies;
(c) implementation of energy efficiency and renewable energy programmes;
(d) the reduction of inefficient transport choices such as single person car journeys;
(e) passive solar gain in developments;
(f) energy efficiency initiatives, including travel demand management.

Method ENG.6 – Southland Regional Energy Strategy

Collaborate with each other and with energy generation stakeholders to develop, review, implement and maintain the Southland Regional Energy Strategy, including to:

(a) advocate for energy conservation and efficiency;
(b) advocate for sustainable management of energy resources;
(c) maintain security of energy supply;
(d) identify and address barriers to development by facilitating access to renewable energy resources and innovative technology;
(e) raise public awareness of the crucial role of energy.

Method ENG.7 – Identification of energy resources

(a) Work with each other, iwi authorities, relevant industry and other agencies to identify and map the location of significant energy resources. This mapping will be made available to territorial authorities (but does not restrict the identification of new sites by industry). In determining significance, regard will be had to at least the following:
    (i) relative local/regional/national and international scarcity;
    (ii) potential contribution to the local, regional and national economies;
    (iii) current and potential demand, and location with respect to demand;
    (iv) constraints on extraction and/or utilisation including existing or planned settlement;
    (v) quality and size of mineral deposits or other resources;
    (vi) importance of the resource to tangata whenua;
    (vii) importance to infrastructure development;
    (viii) potential environmental effects, including effects on tangata whenua cultural and spiritual values.

(b) Establish and maintain provisions in district plans to protect access to significant energy resources identified in clause (a).

Method ENG.8 – Advocacy, education and economic instruments

(a) Encourage, through education and advocacy, the use of small and community-scale distributed renewable electricity generation across all sectors.

(b) Encourage, through economic instruments, installation of small and community-scale distributed renewable electricity generation.

(c) Encourage the supply of surplus electricity from small or community-scale distributed renewable electricity generation to the national grid.

Method ENG.9 – Information, education and public awareness

Encourage energy efficient development and energy conservation through providing information, publications and raising public awareness of energy efficient options, alternatives, and approaches to achieving greater energy conservation.

Method ENG.10 – Consultation

Consult with stakeholders, the community and tangata whenua, and take into account Te Tangi a Tauira and other relevant tangata whenua planning documents when making resource management decisions regarding the use or development of land for energy resources which may adversely affect the life supporting capacity of air, land or water, or tangata whenua cultural or spiritual values.

Method ENG.11 – Other methods

Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS.

Explanation/Principal Reasons

Energy can be used inefficiently for many reasons, including:

- lack of integration of transport and land use planning;
- lack of integration of land use and energy provisions;
- insufficient incentive to use energy efficiently;
- lack of awareness about costs of inefficient use, or the benefits of alternative energy;
- changing to efficient use may require significant investment of capital, while the cost of inefficient use seems nominal;
- costs not being met by users.

Inefficient use of energy in one area, or by individuals, can seem insignificant. Collectively, however, the inefficient use of energy has significant costs. More energy must be produced and then distributed.

The use of energy can be made more efficient if development is designed and located to reduce the need to commute over significant distances, and services are closer to the population base. Transport planning can encourage more efficient options such as public passenger transport or efficient freight transport (for example, transport of freight by rail may be more efficient than transporting by road). Energy efficient design principles, such as orientating and placing buildings so that solar gain is maximised, provide long-term energy efficiency. Efficient use of energy reduces the need to generate or provide more energy. Efficient use of energy will contribute towards existing and future infrastructure meeting future demand.

Maximising the ability to appropriately harness the region's renewable resources, such as wind, water and biomass to provide energy for both the Southland and the New Zealand community, will contribute to the provision of an efficient and suitable supply of energy into the future. Using the region's resources within Southland will ensure that the community is more self reliant, depending less on imported energy.

Diversity in type, location and scale of energy development means that electricity, transport fuels, and other energy should come from a range of sources and via a range of transmission and distribution networks. This diversity will ensure that problems with energy infrastructure are easier to overcome than they would be if energy supply was dependant on one source.

Technologies that currently exist, which enable individuals to harness energy sources such as hydro, solar and wind, are likely to improve and become more cost-effective and efficient into the future. As demand for energy increases, self-reliance will have economic benefits for individuals and the region as a whole. The uptake of these technologies needs to be supported as much as possible by local authorities.

Small-scale distributed renewable electricity generation can reduce loading on existing large-scale infrastructure and help avoid adverse environmental effects by reducing the need for significant upgrade or replacement of large-scale infrastructure. This may be effective when applied to energy-intensive heavy industry or irrigation-dependent agriculture. This is particularly relevant where land use or proposed land use is energy intensive and/or provision can be made for on-site energy generation with minor environmental effect or economic cost. This technology is particularly suited to rural applications, where operations are situated at the end of local transmission lines, safeguarding against outages impacting on their operations.

Development can reduce the ability to access the large mineral resources held within the Southland region. It is important therefore, to safeguard access and potential development of these resources, where they can be extracted without significant adverse environmental effects. This is also true of reverse sensitivity issues arising from infrastructure associated with the use and development of renewable energy resources.

Chapter 17: Urban

Introduction

Tangata whenua tattooed the first patterns of settlement onto Southland soils, initially occupying sites on a temporary basis to take advantage of the region's natural resources.[40] Later settlement followed a similar pattern, and today's urban areas reflect the priorities of past generations, as well as, functioning as contemporary centres of population, culture and economic activity.

The Southland region is predominantly rural, with 85% of all non-conservation land being occupied by farms. The main urban area is Invercargill, but there are also a number of smaller townships including Gore, Mataura, Winton, Riverton/Aparima, Bluff and Te Anau.

A percentage change in the regional population of less than one percent is predicted over the next 20 years.[41] Particular areas of Southland such as Riverton/Aparima and Te Anau are currently experiencing growth pressures, whereas in other areas, the population is declining or remains static.

There is a need to create and maintain sustainable urban environments that function well, provide a safe, healthy and stimulating environment, housing choice, transport options and accessible services and transport. However, development can result in a range of negative effects, including a loss of local identity, social problems or health issues.

This chapter, along with the other chapters in the RPS, such as Chapter 4: Water, Chapter 5: Rural Land/Soils, Chapter 8: Natural Hazards and Chapter 15: Infrastructure/Transport seeks to promote sustainable development of Southland's urban areas.

It is also important to refer to Chapter 3: Tangata Whenua, which sets out the resource management provisions to resolve the resource management issues of significance to Ngāi Tahu as tangata whenua of the Southland Region.

[40] Jacomb, C., Walter, R., and Jennings, C. (2010) *Review of the Archaeology of Foveaux Strait, New Zealand*, University of Otago, Dunedin. P. 51

[41] Galvin, Vince (24 February 2010). Subnational Population Projections 2006 (base) – 2031 update. Statistics New Zealand. http://www.statistics.govt.nz/browse_for_stats/population/estimates_and_projections/SubnationalPopulationProjections_HOTP2031.aspx, viewed 14.11.2011.

Table 17: Overview of Urban provisions

Issues	Objectives	Policies	Methods
Issue URB.1	**Objective URB.1** Urban development	**Policy URB.1** Adverse environmental effects	**Methods URB.1 - 7**
		Policy URB.2 Urban development	**Methods URB.1 - 7**
		Policy URB.3 Urban intensification	**Methods URB.2, 3, 5 - 7**
		Policy URB.5 Land use activities	**Methods URB.2, 4 - 7**
		Policy URB.6 Provide for housing choice	**Methods URB.2 - 7**
Issue URB.2	**Objective URB.1** Urban development	**Policy URB.2** Urban development	**Methods URB.1 - 7**
Issue URB.3	**Objective URB.1** Urban development	**Policy URB.1** Adverse environmental effects	**Methods URB.1 - 7**
		Policy URB.2 Urban development	**Methods URB.1 - 7**
		Policy URB.3 Urban intensification	**Methods URB.2, 3, 5 - 7**
		Policy URB.4 High quality urban design	**Methods URB.2 - 7**
		Policy URB.5 Land use activities	**Methods URB.2, 4 - 7**
		Policy URB.6 Provide for housing choice	**Methods URB.2 - 7**

17.1 ISSUES

Issue URB.1
The use and development of urban areas is critical to Southland's social, economic and cultural wellbeing. However, sporadic and uncoordinated urban growth and development in Southland can result in a loss of high value soils, create inefficiencies in the transportation network, create demand for the provision of additional infrastructure or upgrading of existing infrastructure, create reverse sensitivity effects, and can impact on soil, indigenous biodiversity, amenity values, cultural values and water quality.

Issue URB.2
Population change and patterns of urban development have caused some urban areas to experience population decline which can result in high costs to maintain infrastructure that is underutilised, and a decline in amenity values.

Issue URB.3
Urban areas in Southland which develop in ways that do not recognise the principles of high quality urban design are likely to be less cohesive, can experience reduced amenity and cultural values and can fail to provide for a range of transportation modes.

17.2 OBJECTIVE

Objective URB.1 – Urban development
Urban (including industrial) development occurs in an integrated, sustainable and well-planned manner which provides for positive environmental, social, economic and cultural outcomes.

Explanation/Principal Reasons
Sustainable, integrated and well-planned urban development:

- maintains and enhances indigenous biodiversity, character, amenity and cultural values of Southland's urban areas;
- provides potable water supply;
- integrates with existing transport infrastructure;
- provides for alternative modes of transport;
- provides sufficient land based treatment of sewage and stormwater prior to any discharges to water;
- promotes live-work-play opportunities;
- retains high value soils for productive land uses;
- avoids, remedies or mitigates adverse effects on soil and water quality;
- avoids, remedies or mitigates significant adverse effects from natural hazard events; and
- avoids, remedies or mitigates reverse sensitivity effects.

Well-planned urban environments enhance the quality of life for residents. They can also allow for greater choice of housing, better transport options and access to services, create vibrant, safe and cohesive town centres and enhance business activities.

17.3 POLICIES

Policy URB.1 – Adverse environmental effects
The adverse effects of urban development on the environment should be avoided, remedied or mitigated.

Explanation/Principal Reasons
The infrastructure and built environment that supports and encompasses an urban area, along with the activities carried out within urban areas, can have a number of adverse effects on the environment. These effects include, but are not limited to, reverse sensitivity, air pollution, stormwater pollution, land contamination, reduced amenity values, overloaded infrastructure, social and health effects, loss of biodiversity and loss of natural character. However, urban environments can and should be designed to avoid, remedy or mitigate adverse effects.

Policy URB.2 – Urban development
Manage urban growth and development in ways that:
(a) support existing urban areas;
(b) promote development and/or redevelopment of existing urban areas ahead of greenfield development;
(c) promote urban growth and development within areas that have existing infrastructure capacity;
(d) promote the progressive upgrading of infrastructure and improvement of the quality of sewage and stormwater discharges;
(e) provide potable water supply;
(f) plan ahead for the expansion of urban areas;
(g) promote compact urban form; and
(h) promote appropriate site and building orientation that supports the principles of optimum energy efficiency and solar energy gain.

Explanation/Principal Reasons
Some areas of Southland are facing population decline and, as a result, a decrease in amenity. Managing urban development to focus it in existing areas and avoid the development of greenfield sites will help direct economic activity into existing areas to retain and/or improve amenity. Controlling greenfield development will also help maintain rural and natural environments, inclusive of their associated resources.

Many areas in Southland have existing infrastructure with surplus capacity. It is economically efficient to optimise the use of this infrastructure by promoting growth in these areas before allowing development in areas where new infrastructure will be required.

Planning ahead for the expansion of urban areas helps ensure the sustainable integration of areas while providing for compact urban form, instead of allowing development to occur on an ad-hoc basis.

Policy URB.3 – Urban intensification

Encourage opportunities for urban intensification and redevelopment within Southland's existing urban areas.

Explanation/Principal Reasons
Opportunities exist to intensify land use or redevelop land within Southland's existing urban areas. Exploiting such opportunities can provide for a compact urban form, which is more likely to support public transport, reduce travel distances, increase foot traffic in the central business district to support local services and businesses and so, revitalise the urban areas. However, the retention of local character is important and any intensification initiatives should promote the maintenance and enhancement of

amenity values and quality of life. It is also important that existing infrastructure can service the development or be upgraded as required.

Policy URB.4 – High quality urban design
Encourage high quality urban design.

Explanation/Principal Reasons
Promotion of high quality urban design can enhance urban amenity and the quality of the environment, have positive effects on public health and reduce adverse environmental effects. Well designed urban development can also provide for the cultural wellbeing of people and communities.

Policy URB.5 – Land use activities
Make provision for a range of land use activities within urban areas.

Explanation/Principal Reasons
This policy will help ensure there is sufficient land available to provide for all types of development required within an urban area to support community wellbeing and economic growth and development. Making provision for a range of land use activities (i.e. residential, employment/commercial, utilities and recreational) within an urban area will help encourage balanced urban development and promote live-work-play opportunities. Benefits include but are not limited to:

- a reduction in travel and associated adverse effects (i.e. air pollution and pressure on infrastructure);
- improved public health from greater opportunities to employ active transport modes, such as walking and cycling;
- improved public health and wellbeing as a result of better access to public parks and areas that provide opportunities for recreation; and
- greater certainty that certain areas are not vulnerable to crime as a result of being largely unoccupied at certain times of the day.

However, to retain amenity for residential properties, it is important to consider the adverse effects of having commercial and industrial activities adjacent to these areas.

Policy URB.6 – Provide for housing choice

Provide for housing choice, both in terms of type and lot sizes, within urban areas.

Explanation/Principal Reasons
To support the wellbeing of the community, housing should be able to accommodate the specific needs of the occupiers. These needs may relate to income, age, health, family size/structure, cultural needs, and special needs. Making provision for a range of accommodation types on differing lot sizes will help occupants to find a property best suited to their needs.

17.4 METHODS

Southland Regional Council will:

Method URB.1 – Regional plans

Establish and maintain provisions in regional plans to recognise urban growth while managing the natural and physical environment and protecting:

(a) regionally and nationally significant infrastructure;
(b) outstanding natural features and landscapes;
(c) the quantity and quality of water in groundwater aquifers and surface water bodies;
(d) indigenous biodiversity;
(e) people and property from unacceptable risk from natural hazards and the potential adverse effects associated with climate change;
(f) the relationship between tangata whenua and their ancestral lands, water, sites, wāhi tapu and other taonga.

Territorial authorities will:

Method URB.2 – District plans

(a) Establish and maintain provisions in district plans to manage urban growth while managing the natural and physical environment and protecting:
    (i) regionally and nationally significant infrastructure;
    (ii) outstanding natural features and landscapes;
    (iii) the quantity and quality of water in groundwater aquifers and surface water bodies;
    (iv) indigenous biodiversity;
    (v) the character, amenity and safe and efficient functioning of rural areas and settlements;
    (vi) historic heritage;
    (vii) people and property from unacceptable risk from natural hazards and the potential adverse effects associated with climate change;
    (viii) the relationship between tangata whenua and their ancestral lands, water, sites, wāhi tapu and other taonga;
    (ix) high value soils.
(b) Establish and maintain provisions in district plans which:
    (i) identify and map areas for urban growth and development;
    (ii) encourage development and/or redevelopment of existing urban areas ahead of greenfield development;
    (iii) encourage the integration of land use and infrastructure;
    (iv) avoid unplanned and unmanaged development;
    (v) encourage high quality urban design;
    (vi) encourage a range of urban densities which are appropriate to their locations in order to maintain amenity whilst supporting pedestrian, cycle and public transport;
    (vii) encourage higher housing densities in locations where it is supportive of pedestrian, cycle and public transport and the viability and vibrancy of urban centres;
    (viii) encourage the intensification and, where relevant, the regeneration of existing urban areas;
    (ix) provide a mix of residential (e.g. density and cost), employment and recreational opportunities;
    (x) ensure that urban development cannot occur without the appropriate infrastructure capacity to support it;
    (xi) encourage urban growth within urban areas of Southland that have existing infrastructure capacity;

(xii) promote appropriate site and building orientation that supports the principles of optimum energy efficiency and solar energy gain;
(xiii) ensure reverse sensitivity effects on existing and consented activities can be avoided, remedied, or mitigated;
(xiv) ensure sufficient upgrading of existing and/or development of new sewage and stormwater infrastructure;
(xv) ensure the provision of a potable water supply.

Method URB. 3 – Strategic transportation network plan
Develop and maintain a strategic transportation network plan, or other appropriate strategic transport planning tool, that:
(a) supports and implements programmes that make passenger transport services more effective and attractive;
(b) supports and implements policies that encourage the use of active forms of transport such as walking and cycling.

Local authorities will be encouraged to:

Method URB.4 – Urban development planning
Require the use of spatial management tools such as structure planning prior to rezoning land for urban uses. Spatial management tools should be prepared in accordance with the scale, significance and potential effects of the proposal.

Method URB.5 – Collaboration
The Southland Regional Council and territorial authorities should:
(a) work together when identifying patterns and locations of development;
(b) in areas where significant growth is occurring or anticipated, develop and maintain growth strategies;
(c) work together with other stakeholders including, but not limited to tangata whenua, the community, industry, and infrastructure providers, when undertaking urban development planning processes, including structure planning processes.

Method URB.6 – Advocacy
Promote the adoption of:
(a) the principles of the *New Zealand Urban Design Protocol* (Ministry for the Environment, March 2005); and
(b) *Crime Prevention Through Environmental Design* (CPTED) principles;
when planning, assessing and undertaking urban development.

Method URB.7 – Other methods
Collaborate with other local authorities, tangata whenua and interested stakeholders to investigate additional methods that may be used to implement the policies of this chapter of the RPS**.**

Explanation/Principal reasons
A consolidated form of urban growth in and around existing urban areas is the pattern of development that is most likely to achieve the relevant policies and objectives in the RPS, particularly in relation to energy and infrastructure provision. However, it is recognised that there may be instances where these can be better achieved by an alternative development pattern. For instance, environmental or infrastructure constraints may mean that further development of some existing settlements is not appropriate.

The above methods establish the standards to be met for new settlement development. There will be limited circumstances in which development of a new settlement is appropriate. In particular, it is important that new settlements do not compromise the efficient form and development of existing settlements, and that district plans have an appropriate, comprehensive approach to new urban development to manage effects arising from these.

Development can result in adverse effects on significant natural and physical resources. These adverse effects are subject to detailed policies in other chapters of this RPS. Each of these policies is to guide and influence the location of development to the extent that the relevant policies are implemented. If development will result in the relevant policies not being implemented because of the adverse effects which result, it is to be avoided at that location.

Well designed urban development provides for the social, economic and cultural wellbeing of people and communities, and will meet the foreseeable needs of future generations. Design influences the manner in which development functions and relates to the wider environment. It establishes long-term patterns of resource use and character.

High quality development provides attractive environments in which to live, work and 'play'. This includes:
(a) protecting the important amenity values associated with existing urban areas;
(b) achieving well designed developments that integrate with natural and physical resources;
(c) promoting opportunities for walking and cycling.

Robust development maintains or improves well being, health and safety. This includes:
(a) integrating all the natural and physical resource requirements of a development;
(b) integrating urban development into existing urban areas;
(c) implementing travel demand management measures;
(d) integrating the provision for public passenger transport with development;
(e) enabling people to meet their day-to-day needs within the local area;
(f) ensuring development minimises risk from natural hazards.

Resilient development is able to respond to the foreseeable future needs of people and communities with the minimum change and reinvestment. This includes:
(a) enabling housing types to meet changing population structure and preferences;
(b) integrating development with key transport infrastructure and opportunities;
(c) planning for the effects of climate change;
(d) achieving energy-efficient building location, orientation and design;
(e) development and/or asset spending programmes provide the opportunity to modify existing urban and rural-residential areas. The policy will achieve incremental changes by ensuring that development is designed appropriately, development is well connected to existing areas, and due consideration is given to the broader effects (including future effects) and context of the development.

Where a new settlement development is proposed, a comprehensive approach to urban development may include identifying where and how development is to be accommodated. This can be achieved, for example, through a structure plan process, particularly where there are development and growth pressures.

Taking into account the above, the Southland Regional Council considers that the methods in this chapter are most appropriate to achieve the objectives.

Anticipated environmental results (AERs)

The purpose of the RPS is to provide an overview of the resource management issues of the region, and policies and methods to achieve integrated management of its natural and physical resources.

The anticipated environmental results (AERs) that the Southland Regional Council expects to see are the implementation of the methods contained within the RPS by local authorities. This approach creates a focus on the process of method(s) implementation across the entire region, which will determine if adequate progress towards sustainable management of the region's natural and physical resources is being achieved.

The table below sets out the methods of the RPS, along with the objectives sought to be achieved for each chapter. The table will be used to monitor the efficiency and effectiveness of the RPS and tell the community if it is working. Each method will be evaluated in table format to assess whether it has been:

- implemented;
- substantially implemented; or
- not implemented.

If the method has been substantially implemented or not implemented, an explanatory comment will be provided as part of the evaluation. The evaluation results will be used in conjunction with available state of the environment, plan and resource consent monitoring results. This will assist the Southland Regional Council in evaluating whether the implementation of methods has been achieving adequate progress towards sustainable management of the region's natural and physical resources (refer to Figure 5).

The results of the evaluation will be reported to the community every three years, through the Southland Regional Council's Long-term Plan.

If the evaluation shows that adequate progress is not being made towards implementing the methods, and therefore achieving the AERs, further action will be sought. This may include changes to the RPS, submissions and/or appeals on resource consent proposals, plan changes/reviews or submissions to Long-term and Annual Plan processes of other local authorities.

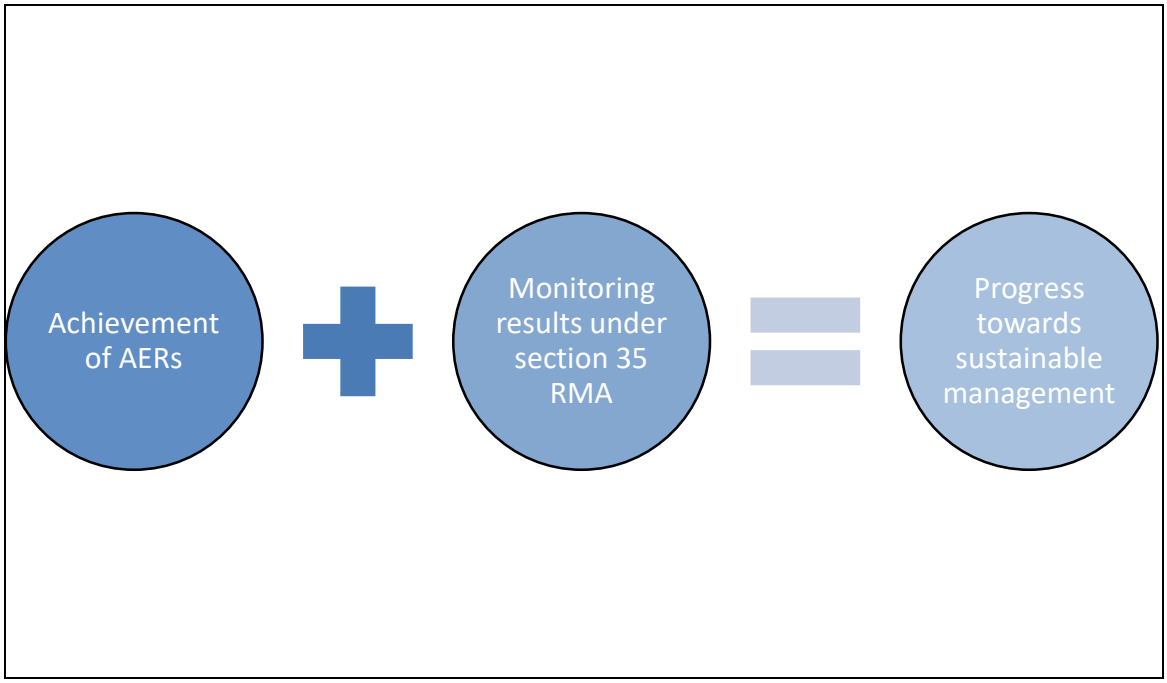

Figure 5: Summary of evaluation process

Table 19: Overview of Anticipated Environmental Results (AERs) provisions

Chapter	Objectives	Anticipated Environmental Results (AERs)
Tangata whenua	**Objective TW.1** The principles of the Treaty of Waitangi/Te Tiriti o Waitangi are taken into account in a systematic way through effective partnerships between tangata whenua and local authorities, which provide the capacity for tangata whenua to be fully involved in council decision-making processes. **Objective TW.2** All local authority resource management processes and decisions take into account iwi management plans. **Objective TW.3** Mauri and wairua are sustained or improved where degraded, and mahinga kai and customary resources are healthy, abundant and accessible to tangata whenua. **Objective TW.4** Wāhi tapu, wāhi taonga and sites of significance are appropriately managed and protected. **Objective TW.5** Māori are able to develop and use their land and resources and provide for their social, economic and cultural wellbeing, in a manner that is sustainable.	• Method TW.1 - Regional plans • Method TW.2 - Consultation • Method TW.3 - Information and assistance • Method TW.4 - Sharing and transfer of responsibilities • Method TW.5 - District plans • Method TW.6 - Research and investigation • Method TW.7 - Collaboration • Method TW.8 - Protocols • Method TW.9 - Consultation • Method TW.10 - Other methods
Water	***Part A: Water Quality*** **Objective WQUAL.1** Water quality in the region: (a) safeguards the life-supporting capacity of water and related ecosystems; (b) safeguards the health of people and communities;	• Method WQUAL.1 - Regional plans • Method WQUAL.2 - Research and investigations • Method WQUAL.3 - Monitoring • Method WQUAL.4 - Consents • Method WQUAL.5 - Information and advice • Method WQUAL.6 - Land use effects on water quality

Chapter	Objectives	Anticipated Environmental Results (AERs)
	(c) is maintained, or improved in accordance with freshwater objectives formulated under the National Policy Statement for Freshwater Management 2014; (d) is managed to meet the reasonably foreseeable social, economic and cultural needs of future generations. **Objective WQUAL.2** Halt the decline, and improve water quality in lowland water bodies and coastal lakes, lagoons, tidal estuaries, salt marshes and coastal wetlands in accordance with freshwater objectives formulated in accordance with the National Policy Statement for Freshwater Management 2014. **Objective WQUAL.3** Maintain the quality of water where it is in its natural state.	• Method WQUAL.7 - Management of activities that affect water quality • Method WQUAL.8 - Discharges to land • Method WQUAL.9 - Land use rules • Method WQUAL.10 - Collaboration • Method WQUAL.11 - Integrated management • Method WQUAL.12 - Good management practice • Method WQUAL.13 - District plans • Method WQUAL.14 - Good management practice • Method WQUAL.15 - Collaboration • Method WQUAL.16 - Other methods
	Part B: Water Quantity **Objective WQUAN.1** Flows, levels and allocation regimes of surface water and groundwater in the region are developed in accordance with the National Policy for Freshwater Management 2014 to: (a) safeguard the life-supporting capacity of water, catchments and related ecosystems; (b) support the maintenance or improvement of water quality in accordance with Policy WQUAL.1; (c) meet the needs of a range of uses, including the reasonably foreseeable social, economic and cultural needs of future generations; (d) comply with limits or targets set to achieve freshwater objectives. **Objective WQUAN.2** The allocation and use of Southland's water resources:	• Method WQUAN.1 - Regional plans • Method WQUAN.2 - Allocation limits • Method WQUAN.3 - Monitoring • Method WQUAN.4 - Research and investigations • Method WQUAN.5 - Consents • Method WQUAN.6 - Information gathering • Method WQUAN.7 - Integrated management • Method WQUAN.8 - District plans • Method WQUAN.9 - Consultation • Method WQUAN.10 - Allocation regimes • Method WQUAN.11 - Strategies and other mechanisms • Method WQUAN.12 - Information, education and public awareness • Method WQUAN.13 - Collaborative management • Method WQUAN.14 - Other methods

Chapter	Objectives	Anticipated Environmental Results (AERs)
	(a) is efficient; (b) recognises and makes provision for the Monowai and nationally significant Manapōuri hydro-electric generation schemes in the Waiau catchment and the resultant modified flows and levels.	
	Part C: Beds of Rivers and Lakes **Objective BRL.1** All significant values of lakes and rivers are maintained and enhanced. **Objective BRL.2** Public access to, along and across lakes and rivers is maintained, and enhanced where necessary, in a strategic and co-ordinated manner, to ensure a level of public access appropriate to the values of the area.	• Method BRL.1 - Regional plans • Method BRL.2 - Regional rules • Method BRL.3 - Collaboration • Method BRL.4 - Regional and district plans • Method BRL.5 - Investigations • Method BRL.6 - Information, education and technical assistance • Method BRL.7 - Public access strategy • Method BRL.8 - Consultation • Method BRL.9 - Other methods
Rural Land/Soils	**Objective RURAL.1** Achieve sustainable use of Southland's rural land resource, in respect of: (a) agriculture and primary sector activities; (b) subdivision, use and development activities; (c) earthworks and vegetation clearance activities; (d) the use of soil resources; (e) mineral extraction activities; and (f) on-site wastewater systems. **Objective RURAL.2** Safeguard the life-supporting capacity, mauri and health of soils in rural areas, and prevent or minimise soil erosion and sedimentation from land use soil disturbance.	• Method RURAL.1 - Regional plans • Method RURAL.2 - Research and investigation • Method RURAL.3 - Information, education, technical assistance and promotion • Method RURAL.4 - District plans and resource consents • Method RURAL.5 - Economic instruments • Method RURAL.6 - Territorial authority management • Method RURAL.7 - Monitoring • Method RURAL.8 - Information and education • Method RURAL.9 - Strategies • Method RURAL.10 - Investigation and collaboration • Method RURAL.11 - Consultation • Method RURAL.12 - Tangata whenua involvement • Method RURAL.13 - Research, information and collaboration • Method RURAL.14 - Promotion • Method RURAL.15 - Other methods

Chapter	Objectives	Anticipated Environmental Results (AERs)
Biodiversity	**Objective BIO.1** Understand the extent of loss of indigenous ecosystems and habitats across the Southland Region and identify those most at risk to further loss and degradation. **Objective BIO.2** Maintain indigenous biodiversity in Southland and protect areas of significant indigenous vegetation and significant habitats of indigenous fauna for present and future generations. **Objective BIO.3** Enhance the range, extent and condition of indigenous biodiversity in Southland, with a particular emphasis on those areas most at risk to further loss or degradation.	• Method BIO.1 - Schedule of threatened, at risk and rare habitat types • Method BIO.2 - Biodiversity strategy • Method BIO.3 - Collaboration • Method BIO.4 - Pest plant and pest animal management • Method BIO.5 - Marine protected areas • Method BIO.6 - Protect significant indigenous vegetation and significant habitats of indigenous fauna • Method BIO.7 - Maintain indigenous biodiversity • Method BIO.8 - Lawful maintenance and operation of existing activities • Method BIO.9 - Resource consents • Method BIO.10 - Enhancement, biodiversity offsets and compensation measures • Method BIO.11 - Consultation • Method BIO.12 - Investigations, research, monitoring and reporting • Method BIO.13 - Education, public awareness and promotion • Method BIO.14 - Financial assistance • Method BIO.15 - Other methods
Coast	**Objective COAST.1** Provide clear direction on appropriate and inappropriate subdivision, use and development activities, the cumulative effect of an activity, and precedent effects of a decision, within the region's coastal environment. **Objective COAST.2** Infrastructure, ports, energy projects, aquaculture, mineral extraction activities, subdivision, use and development in the coastal environment are provided for and able to expand,	• Method COAST.1 - Regional Coastal Plan • Method COAST.2 - Resource consents • Method COAST.3 - Protocols and accords • Method COAST.4 - District plans • Method COAST.5 - Public access • Method COAST.6 - Education, public awareness and promotion • Method COAST.7 - Advocating • Method COAST.8 - Resource consents • Method COAST.9 - Other methods

Chapter	Objectives	Anticipated Environmental Results (AERs)
	where appropriate, while managing the adverse effects of those activities. **Objective COAST.3** Coastal water quality and ecosystems are maintained or enhanced. **Objective COAST.4** The natural character of the coastal environment is restored, rehabilitated or preserved. **Objective COAST.5** Recognise the contribution of aquaculture to the well-being of people and communities by making provision for aquaculture in appropriate locations while: (a) protecting coastal indigenous biodiversity in accordance with Policy BIO.3; (b) protecting outstanding natural features, landscapes and natural character in accordance with Policy COAST.3; and (c) avoiding, remedying, or mitigating other adverse effects.	
Natural Hazards	**Objective NH.1** The risks to people, communities, their businesses, property and infrastructure from the effects of natural hazards are understood and avoided, remedied or mitigated, resulting in communities becoming more resilient.	• Method NH.1 - Regional plans and bylaws • Method NH.2 - Research and investigation • Method NH.3 - Information, education and technical assistance • Method NH.4 - Monitoring • Method NH.5 - District plans • Method NH.6 - Information • Method NH.7 - District plans and resource consents • Method NH.8 - Promote • Method NH.9 - Risk assessments

Chapter	Objectives	Anticipated Environmental Results (AERs)
		• Method NH.10 - Resource consents • Method NH.11 - Critical infrastructure • Method NH.12 - Research, information and collaboration • Method NH.13 - Collaboration • Method NH.14 - Sharing and transfer of responsibilities • Method NH.15 - Strategies • Method NH.16 - Other methods
Air Quality	**Objective AQ.1** Enable the discharge of contaminants into air while managing the adverse effects of those contaminants on human health and wellbeing, and the environment. **Objective AQ.2** New activities established in Southland do not hinder the region's ability to achieve compliance with national environmental standards and guidelines for ambient air quality.	• Method AQ.1 - Regional plans • Method AQ.2 - Research and monitoring • Method AQ.3 - Information, education and public awareness • Method AQ.4 - District plans • Method AQ.5 - Financial incentives • Method AQ.6 - Support and promote • Method AQ.7 - Strategies • Method AQ.8 - Consultation • Method AQ.9 - Collaboration and protocols • Method AQ.10 - Bylaws and legislation • Method AQ.11 - Other methods
Natural Features and Landscapes	**Objective LNF.1** Southland's outstanding natural features and landscapes are identified and protected from inappropriate subdivision, use and development. **Objective LNF.2** Southland's locally distinctive and valued natural features and landscapes are identified, and managed so that subdivision, use and development is consistent with their values.	• Method LNF.1 - Regional plans • Method LNF.2 - Identify regional landscape character values • Method LNF.3 - District plans • Method LNF.4 - Resource consents • Method LNF.5 - Information sharing and collaboration • Method LNF.6 - District plans • Method LNF.7 - Consultation • Method LNF.8 - Landscape assessments • Method LNF.9 - Identification, investigation and assessment of locally distinctive and valued natural features and landscapes • Method LNF.10 - Areas and values • Method LNF.11 - Investigation and assessment • Method LNF.12 - Other methods

Chapter	Objectives	Anticipated Environmental Results (AERs)
Contaminated Land	**Objective CONTAM.1** Land affected by soil contamination is identified, investigated and managed. **Objective CONTAM.2** Adverse effects on the environment (including human health) from contaminated land are avoided, remedied or mitigated.	• Method CONTAM.1 - Regional plans • Method CONTAM.2 - Identify, investigate and manage • Method CONTAM.3 - Information, education and assistance • Method CONTAM.4 - District plans • Method CONTAM.5 - Collaboration and information sharing • Method CONTAM.6 - Strategies and protocols • Method CONTAM.7 - Consultation • Method CONTAM.8 – Other methods
Hazardous Substances	**Objective HAZ.1** Adverse effects on the environment (including human health and safety) from the storage, use, transportation and disposal of hazardous substances are prevented or mitigated.	• Method HAZ.1 - Regional plans • Method HAZ.2 - District plans • Method HAZ.3 - Collaboration • Method HAZ.4 - Transport routes • Method HAZ.5 - Bylaws • Method HAZ.6 - Collection programmes and facilities • Method HAZ.7 - Protocols • Method HAZ.8 - Information, education and public awareness • Method HAZ.9 - Promote, support and advocate • Method HAZ.10 - Financial incentives • Method HAZ.11 - Consultation • Method HAZ.12 - Monitoring • Method HAZ.13 - Other methods
Solid Waste	**Objective WASTE.1** Reduce the generation of solid waste in Southland. **Objective WASTE. 2** Avoid, mitigate, or where appropriate remedy the adverse environmental effects of solid waste storage, disposal, processing, handling and transportation.	• Method WASTE.1 - Regional plans • Method WASTE.2 - Monitoring • Method WASTE.3 - Information, education and public awareness • Method WASTE.4 - District plans • Method WASTE.5 - Advocate • Method WASTE.6 - Agreements and accords • Method WASTE.7 - Promote and collaborate • Method WASTE.8 - Economic instruments • Method WASTE.9 - Monitoring and regulation

Chapter	Objectives	Anticipated Environmental Results (AERs)
		• Method WASTE.10 - Information, education and public awareness • Method WASTE.11 - Consultation • Method WASTE.12 - Integration • Method WASTE.13 - Central government • Method WASTE.14 - Regional waste strategy • Method WASTE 15 - Other methods
Historic Heritage	**Objective HH.1** Historic heritage values are identified and protected from inappropriate subdivision, use and development. **Objective HH.2** The built heritage of Southland is appropriately recognised and where possible utilised in a sustainable manner. **Objective HH.3** Historic heritage values are appropriately managed to avoid or mitigate the potential adverse effects of natural processes and climate change.	• Method HH.1 - District plans and regional plans • Method HH.2 - Collaboration • Method HH.3 - Education, information, advocacy and consultation • Method HH.4 - Other methods
Infrastructure/ Transport	***Part A: Infrastructure*** **Objective INF.1** Southland's regionally significant, nationally significant and critical infrastructure is secure, operates efficiently, and is appropriately integrated with land use activities and the environment.	• Method INF.1 - Regional plans • Method INF.2 - District plans • Method INF.3 - Consistent approach • Method INF.4 - Monitoring • Method INF.5 - Consultation • Method INF.6 - Other methods
	Part B: Transport **Objective TRAN.1** Development of transport infrastructure and land use take place in an integrated and planned manner which: (a) integrates transport planning with land use;	• Method TRAN.1 - Regional plans and strategies • Method TRAN.2 - Strategic transportation network plan • Method TRAN.3 - District plans • Method TRAN.4 - Regional Land Transport Strategy • Method TRAN.5 - Promotion and information • Method TRAN.6 - Collaboration

Chapter	Objectives	Anticipated Environmental Results (AERs)
	(b) protects the function, safety, efficiency and effectiveness of the transport system; (c) minimises potential for reverse sensitivity issues to arise from changing land uses; (d) provides for positive social, recreational, cultural and economic outcomes; (e) minimises the potential for adverse public health and environmental effects; (f) enhances accessibility and connectivity, maximising transport choice for users of the transport system.	• Method TRAN.7 – Monitoring • Method TRAN.8 – Other methods
Energy	**Objective ENG.1** Efficient use of energy resources. **Objective ENG.2** Use, development, transmission and distribution of local and regional energy resources is undertaken where the adverse effects on the environment (including communities) are avoided, remedied, mitigated, or where appropriate, and such measures are volunteered by the resource user, offset or compensated for. **Objective ENG.3** Generation and use of renewable energy resources is increased. **Objective ENG.4** Recognise and make provision for the national significance of renewable electricity generation activities.	• Method ENG.1 - Regional plans • Method ENG.2 - District plans • Method ENG.3 - Promotion of efficient transport choices • Method ENG.4 - Resource consents • Method ENG.5 - Collaboration • Method ENG.6 - Southland Regional Energy Strategy • Method ENG.7 - Identification of energy resources • Method ENG.8 - Advocacy, education and economic instruments • Method ENG.9 - Information, education and public awareness • Method ENG.10 - Consultation • Method ENG.11 - Other methods
Urban	**Objective URB.1** Urban (including industrial) development occurs in an integrated, sustainable and well-planned manner which provides for positive environmental, social, economic and cultural outcomes.	• Method URB.1 - Regional plan • Method URB.2 - District plans • Method URB.3 - Strategic transportation network plan • Method URB.4 - Urban development planning • Method URB.5 - Collaboration

Chapter	Objectives	Anticipated Environmental Results (AERs)
		• Method URB.6 - Advocacy • Method URB.7 - Other methods

Glossary and Definitions

This glossary is included to assist in the understanding of terms used in this RPS.

Definitions

Where the definition is presently used in the Act, this is indicated by means of one asterisk*. Where the definition is presently used in a Regional Plan prepared by the Southland Regional Council, this is indicated by means of two asterisks**. Where the definition is used in a National Policy Statement or National Environmental Standard that is in effect, this is indicated by means of three asterisks***.

AEP
Annual exceedence probability.

Agricultural effluent**
Effluent that is derived from either pastoral or horticultural farming, but excludes excreta from individual animals, fertiliser application and non-point source discharges from normal farming practices.

Air shed***
An area designated by a regional council for the purposes of managing air quality and gazetted by the Minister.

Ambient air quality**
The general quality of the air that surrounds us.

Amenity values*
Means 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.

Aquaculture activities*
(a) means any activity described in section 12 done for the purpose of the breeding, hatching, cultivating, rearing, or ongrowing of fish, aquatic life, or seaweed for harvest if the breeding, hatching, cultivating, rearing, or ongrowing involves the occupation of a coastal marine area; and
(b) includes the taking of harvestable spat if the taking involves the occupation of a coastal marine area; but
(c) does not include an activity specified in paragraph (a) if the fish, aquatic life, or seaweed:
    (i) are not in the exclusive and continuous possession or control of the person undertaking the activity; or
    (ii) cannot be distinguished or kept separate from naturally occurring fish, aquatic life, or seaweed; and
(d) does not include an activity specified in paragraph (a) or (b) if the activity is carried out solely for the purpose of monitoring the environment.

Aquifer**
A saturated rock or soil material capable of transmitting and yielding water in sufficient quantities for abstraction.

Archaeological site

(a) any place in New Zealand, including any building or structure (or part of a building or structure), that -
    (i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and
    (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
(b) includes a site for which a declaration is made under section 43(1) of the Resource Management Act.

At-risk habitat
Habitat that has been reduced to a level of less than 50% of its original (pre-human) extent in the Region.

Bed*
(a) In relation to any river -
    (i) for the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which the waters of the river cover at its annual fullest flow without overtopping its banks:
    (ii) in all other cases, the space of land which the waters of the river cover at its fullest flow without overtopping its banks.
(b) In relation to any lake, except a lake controlled by artificial means,-
    (i) for the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which waters of the lake cover at its annual highest level without exceeding its margin:
    (ii) in all other cases, the space of land which the waters of the lake cover at its highest level without exceeding its margin.
(c) In relation to any lake controlled by artificial means, the space of land which the waters of the lake cover at its maximum permitted operating level.
(d) In relation to the sea, the submarine areas covered by the internal waters and the territorial sea.

Biodiversity [or biological diversity*]
The variability among living organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems.

Biodiversity offset
Means measurable conservation outcomes resulting from actions which are designed to compensate for significant residual adverse effects on biodiversity arising from project development after appropriate avoidance, minimisation, remediation and mitigation measures have been taken. Biodiversity offsets will address the following principles:
(a) *No net loss* – the offsetting proposal achieves no net loss and preferably a net gain of biodiversity;
(b) *Additional conservation outcomes* – biodiversity outcomes are above and beyond results that would have occurred if the offset was not proposed;
(c) *Limits to offsetting* – biodiversity offsetting should not be applied to justify impacts on vulnerable and irreplaceable biodiversity;
(d) *Proximity* – the offsetting proposal should be located close to the application site, where this will achieve the best ecological outcomes;
(e) *Like for like* – offsetting measures re-establish or protect the same as or similar type ecosystem to that which is adversely affected;
(f) *Long-term outcomes* – the offset's positive ecological outcomes last at least as long as the effects of the application activity, and preferably in perpetuity;

(g) *Timing* – the delay between the loss of biodiversity through development and the gain or maturation of ecological outcomes is minimized;
(h) Any offsetting proposal will include biodiversity management plans prepared in accordance with good practice.

Built environment
The part of the physical surroundings which are made by people, such as buildings and other major structures, and transportation infrastructure such as roads, bridges and rail. It includes the human community, cultural experiences and interactions of people and provides the setting for human activity, ranging from the large-scale civic surroundings to the personal places.

Catchment
The land area that contributes the river's or stream's flow, and may be divided into sub catchments or management areas.

Cleanfill Site**
Land used for the permanent disposal of cleanfill and no other type of material but excludes earthworks on the same landholding, earthworks associated with any road, driveway or track, and any area within a road reserve containing a formed road that is used for the deposition of roading material.

Climate change*
Means 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 environment
An environment in which the coast is a significant part or element and includes:
(a) the coastal marine area;
(b) islands within the coastal marine area;
(c) areas where coastal processes, influences or qualities are significant, including coastal lakes, lagoons, tidal estuaries, saltmarshes, coastal wetlands, and the margins of these;
(d) areas at risk from coastal hazards;
(e) coastal vegetation and the habitat of indigenous coastal species including migratory birds;
(f) elements and features that contribute to the natural character, landscape, visual qualities or amenity values;
(g) items of cultural and historic heritage in the coastal marine area or on the coast;
(h) inter-related coastal marine and terrestrial systems, including the intertidal zone; and
(i) physical resources and built facilities, including infrastructure, that have modified the coastal environment.

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.

Coastal processes
Dynamic natural, physical and ecological relationships and events, that are characteristically coastal in their occurrence, nature and effects, that act to shape a coastline, its landforms and features - such as,

beaches, wave cut platforms – and including processes of: wave formation, breaking and dissipation; swash run-up; nearshore currents; sediment transport, erosion and deposition.

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.

Compact urban form

The physical layout and design of a city which increases efficiency in the way people can use a city and the way in which a city is run.

Contaminated land*

Land that has a hazardous substance in or on it that

(a) has significant adverse effects on the environment; or

(b) is reasonably likely to have significant adverse effects on the environment.

Covenant

A legally binding protection agreement.

Critical infrastructure

Infrastructure that provides services which, if interrupted, would have a significant effect on the wellbeing and health and safety of people and communities and would require reinstatement, and includes all strategic facilities.

Cumulative effect

Means an effect, which arises over time or in combination with other effects, regardless of the scale, intensity, duration or frequency of the effect.

District plan*

(a) Means an operative plan approved by a territorial authority under Schedule 1; and

(b) Includes all operative changes to the plan (whether arising from a review or otherwise).

Ecosystem**

A dynamic complex of plant, animal and micro-organism communities and their non-living environment, interacting as a functional unit.

Ecosystem health

Refers to the condition of an ecosystem and its ability to function normally, thus supporting the life-forms and processes naturally associated with it.

Ecosystem services

Means the benefits people obtain from ecosystems. These include:

- provisioning services – the products obtained from ecosystems, including, for example, genetic resources, food and fibre, and fresh water;
- regulating services – the benefits obtained from the regulation of ecosystem processes, including, for example, the regulation of climate, water, and some human diseases;
- cultural services – the non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experience; and
- supporting services – those ecosystem services that are necessary for the production of all other ecosystem services.

Some examples include biomass production, production of atmospheric oxygen, crop pollination, soil formation and retention, nutrient cycling, water cycling, and provisioning of habitat.

Environmental compensation
Means any action (works, services or restrictive covenants) as compensation for unavoided and unmitigated adverse effects of the activity for which consent is being sought including actions that provide measurable biodiversity outcomes that address significant adverse biodiversity effects arising from project development which do not meet the thresholds of a biodiversity offset.

Esplanade reserve*
A reserve within the meaning of the Reserves Act 1977 -
(a) which is either –
  (i) a local purpose reserve within the meaning of Section 23 of that Act, if vested in the territorial authority under Section 239 [of the Act]; or
  (ii) a reserve vested in the Crown or a regional council under Section 237D [of the Act]; and
(b) which is vested in the territorial authority, regional council, or the Crown for a purpose or purposes set out in Section 229 [of the Act].

Freshwater management unit***
The water body, multiple water bodies or any part of a water body determined by the regional council as the appropriate spatial scale for setting freshwater objectives and limits and for freshwater accounting and management purposes.

Freshwater objective***
An intended environmental outcome in a freshwater management unit.

Greenfield Site
Land, usually located in a rural area, which has not previously been built on.

Groundwater**
Subsurface water that occurs beneath the water table in soils and geologic formations that are fully saturated.

Habitat
Means the area or environment where an organism or ecological community lives or occurs naturally for some or all of its life cycle or as part of its seasonal feeding or breeding pattern.

Hazardous Activities and Industries List
A compilation of activities and industries that are considered likely to cause land contamination resulting from hazardous substance storage, use or disposal.

Hazardous substance*
Includes, but is not limited to, any substance defined in Section 2 of the Hazardous Substances and New Organisms Act 1996 as a hazardous substance.

Hazardous waste
Means any waste:
(a) with one or more of the following intrinsic properties:
  (i) explosiveness
  (ii) flammability
  (iii) a capacity to oxidize

(iv) corrosiveness
(v) toxicity (including chronic toxicity) 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 one or more of the properties specified in part (a).

High-altitude land

Land in Southland that is over 400 metres above sea level.

High quality urban design

Means urban design which demonstrates adherence to the New Zealand Urban Design Protocol (March 2005) Key Urban Design Qualities, including that the design:

- demonstrates an understanding and recognition of scale and context – the relationship between the design elements of the built environment (houses, streets, blocks, neighbourhoods and towns) and the natural environment (topography, coast, streams and vegetation);
- is sympathetic to, and builds upon, both the physical and cultural identity;
- provides a choice of urban form that is flexible and adaptable;
- acknowledges that there may be a need for a diverse range of housing to meet changing needs, especially the effects of ageing communities;
- provides a variety of connections between spaces and places, including provision for cars, cycles, buses, pedestrians and other transport modes;
- is innovative and resource efficient;
- provides lively and pleasant places for people to enjoy;
- reflects the importance of community spaces;
- provides a comfortable and safe urban environment;
- contributes to the wellbeing of people and communities;
- promotes collaboration between the design partners, local authorities, design professionals, communities and private developers;
- takes into account issues of affordability and reverse sensitivity; and
- promotes the protection of existing infrastructure (including public utility networks) and its efficient integration with, and upgrading to meet the demands of, growth management.

High value soils

Soils that are classified as Class 1 or 2 in the New Zealand Land Resource Inventory (NZLRI).

Historic heritage*

(a) means those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, deriving from any of the following qualities:
  (i) archaeological;
  (ii) architectural;
  (iii) cultural;
  (iv) historic;
  (v) scientific;
  (vi) technological; and

(b) includes—
  (i) historic sites, structures, places, and areas; and
  (ii) archaeological sites; and
  (iii) sites of significance to Māori, including wāhi tapu; and
  (iv) surroundings associated with the natural and physical resources**.**

Indigenous

In relation to a species of flora or fauna, means a species or genetic variant found naturally in New Zealand, including migrant species visiting New Zealand on a regular or irregular basis (as opposed to introduced by humans).

Indigenous biodiversity

The variability among living (indigenous) organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems.

Indigenous biodiversity values

Means those attributes of an ecosystem that determine an area or habitat's importance for the maintenance of indigenous biodiversity values regionally. These values include species composition, habitat structure and ecosystem function.

Indigenous vegetation

Means any local indigenous plant community through the course of its growth or succession consisting primarily of native species and habitats normally associated with that vegetation type, soil or ecosystem or having the potential to develop these characteristics. It includes vegetation with these characteristics that has been regenerated with human assistance following disturbance or as mitigation for another activity, but excludes plantations and vegetation that have been established for commercial harvesting.

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 Act.

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 and educational uses.

Integrated contaminated land register

An electronic database local authorities use to record and manage information about properties in the Southland region that have been or are likely to have been used for activities involving hazardous substances.
Iwi management plan Any planning document prepared by an iwi or hapu, recognised by the relevant iwi authority and lodged with the regional, city or district council.
Landfill** Means a site that is used for the permanent disposal of waste but excludes a cleanfill site, earthworks associated with any road, driveway or track, and any area within a road reserve containing a formed road that is used for the deposition of roading material.
Land Information Memoranda Means a memorandum prepared by a territorial local authority in accordance with Section 44A of the Local Government Official Information and Meetings Act 1987.
Landscape The natural and physical attributes of land, together with air and water, which change over time as a result of physical, biological and cultural processes, and which is made known by people's evolving experiences, perceptions and association.
Land use capability class An assessment of the land's capability for use, while taking into account its physical limitations and its versatility for sustained production.
Land use capability classification A systematic arrangement of different types of land according to those properties that determine its suitability for long-term sustained production in the sense of suitability for productive use or uses after taking into account the physical limitations of the land.
Liquefaction A geological process that occurs when vibrations or water pressure within a mass of soil cause the soil particles to lose contact with one another. As a result, the soil behaves like a liquid, has an inability to support weight and can flow down very gentle slopes. This condition is usually temporary and is most often caused by an earthquake vibrating water-saturated fill or unconsolidated soil.
Local Authority* Means a regional council or territorial authority.
Mid-altitude land Land in Southland that is between 200 metres and 400 metres above sea level.
Multi-modal transportation infrastructure The infrastructure required to facilitate the movement of freight or people by the use of at least two different transport modes.
National environmental standard* Means a standard prescribed by regulations made under Section 43 of the Resource Management Act 1991.
National policy statement*

Means a statement issued under Section 52 of the Resource Management Act 1991.

Nationally significant infrastructure
Infrastructure which contributes to the development and wellbeing and health and safety of people and communities extending beyond the region.

Natural character**
The qualities of the environment that give it recognisable character. Embraces ecological, physical, spiritual, cultural, intrinsic and aesthetic values, and includes modified and managed environments.

Natural hazard*
Means 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.

No net loss
No overall reduction in biodiversity, as measured by species composition, habitat structure, and ecosystem function.

Non-point source discharge**
Water contamination derived from diffuse sources where there is no single identifiable discharge point.

Nutrient**
An element or compound essential for the growth and development of life forms. The major plant nutrients are nitrogen, phosphorus, potassium, sulphur, magnesium and calcium but there are also a number of minor nutrients which are required in small quantities.

On-site wastewater system
The collection, treatment, and disposal/reuse of wastewater from an individual home or commercial facility on the same property as it is generated. For the purpose of this definition wastewater is limited to toilet wastes and wash waters from kitchens, bathrooms and laundries.

Over-allocation***
Is the situation where the resource:
(a) has been allocated to users beyond a limit or
(b) is being used to a point where a freshwater objective is no longer being met.
This applies to both water quantity and quality.

Particulate matter
Solid and aerosol matter that exists in the atmosphere and includes smoke, deposited particulates, suspended particulates, respirable particulates and visibility-reducing particulates. Particles range in size from 100 microns down to aggregation of molecules.

PM_{10}***
Means particulate matter that is—
(a) less than 10 micrometres in aerodynamic diameter; and
(b) measured in accordance with the United States Code of Federal Regulations, Title 40—Protection of Environment, Volume 2, Part 50, Appendix J — Reference method for the determination of particulate matter as PM_{10} in the atmosphere.

Point source discharge**
Discharges from specific and identifiable sources (such as pipes or drains) concentrated at a given point.

Precautionary approach**
A precautionary approach is one that adopts prudent foresight, and is only applied in circumstances where there is scientific uncertainty or ignorance about the nature or scope of environmental harm.

Product stewardship
A 'cradle to grave' tool that helps reduce the environmental impact of manufactured products. In product stewardship schemes, producers, brand owners, importers, retailers, consumers and other parties accept responsibility for the environmental effects of their products – from the time they are produced until they are disposed of.

Rare habitat
Means either an area of habitat that is naturally or originally rare in the Region (that is, there was never a large number or abundance of that type of habitat) as determined in accordance with Williams et al 2007.[42]

Regional Council
Means a regional council named in Part 1 of Schedule 2 of the Local Government Act 2002.

Regional plan*
(a) Means an operative plan approved by a regional council under Schedule 1 (including all operative changes to the plan (whether arising from a review or otherwise); and
(b) Includes a regional coastal plan.

Regionally significant infrastructure
Infrastructure in the region which contributes to the wellbeing and health and safety of the people and communities of the region, and includes all critical infrastructure.

Regionally strategic transport infrastructure
The infrastructure required to facilitate the movement of freight or people and includes:
(a) the regional strategic roads as defined in the Southland Regional Land Transport Strategy.
(b) the Southland rail network.
(c) commercial port areas at Bluff including associated infrastructure.
(d) Invercargill, Gore, Manapouri and Milford Sound/Piopiotahi Airports, and Stewart Island/Rakiura Airstrip (Ryans Creek).

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

Renewable electricity generation activities***
The construction, operation and maintenance of structures associated with renewable electricity generation. This includes small and community-scale distributed generation activities, the system of

[42] Williams P.A., Wiser S., Clarkson B. and Stanley M. 2007: New Zealand's historically rare terrestrial ecosystems set in a physical and physiognomic framework. *New Zealand Journal of Ecology 31(2): 119-128*.

electricity conveyance required to convey electricity to the distribution network and/or the national grid, and electricity storage technologies associated with renewable electricity.
Renewable energy*   Means energy produced from solar, wind, hydro, geothermal, biomass, tidal, wave, and ocean current sources.
Reverse sensitivity   Means the vulnerability of an existing lawfully established activity to the introduction or development of a new activity or land use in the vicinity that may be sensitive to the actual or perceived adverse effects generated by the existing activity.
Riparian margin**   Land situated along the bank of a lake, river, wetland or other water body.
Rural area   An area of lower population density in which farmland, forestry, national parks or reserves predominate.
Rural-residential development (lifestyle property)   A semi-rural property comprising a house and land, that may be used for small-scale farming.
Scrub   Woody vegetation in which the cover of shrubs and trees in the canopy is >80% and in which shrub cover exceeds that of trees. Shrubs are woody plants <10 cm diameter at breast height.
Sedimentation   When particulate matter is carried by water or wind and deposited on the surface of the land or the seabed, and may in time become consolidated into rock.
Shrubland   Woody vegetation in which the cover of shrubs and trees in the canopy is 20-80% and in which the shrub cover exceeds that of any other growth form or bare ground.
Significant indigenous vegetation and significant habitats of indigenous fauna   Indigenous vegetation and habitats of indigenous fauna that are determined to be significant through the application of the significant assessment criteria set out in Appendix 3.
Small and community-scale distributed generation***   Means renewable electricity generation for the purpose of using electricity on a particular site, or supplying an immediate community, or connecting into the distribution network.
Solid waste   Any solid materials, regardless of form, that require permanent disposal, or are diverted from disposal to be reused or recycled.
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).

Steep land
Land 26-35° in slope.

Strategic facilities
Includes:
(a) critical infrastructure;
(b) nationally significant infrastructure;
(c) regionally significant infrastructure;
(d) gas and petroleum storage facilities;
(e) public healthcare facilities and medical centres;
(f) fire stations, police stations, ambulance stations, emergency coordination facilities;
(g) defence facilities;
(h) Invercargill, Gore, Manapōuri and Milford Sound/Piopiotahi Airports, and Stewart Island/Rakiura Airstrip (Ryans Creek);
(i) Southland Public Hospital (Kew);
(j) lifeline utilities as defined in the Civil Defence Emergency Management Act 2002;
(k) flood and drainage infrastructure managed by the Southland Regional Council.

Structure plan
Means a framework to guide the development or redevelopment of a particular area by defining the future development and land use patterns, areas of open space, the layout and nature of infrastructure (including transportation links), and other key features for managing the effects of development.

Subdivision of land*
(a) The division of an allotment—
  (i) by an application to [the Registrar-General of Land] for the issue of a separate certificate of title for any part of the allotment; or
  (ii) by the disposition by way of sale or offer for sale of the fee simple to part of the allotment; or
  (iii) by a lease of part of the allotment which, including renewals, is or could be for a term of more that 35 years; or
  (iv) by the grant of a company lease or cross lease in respect of any part of the allotment; or
  (v) by [the deposit of a unit plan, or] an application to [the Registrar-General of Land] for the issue of a separate certificate of title for any part of a unit on a unit plan; or
(b) An application to [the Registrar-General of Land] for the issue of a separate certificate of title in circumstances where the issue of that certificate of title is prohibited by Section 226 of the Resource Management Act 1991.

Surface water**
Fresh or geothermal water in a river, lake, stream, pond, or wetland, or any part thereof, that is not located within the coastal marine area but excludes water in an artificial water course.

Taxa
Named biological classification units assigned to individuals or sets of species (e.g. species, subspecies, genus, order, variety).

Territorial Authority
Means a city council or a district council named in Part 2 of Schedule 2 of the Local Government Act 2002.

Threatened habitat

Threatened habitat means an area of habitat that has been reduced to a level of 20% or less of its original (pre-human) extent in the Region determined in accordance with Land Environments of New Zealand (LENZ) and/or other associated predictive tools with environmental variables.
Travel demand management Any initiative that modifies travel decisions so as to reduce the negative impacts of road transport.
Upgrade An improvement or increase in capacity, efficiency, security or safety to a structure, system or facility.
Urban area A built-up area of higher population density in which commercial, industrial and residential activities predominate.
Urban sprawl The unplanned, uncontrolled spreading of urban development into areas adjoining the edge of a city.
Versatile soils See High Value Soils.
Waterbody* Fresh 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.
Water harvesting.** The abstraction or diversion of water for storage for later use.
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.

Glossary of Māori words – Papakupu

This papakupu is included to assist in the understanding of Māori terms used in the RPS.

Definitions that come from Te Tangi a Tauira Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 are indicated by means of the symbol #. Definitions that come from the Resource Management Act 1991 are indicated by means of an asterisk*

Other sources, where used, are indicated accordingly.

Ahi kā # - Occupation, land rights, continued occupation, properly ahi kā roa "long burning fires", one of the most important elements of traditional lore of Māori land tenure.
Ara tawhito – traditional travel routes.
Iwi – Tribe.
Iwi authority* - The authority which represents an iwi and which is recognised by that iwi as having authority to do so.
Kaimoana # - Seafood, especially shellfish etc.
Kainga # - Village permanently occupied.
Kaitiaki # – Guardians.
Kaitiakitanga* - The exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources; and includes the ethic of stewardship.
Kaupapa – Subject.
Kāwanatanga # - Governance, relating to the exchange of gifts enshrined in the Treaty of Waitangi.
Ki uta ki tai # - From the mountains to the sea.
Kōiwi tangata # - Human skeletal remains.
Mahinga kai # - Food, and places for obtaining natural foods, methods and cultural activities involved.
Manaakitanga # - Support, caring and hospitality, as shown towards guests.
Mana whenua* - means customary authority exercised by an iwi or hapū in an identified area.
Māori - A person of the Māori race of New Zealand, and includes a descendant of any such person[43].
Marae # **-** Traditional Māori open meeting ground. All important matters affecting an iwi must be discussed, and ultimately decided, on their own traditionally recognised marae. Here leaders, chiefs

[43] Section 4 of the Te Ture Whenua Māori Act 1993

and commoners alike, are accountable, before the people of the tribe, to their families, relations and to the wider tribal and Māori community.
Mātaitai* **-** Food resources from the sea and mahinga mātaitai means the areas from which these resources are gathered.
Mātauranga # - Information, knowledge, education.
Mauri # - Spiritual essence, lifeforce.
Murihiku # – The takiwā of the four Murihiku Rūnanga Papatipu of Ngāi Tahu whānui is identified in Te Rūnanga o Ngāi Tahu Act 1996 (for Ngāti Mamoe in pre-Ngāi Tahu times the term included most of the southern two-thirds of the South Island).
Ngāi Tahu/Ngāi Tahu whānui - The collective of the individuals who descend from the primary hapū of Waitaha, Ngāti Mamoe, and Ngāi Tahu, namely, Kāti Kurī, Kāti Irakehu, Kāti Huirapa, Ngāi Tūāhuriri, and Kai Te Ruahikihiki[44].
Nohoanga # - Temporary campsite (stopover), for seasonal gathering of food/kai and natural resources.
Papakāinga - A form of housing development which occurs on multiple-owned Māori or ancestral land. Traditionally, the literal meaning of papakāinga housing is, 'a nurturing place to return to'.
Papatipu Rūnanga - The Papatipu Rūnanga of Ngāi Tahu whānui referred to in Section 9 of the Te Rūnanga o Ngāi Tahu Act 1996. The four Murihiku Papatipu Rūnanga are Waihōpai Rūnaka, Te Rūnanga o Ōraka-Aparima, Hokonui Rūnaka and Te Rūnanga o Awarua.
Piopiotahi - Milford Sound
Pounamu - (a) Bowenite: (b) Nephrite, including semi-nephrite: (c) Serpentine occurring in its natural condition in the land described in the Schedule of the Ngāi Tahu (Pounamu Vesting) Act 1997[45].
Pouwhenua – traditional landmarks.
Rāhui # - Restriction, reservation/exclusion under tribal authority, and a marker warning of this; controls, also a statement that a resource is being actively managed, also "No Trespass" sign, reserve, reservation.
Rangatiratanga # - Chieftainship, the powers and qualities of chiefly leadership, and exercise of tribal authority. Self determination.
Taiāpure # - Local fisheries areas. They can be established over areas of special significance to tangata whenua.

[44] Section 9 of the Ngāi Tahu Claims Settlement Act 1998
[45] Section 2 of the Ngāi Tahu (Pounamu Vesting) Act 1997

Takiwā # – Area.
Tangata Whenua # - People of the land, local owner-occupier, original inhabitant, the people that hold the tūrangawaewae and the manawhenua in an area, according to tribal and hapū custom.
Taonga # - Treasured possession, material or abstract (e.g. language); Māori interest in these is protected by the Treaty of Waitangi and New Zealand statute and common law/lore.
Taonga raranga* - Plants which produce material highly prized for use in weaving.
Tauranga waka* - Canoe landing sites.
Te Rūnanga o Ngāi Tahu - The body corporate known as Te Rūnanga o Ngāi Tahu established by Section 6 of the Te Rūnanga o Ngāi Tahu Act 1996.
Te Tiriti o Waitangi - The Treaty of Waitangi, which has the same meaning as the word Treaty as defined in Section 2 of the Treaty of Waitangi Act 1975.
Te Wai Pounamu - The South Island.
Tikanga # - Rights, customs accepted protocol, rule, Māori traditions, lore or law, the correct Māori way.
Tōpuni # - Derives from the traditional Ngāi Tahu custom of persons of rangatira (chiefly) status extending their mana and protection over an area or person by placing their cloak over them or it.
Tūpuna # – Ancestors.
Urupā # - Burial place, cemetery, often enclosed.
Wāhi ingoa # - place names.
Wāhi taonga # - Places of sacred or extreme importance.
Wāhi tapu # - Sacred places.
Wairua # - Spirit.
Whakapapa # - Genealogy, cultural identity.

Appendix 1: Instruments from the Ngāi Tahu Claims Settlement Act 1998

The Ngāi Tahu Claims Settlement Act 1998 (the Settlement Act) implements a number of settlement provisions recognising the particular cultural, spiritual, historical and traditional associations of Ngāi Tahu with particular sites, areas and species. These provisions include the identification of taonga species and the establishment of tōpuni, statutory acknowledgements and nohoanga sites, with the purpose of improving the effectiveness of Ngāi Tahu participation in resource management.

Figure 4 shows the areas in Southland identified in the Settlement Act. It is important to recognise that there are other sites of significance to Ngāi Tahu, particularly at a local level, including sites of cultural significance. Indigenous biodiversity is also very important to Ngāi Tahu, including but not limited to those taonga species included in the Settlement Act.

(a) Statutory acknowledgements

Statutory acknowledgements recognise Ngāi Tahu mana in relation to a range of sites and areas in the South Island. They provide for the recognition of this mana to be reflected in the management of those areas through the processes of the Act.

The Statutory Acknowledgements and definitions of the areas in the Southland region and how they affect the resource management process are set out in Schedules 14 to 77, 100 to 104 and 108 of the Settlement Act.

Pursuant to Section 220 of the Settlement Act, local and territorial authorities within the Ngāi Tahu claim area must attach to all regional policy statements and regional and district plans, information recording all statutory acknowledgements affecting statutory areas covered wholly or partly by such documents, either by providing the information in full or by way of reference to the appropriate part of the Settlement Act. This appendix provides this information in full.

(b) Tōpuni

Tōpuni are landscape features of special importance or value to Ngāi Tahu. They place an 'overlay' of Ngāi Tahu values on specific pieces of land managed by the Department of Conservation and ensure that Ngāi Tahu values are recognised, acknowledged and provided for. A list of Tōpuni sites in the Southland region and a description of the values associated with them are in Schedules 80 to 93 of the Settlement Act.

(c) Nohoanga

Nohoanga are temporary campsites to facilitate customary fishing and gathering of other resources. The Ngāi Tahu Settlement provides for 72 such sites, with 11 of these situated in Southland. A list of sites over which Nohoanga Entitlements have been granted in Southland is provided in Schedule 95 of the Settlement Act.

(d) Taonga species management

Within the Settlement Act (Section 288), the Crown recognises the special association of Ngāi Tahu with certain bird, plant and marine mammal taonga species. The aim is to improve Ngāi Tahu involvement in the management of these species through increased consultative requirements with Ngāi Tahu. A list of taonga species is provided in Schedule 97 of the Settlement Act.

(e) Dual place names

The Settlement Act (Section 269) provides for the amendment of place names on official maps, in accordance with the New Zealand Geographic Board Act 1946. The reestablishment of traditional place names is a symbol of the history and relationship of Ngāi Tahu with the landscape. A list of dual place names is provided in Schedule 96 of the Settlement Act.

Statutory Acknowledgement Areas

What are statutory acknowledgements?

A statutory acknowledgment is an acknowledgement by the Crown of the special relationship of Ngāi Tahu with identifiable areas. Namely the particular cultural, spiritual, historical and traditional association of Ngāi Tahu with those areas (known as statutory areas). The statutory areas within Southland are identified on Figure 4 and described below.

What are the purposes of statutory acknowledgements?

The purposes of Statutory Acknowledgements are:

(a) to ensure that the particular association of Ngāi Tahu with certain significant areas in the South Island are identified and that Te Rūnanga o Ngāi Tahu is informed when a proposal may affect one of these areas;

(b) to improve the implementation of Resource Management Act 1991 processes, in particular by requiring consent authorities to have regard to statutory acknowledgements when making decision on the identification of affected parties.

Who may be affected by statutory acknowledgements?

You may be affected by a statutory acknowledgment if you are applying for resource consent for an activity that is within, adjacent to, or directly impacting on a statutory area.

What happens when you apply?

If you are applying for resource consent for an activity within, adjacent to, or directly impacting on a statutory area:

(a) the local authority must send a summary of your resource consent application to Te Rūnanga o Ngāi Tahu, and

(b) the local authority must have regard to the statutory acknowledgement in going through the decision-making process on whether Te Rūnanga o Ngāi Tahu is an affected party in relation to the resource consent application.

How can statutory acknowledgements be used in submissions?

How statutory acknowledgements can be used in submission is set out in Section 211 of the Ngāi Tahu Claims Settlement Act 1998. Pursuant to Section 211:

Te Rūnanga o Ngāi Tahu and any member of Ngāi Tahu Whānui may cite the relevant statutory acknowledgement in submission to, and in proceedings before a consent authority or the Environment Court concerning activities within, adjacent to, or impacting directly on a statutory area as evidence of Ngāi Tahu's association with the statutory area.

The content of the association, as recorded in a statutory acknowledgement, is not by virtue of the statutory acknowledgment binding as deemed fact upon consent authorities, the Environment Court, parties to proceedings before those bodies, or any other person able to participate in those proceedings, but the statutory acknowledgement may be taken into account by them.

Neither Te Rūnanga o Ngāi Tahu nor any member of Ngāi Tahu Whānui is precluded from stating that Ngāi Tahu has any association with the statutory area not described in the relevant statutory acknowledgment, nor does the content or existence of the statutory acknowledgement derogate from any such statement.

Purpose of statutory acknowledgements

Pursuant to Section 215, and without limiting Section 216-219 of the Ngāi Tahu Claims Settlement Act 1998 the purposes of statutory acknowledgements are:

(a) to require that consent authorities forward summaries of resource consent applications to Te Rūnanga o Ngāi Tahu, as required by regulations made pursuant to Section 207; and

(b) to require that consent authorities, Heritage New Zealand Pouhere Taonga, or the Environment Court, as the case may be, have regard to the statutory acknowledgements in relation to the statutory areas, as provided in Section 208 to 210; and

(c) to empower the Minister of the Crown responsible for management of the statutory areas, or the Commissioner of Crown Lands, as the case may be, to enter into deeds of recognition, as provided in Section 212; and

(d) to enable Te Rūnanga o Ngāi Tahu and any member of Ngāi Tahu Whānui to cite statutory acknowledgments as evidence of the association of Ngāi Tahu to the statutory areas, as provided in Section 211.

Limitations on effect of statutory acknowledgements

(a) These statutory acknowledgements do not affect, and are not to be taken into account in, the exercise of power, duty, or function by any person or entity under any statute, regulation, or bylaw; and

(b) without limiting paragraph (a), no person or entity, in considering any matter or making any decision or recommendation under the statute, regulation, or bylaw, may give any greater or lesser weight to Ngāi Tahu's association with these areas (as described in the statutory acknowledgments) that that person or entity would give under the relevant statute, regulation, or bylaw, if these statutory acknowledgement, did not exist.

Except as expressly provided in this Act, these statutory acknowledgements do not affect the lawful rights or interests of any person who is not a party to the deed of settlement. Except as expressly provided for in this Act, these statutory acknowledgements do not, of themselves, have the effect of granting, creating, or providing evidence of any estate or interest in, or any rights of any kind whatsoever relating to these statutory acknowledgement areas.

Coastal marine area statutory acknowledgements

There are also two statutory acknowledgments within the Southland region in the coastal marine area. These are:

- Rakiura/Te Ara a Kiwa (Rakiura/Foveaux Strait Coastal Marine Area); and
- Te Mimi o Tū Te Rakiwhānoa (Fiordland Coastal Marine Area).

STATUTORY ACKNOWLEDGEMENT FOR RAKIURA/TE ARA A KIWA

(RAKIURA/FOVEAUX STRAIT COASTAL MARINE AREA)

(From Schedule 104 – refer to Sections 205, 312, and 313 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is Rakiura/Te Ara a Kiwa (Rakiura/Foveaux Strait Coastal Marine Area), the Coastal Marine Area of the Hokonui and Awarua constituencies of the Southland region, as shown on SO 11505 and 11508, Southland Land District, as shown on Allocation Plan NT 505 (SO 19901).

Preamble

Under section 313, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Rakiura/Te Ara a Kiwa as set out below.

Ngāi Tahu Association with Rakiura/Te Ara a Kiwa

Generally the formation of the coastline of Te Wai Pounamu relates to the tradition of Te Waka o Aoraki, which foundered on a submerged reef, leaving its occupants, Aoraki and his brother to turn to stone. They are manifested now in the highest peaks of the Kā Tititiri of Te Moana (the Southern Alps). The bays, inlets, estuaries and fiords which stud the coast are all the creations of Tū Te Rakiwhānoa, who took on the job of making the island suitable for human habitation.

The naming of various features along the coastline reflects the succession of explorers and iwi (tribes) who travelled around the coastline at various times. The first of these was Māui, who fished up the North Island, and is said to have circumnavigated Te Wai Pounamu. In some accounts the island is called Te Waka o Māui in recognition of his discovery of the new lands. A number of coastal place names are attributed to Māui, particularly on the southern coast. Māui is said to have sojourned at Ōmaui (at the mouth of the New River Estuary) for a year, during which time he claimed the South Island for himself. It is said that in order to keep his waka from drifting away he reached into the sea and pulled up a stone to be used as an anchor, which he named Te Puka o Te Waka o Māui (Rakiura or Stewart Island).

The great explorer Rakaihautu travelled overland along the coast, identifying the key places and resources. He also left many place names on prominent coastal features. When Rakaihautu's southward exploration of the island reached Te Ara a Kiwa, he followed the coastline eastwards before heading for the east coast of Otago.

Particular stretches of the coastline also have their own traditions. Foveaux Strait is known as Te Ara a Kiwa (the pathway of Kiwa), the name relating to the time when Kiwa became tired of having to cross the land isthmus which then joined Murihiku (Southland) with Rakiura (Stewart Island). Kiwa requested the obedient Kewa (whale) to chew through the isthmus and create a waterway so Kiwa could cross to and fro by waka. This Kewa did, and the crumbs that fell from his mouth are the islands in Foveaux Strait, Solander Island being Te Niho a Kewa, a loose tooth that fell from the mouth of Kewa.

The waka Takitimu, captained by the northern rangatira (chief) Tamatea, travelled around much of Te Wai Pounamu coast, eventually breaking its back at the mouth of the Waiau River in Murihiku. Many place names on the coast can be traced back to this voyage, including Monkey Island near Ōrepuki

which is known as Te-Punga (or Puka)-a-Takitimu. While sailing past the cliffs at Ōmaui it is said that Tamatea felt a desire to go ashore and inspect the inland, and so he turned to the helmsman and gave the order "Tārere ki whenua uta" ("swing towards the mainland"), but before they got to the shore he countermanded the order and sailed on. Subsequently the whole area from Ōmaui to Bluff was given the name of Te Takiwā o Tārere ki Whenua Uta. In olden days when people from the Bluff went visiting they were customarily welcomed on to the hosts' marae with the call, 'haere mai koutou te iwi tārere ki whenua uta'. One of the whare at Te Rau Aroha marae in Bluff is also named 'Tārere ki Whenua uta' in memory of this event.

The Takitimu's voyage through the Strait came to an end when the waka was overcome by three huge waves, named Ō-te-wao, Ō-roko and Ō-kaka, finally coming to rest on a reef near the mouth of the Waiau (Waimeha). According to this tradition, the three waves continued on across the low lying lands of Murihiku, ending up as permanent features of the landscape.

For Ngāi Tahu, traditions such as these represent the links between the cosmological world of the gods and present generations. These histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Because of its attractiveness as a place to establish permanent settlements, including pā (fortified settlements), the coastal area was visited and occupied by Waitaha, Ngāti Mamoe and Ngāi Tahu in succession, who through conflict and alliance, have merged in the whakapapa (genealogy) of Ngāi Tahu Whānui. Battle sites, urupā and landscape features bearing the names of tūpuna (ancestors) record this history. Prominent headlands, in particular, were favoured for their defensive qualities and became the headquarters for a succession of rangatira and their followers.

The results of the struggles, alliances and marriages arising out of these migrations were the eventual emergence of a stable, organised and united series of hapū located at permanent or semi-permanent settlements along the coast, with an intricate network of mahinga kai (food gathering) rights and networks that relied to a large extent on coastal resources.

Mokamoka (Mokomoko or Mokemoke) was one such settlement, in a shallow inlet off the Invercargill estuary. It was here that Waitai was killed, the first Ngāi Tahu to venture this far south, well out of the range of his own people, then resident at Taumutu. This settlement was sustained by mahinga kai taken from the estuary and adjoining coastline, including shellfish and pātiki (flounder).

Ōue, at the mouth of the Ōreti River (New River Estuary), opposite Ōmaui, was one of the principal settlements in Murihiku. Honekai, who was a principal chief of Murihiku in his time, was resident at this settlement in the early 1820s, at the time of the sealers. In 1850 there were said to still be 40 people living at the kaik at Ōmaui under the chief Mauhe. Honekai's brother, Pukarehu, was a man who led a very quiet life, and so little was known. He is remembered, however, in the small knob in the hills above Ōmaui which bears his name. When he passed away he was interred in the sandhills at the south end of the Ōreti Beach opposite Ōmaui. Ōue is said to have got its name from a man Māui left to look after his interests there until his return. It was also here that the coastal track to Riverton began. From Ōue to the beach the track was called Te Ara Pakipaki, then, when it reached the beach, it was called Mā Te Aweawe, finally, at the Riverton end, it was known as Mate a Waewae.

After the death of Honekai, and as a consequence of inter-hapū and inter-tribal hostilities in the Canterbury region, many inhabitants of Ōue and other coastal villages on Foveaux Strait relocated to Ruapuke Island, which became the Ngāi Tahu stronghold in the south. The rangatira Pahi and Tupai were among the first to settle on the island. Pahi had previously had one of the larger and oldest pā in

Murihiku at Pahi (Pahia), where 40 to 50 whare (houses) were reported in 1828. The Treaty of Waitangi was signed at Ruapuke Island by Tuhawaiki and others. No battles however occurred here, the pā Pā-raki-ao was never fully completed, due to the realisation that Te Rauparaha could not reach this far south.

Other important villages along the coast included: Te Wae Wae (Waiau), Taunoa (Ōrepuki), Kawakaputaputa (Wakaputa), Ōraka (Colac Bay), Aparima (Riverton – named Aparima after the daughter of the noted southern rangatira Hekeia, to whom he bequeathed all of the land which his eye could see as he stood on a spot at Ōtaitai, just north of Riverton), Turangiteuaru, Awarua (Bluff), Te Whera, Toe Toe (mouth of the Mataura River) and Waikawa.

Rarotoka (Centre Island) was a safe haven at times of strife for the villages on the mainland opposite (Pahi, Ōraka and Aparima). Numerous artefacts and historical accounts attest to Rarotoka as having a significant place in the Ngāi Tahu history associated with Murihiku.

Rakiura also plays a prominent part in southern history, the 'Neck' being a particularly favoured spot. Names associated with the area include: Kōrako-wahine (on the western side of the peninsula), Whare-tātara (a rock), Hu-pokeka (Bullers Point) and Pukuheke (the point on which the lighthouse stands). Te Wera had two pā built in the area called Kaiarohaki, the one on the mainland was called Tounoa, and across the tidal strip was Kā -Turi-o Whako.

A permanent settlement was located at Port Pegasus, at the south-eastern end of Rakiura, where numerous middens and cave dwellings remain. Permanent settlement also occurred on the eastern side of Rakiura, from the Kaik near the Neck, south to Tikotaitahi (or Tikotatahi) Bay. A pā was also established at Port Adventure.

Mahinga kai was available through access from the coastal settlements to Te Whaka-a-te-Wera (Paterson Inlet), Lords River and, particularly for waterfowl, to Toi Toi wetland. In addition, the tītī islands off the north-eastern coast of the island, and at the mouth of Kōpeka River and the sea fishery ensured a sound base for permanent and semi-permanent settlement, from which nohoanga operated.

Te Ara a Kiwa, the estuaries, beaches and reefs off the mainland and islands all offered a bounty of mahinga kai, with Rakiura and the tītī islands being renowned for their rich resources of bird life, shellfish and wet fish. The area offered a wide range of kaimoana (sea food), including tuaki (cockles), paua, mussels, toheroa, tio (oysters), pūpū (mudsnails), cod, groper, barracuda, octopus, pātiki (flounders), seaweed, kina, kōura (crayfish) and conger eel. Estuarine areas provided freshwater fisheries, including tuna (eels), inaka (whitebait), waikōura (freshwater crayfish), kōkopu and kanakana (lamprey). Marine mammals were harvested for whale meat and seal pups. Many reefs along the coast are known by name and are customary fishing grounds, many sand banks, channels, currents and depths are also known for their kaimoana.

A range of bird life in the coastal area also contributed to the diversity of mahinga kai resources available, including tītī, seabirds such as shags and gulls, sea bird eggs, waterfowl, and forest birds such as kiwi, kākā, kākāpō, weka, kukupa and tieke. A variety of plant resources were also taken in the coastal area, including raupō, fern root, tī kōūka (cabbage tree), tutu juice and kōrari juice. Harakeke (flax) was an important resource, required for the everyday tasks of carrying and cooking kai. Black mud (paru) was gathered at Ocean Beach for use as dye. Tōtara bark was important for wrapping pōhā in, to allow safe transport of the tītī harvest. Pōhā were made from bull kelp gathered around the rocky coast.

The numerous tītī islands are an important part of the Ngāi Tahu southern economy, with Taukihepa (Te Kanawera) being the largest. Tītī were and are traded as far north as the North Island. The 'Hakuai' is a bird with a fearsome reputation associated with the islands. No one has ever seen this bird, which appears at night, but it once regularly signalled the end to a birding season by its appearance at night. Known for its distinctive spine-chilling call, the hakuai was a kaitiaki that could not be ignored. At the far western edge of Foveaux Strait is Solander Island (Hau-tere), an impressive rock pinnacle rising hundreds of feet out of the sea, on which fishing and tītī gathering occurred.

The coast was also a major highway and trade route, particularly in areas where travel by land was difficult. Foveaux Strait was a principal thoroughfare, with travel to and from Rakiura a regular activity. There was also regular travel between the islands Ruapuke, Raratoka and other points.

The tītī season still involves a large movement across the Strait to the islands, in addition large flotillas of Ngāi Tahu once came south from as far afield as Kaikōura to exercise their mutton-birding rights. Whenua Hou (Codfish Island) and the Ruggedy Islands were important staging posts for the movement of birders to the tītī islands off the south-west coast of Rakiura. Whenua Hou had everything that the birders required: shelter, proximity to the tītī islands, kai moana, manu (birds) and ngahere (bush). From Whenua Hou, the birders would camp at Miniti (Ernest Island), at the end of Mason Bay, where the waka-hunua (double-hulled canoes, or canoes with outriggers) were able to moor safely, ready for the final movement to the various tītī islands. Waka-hunua were an important means of transport on the dangerous and treacherous waters of Foveaux Strait and the Rakiura coast. After dropping birders and stores on the tītī islands the waka hunua generally returned immediately to Aparima and other tauranga waka along the mainland of Foveaux Strait, due to the paucity of safe anchorages among the tītī islands.

Travel by sea between settlements and hapū was common, with a variety of different forms of waka, including the southern waka hunua (double-hulled canoe) and, post-contact, whale boats plying the waters continuously. Hence tauranga waka occur up and down the coast, including spots at Pahi, Ōraka and Aparima, and wherever a tauranga waka is located there is also likely to be a nohoanga (settlement), fishing ground, kaimoana resource, rimurapa (bull kelp – used to make the pōhā, in which tītī were and still are preserved) and the sea trail linked to a land trail or mahinga kai resource. Knowledge of these areas continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the coast.

The New River Estuary contains wāhi tapu, as do many of the coastal dunes and estuarine complexes for the length of the Foveaux Strait. Many urupā are located on islands and prominent headlands overlooking the Strait and the surrounding lands and mountains. The rangatira Te Wera, of Huriawa fame, is buried at Taramea (Howells point), near Riverton. There are two particularly important urupā in Colac Bay, as well as an old quarry site (Tihaka). From Colac Bay to Wakaputu, the coastal sandhills are full of middens and ovens, considered to be linked to the significant mahinga kai gathering undertaken in Lake George (Urewera). Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected in secret locations.

The mauri of the coastal area represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the coastal area.

STATUTORY ACKNOWLEDGEMENT FOR TE MIMI O TŪ TE RAKIWHĀNOA

(FIORDLAND COASTAL MARINE AREA)

(From Schedule 102 – refer to Sections 205, 312 and 313 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is Te Mimi o Tū Te Rakiwhānoa (Fiordland Coastal Marine Area), the Coastal Marine Area of the Te Anau constituency of the Southland region, as shown on SO Plan 11503, Southland Land District, as shown on Allocation Plan NT 505 (SO 19901).

Preamble

Under section 313, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Te Mimi o Tū Te Rakiwhānoa as set out below.

Ngāi Tahu Association with Te Mimi o Tū Te Rakiwhānoa

The fiords of this region represent, in tradition, the raised up sides of Te Waka o Aoraki. The waka (canoe) foundered on a submerged reef and its occupants, Aoraki and his brothers, Rāraki, Rakiroa and others, were turned to stone. They stand now as the highest peaks of Kā Tiritiri o Te Moana (the Southern Alps). The fiords at the southern end of the Alps were hacked out of the raised side of the wrecked waka by Tū Te Rakiwhānoa, in an effort to make it habitable by humans. The deep gouges and long waterways that make up the fiords were intended to provide safe havens on the rugged coastline, and stocked with fish, forest and birds to sustain travellers.

For Ngāi Tahu, traditions such as these represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Particular stretches of the coastline also have their own traditions. The visit of Tamaahua to Piopiotahi (Milford Sound) in search of Poutini, who had absconded with his wife Waitaiki, is linked to the creation of Pounamu further north on Te Tai Poutini (the West Coast). The koko-takiwai which is found in Piopiotahi has its basis in a visit to Piopiotahi by the waka Tairea. A woman, Koko-takiwai, and her children, known as Matakirikiri, were left behind by the Tairea and were turned into varieties of pounamu.

Place names along the coast record Ngāi Tahu history and point to the landscape features which were significant to people for a range of reasons. For example, in his voyage around the Sounds in the waka, Takitimu, Tamatea gave the chiselled terrain the name `Te Rua-o-te-moko', likening the deep gouges adorning the impressive cliff faces of the fiords to the tattoos on a chief's face. Martins Bay (Whakatipu-waitai or Kōtuku) to the north of the fiords was the site of an old settlement, located to control the pounamu resources to be found here. An area of Doubtful Sound is known as Kahui-te-kākāpō, while Dagg Sound had a canoe harbour known as Te Rā. Breaksea Island (within Breaksea Sound — Te Puaitaha) is known as Te Au Moana, referring to the ocean current that sweeps around the inlet. Cape Providence is known as Ōrariki, a cliff near here is called Taka-o-te-karehu-o-Tamatea, referring to an episode when some tattooing ink belonging to Tamatea washed over board. Chalky Sound is known as Taiari and a rock in the Sound is known as Te Kakahu-o-Tamatea, a place where Tamatea had his clothes spread out to dry after being drenched by the salt spray. Preservation Inlet has the name Rakituma.

The area was visited mainly by Ngāti Mamoe and Ngāi Tahu, who had various routes and nohoanga for the purpose of gathering koko-takiwai and manu (birds), particularly the kākāpō. The area played a significant role in the history of conflict between Ngāi Tahu and Ngāti Mamoe, with a number of Ngāti Mamoe taking refuge in the isolation of the fiords in order to escape the unforgiving attitudes of some sections of Ngāi Tahu. The noted rangatira, Tarewai from Otago Heads, met his end here at the hands of Ngāti Mamoe, having pursued them from the Otago Peninsula to Rakituma. Tarewai and his warriors were successfully ambushed by those they were pursuing, with the result that no one ever returned to Otago from this battle. Te Whare Pā in Rakitimu was the scene of one of the last major battles between Ngāti Mamoe and Ngāi Tahu.

Another dark piece of history occurred at Te Tauraka o te Hupokeka (Anita Bay). Hupokeka and his whānau (family) regularly visited Piopiotahi, travelling from Murihiku to gather koko-takiwai, and staying at a nohoanga in Anita Bay. It was here, in the 1820s, that he and his whānau were slaughtered by sealers in retribution for an incident of which they were quite innocent.

Because of its attractiveness as a place to establish permanent settlements, including pā (fortified settlements), the coastal area was visited and occupied first by Ngāti Mamoe and later by Ngāi Tahu. Through conflict and alliance, these two iwi have merged in the whakapapa (genealogy) of Ngāi Tahu. Battles sites, urupā and landscape features bearing the names of tūpuna (ancestors) record this history. Prominent headlands, in particular, were favoured for their defensive qualities and became the headquarters for a succession of rangatira and their followers. Notable pā and nohoanga occurred in many areas on the Fiordland coast including: Milford (Lake Marchant) and Caswell Sounds; Kahui-te-kākāpō (Doubtful Sound), known as the gathering place of the kākāpō, in reference to the gathering of kākāpō meat and feathers which was one of the key reasons that Ngāi Tahu Whānui regularly travelled to the fiords; Dagg Sound gets the sun all day, and consequently is well known as a nohoanga site, it also has a good canoe harbour known as Te Rā; Rakituma is the site of several pā or nohoanga including one at Matauira and another at Te Whare Pā.

It was the koko-takiwai and kākāpō which primarily attracted Ngāi Tahu to Fiordland. The koko-takiwai is favoured as a softer type of pounamu, more easily shaped into a finer quality of end product. It was therefore particularly sought after for the making of ornaments, such as hei-tiki. The area also offered many other mahinga kai to sustain parties on their arduous expeditions, including a range of manu (birds), fish and kaimoana resources.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the area, the relationship of people with the coastline and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

There are two principal trails linking the Fiordland coast with the rest of Te Wai Pounamu (the South Island). A sea route around the fiords links Piopiotahi to Murihiku, and was the main route by which the koko-takiwai gathered from that end of the fiords was transported. The inland route for transporting koko-takiwai by backpack lay over what is now known as the Milford track, over Ōmanui (McKinnon Pass), down the Waitawai (Clinton River) to the head of Te Ana-au (Lake Te Anau). From there, the pounamu would be transported by mokihi to the head of the Waiau River, and from there down the Waiau to Te Ara a Kiwa (Foveaux Strait). In addition, a trail from Martins Bay, up the Hollyford Valley and over into the Routeburn Valley to the pounamu source at the head of Lake Whakatipu-wai-māori, was commonly used by Tai Poutini iwi, who regularly travelled south via this route to obtain koko-takiwai.

Hence tauranga waka (landing places) occur up and down the coast and wherever a tauranga waka is located there is also likely to have been a nohoanga, fishing ground, kaimoana resource, with the sea trail linked to a land trail or mahinga kai resource. The tūpuna had a huge knowledge of the coastal environment and weather patterns, passed from generation to generation. This knowledge continues to be held by whānau and hapū and is regarded as taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the coast.

The fiords are the repository of many kōiwi tangata, secreted away in keeping places throughout the region. There are also many other wāhi tapu in the area, including examples of rock art in Chalky Sound. Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. Urupā and wāhi tapu are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected in secret locations.

The mauri of Te Mimi o Tū Te Rakiwhānoa represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the area.

STATUTORY ACKNOWLEDGEMENT FOR HANANUI (MOUNT ANGLEM)

(From Schedule 18 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the area known as Hananui (Mt Anglem), as shown on Allocation Plan MS 264 (SO 12249).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Hananui, as set out below.

Ngāi Tahu Association with Hananui

As with all principal maunga (mountains), Hananui is imbued with the spiritual elements of Raki and Papa, in tradition and practice regarded as an important link to the primeval parents.

The name Hananui is derived from an event involving the tūpuna (ancestor) Rakitamau, a chief of Te Taumutu, and son of Tū Te Kawa. Rakitamau became a widower through the unfortunate death of his wife. Rakitamau journeyed to Motunui (as Rakiura was called then) seeking the hand of a tribally renowned wahine (woman) to take her place, as in his view she would increase his standing due to her mana, reflected in her connections to the land and important people of Rakiura.

On his arrival at her village, Rakitamau asked for the woman by name, only to be told by a laughing group of women she was tāpui (betrothed or set apart). At this, Rakitamau blushed deeply. When he then asked for her sister the people laughed loudly, as they told him she was tāpui also. This news made him blush further so that his cheeks flamed. He left the island never to return and the women were so amused that they named the highest point on the island Hananui, referring to the great glow of Rakitamau, in memory of the event. Rakiura itself takes its name from the glowing skies of this region, the aurora lights.

For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Pūtātāra was an old settlement under the lee of Hananui, a place to which an Otago rangatira (chief), Tukiauau, retired to seek refuge.

The mauri of Hananui represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with Hananui.

STATUTORY ACKNOWLEDGEMENT FOR MATAURA RIVER

(From Schedule 42 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the river known as Mataura, the location of which is shown on Allocation Plan MD 125 (SO 12264).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to the Mataura River, as set out below.

Ngāi Tahu Association with the Mataura River

The area of the Mataura River above the Mataura Falls was traditionally used by the descendants of the Ngāti Mamoe chief, Parapara Te Whenua. The descendants of Parapara Te Whenua incorporate the lines of Ngāti Kurī from which the Mamaru family of Moeraki descend. Another famous tūpuna associated with the river was Kiritekateka, the daughter of Parapara Te Whenua. Kiritekateka was captured by Ngāi Tahu at Te Anau and her descendants make up the lines of many of the Ngāi Tahu families at Ōtākou.

For Ngāi Tahu, histories such as these reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

The Mataura was an important mahinga kai, noted for its indigenous fishery. The Mataura Falls were particularly associated with the taking of kanakana (lamprey). The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of Mataura, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The mauri of the Mataura represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a

life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the river.

STATUTORY ACKNOWLEDGEMENT FOR APARIMA RIVER

(From Schedule 15 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the River known as Aparima, the location of which is shown on Allocation Plan MD 126 (SO 12265).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to the Aparima River, as set out below.

Ngāi Tahu Association with the Aparima River

The mouth of the Aparima was the site of a permanent settlement, with associated urupā nearby. Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations.

The river was an important source of mahinga kai, with shellfish, mussels, paua, tuna (eels) and inaka (whitebait) all being taken from the river and its estuary. An eel weir was constructed at the narrows where the Pourakino River enters the Aparima, and was an important source of tuna.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka (landing places), places for gathering kai and other taonga, ways in which to use the resources of the Aparima, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The mouth of the Aparima was a tauranga waka, from which sea voyages were launched to and from a variety of locations in and around Te Ara a Kiwa (Foveaux Strait), Rakiura and the tītī islands. A carved tauihu (canoe prow) found in the estuary of the river attests to this.

The tūpuna had an intimate knowledge of navigation, river routes, safe harbours and landing places, and the locations of food and other resources on the Aparima. The river was an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the river.

The mauri of the Aparima represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the river.

STATUTORY ACKNOWLEDGEMENT FOR LAKE HAUROKO

(From Schedule 29 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the Lake known as Hauroko, the location of which is shown on Allocation Plan MD 41 (SO 12258).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Lake Hauroko, as set out below.

Ngāi Tahu Association with Lake Hauroko

Hauroko is strongly associated with urupā in the immediate vicinity, including one on an island in the lake, known to Pākehā as Mary Island. In particular, Ngāti Rakiamoa and Ngāti Ruahikihiki have several traditions about their dead laying in this region.

Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations. It is because of its proximity to these urupā that Hauroko is considered tapu by Ngāi Tahu.

The mauri of Hauroko represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the lake.

STATUTORY ACKNOWLEDGEMENT FOR MANAWAPŌPŌRE/HIKURAKI (MAVORA LAKES)

(From Schedule 39 – refer to Sections 205 and 206)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the Wetland known as, the location of which is shown on Allocation Plan MD44 (SO 12235).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Manawapōpōre/Hikuraki, as set out below.

Ngāi Tahu Association with Manawapōpōre/Hikuraki

Manawapōpōre and Hikuraki are part of one of the most significant catchments in Murihiku (Southland). The wetland also lies in the path of the important trail from the mouth of the Ōreti River onward, via the Greenstone Valley, to the head of Whakatipu-wai-māori (Lake Wakatipu), or alternatively continuing along the Greenstone Valley and out via the Hollyford to the West Coast. These

were important trading routes, to gather pounamu for exchange with northern iwi for materials and foods unavailable in the south.

The wetland area was, therefore, an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the area.

In addition, the trails were part of summer time pursuits such as kai-hau-kai, whānaungatanga (the renewal and strengthening of family links) and arranging marriages with hapū from the neighbouring region of Otago and further afield. Such strategic marriages between hapū strengthened the kupenga (net) of whakapapa and thus rights to use the resources of the area.

Manawapōpōre (Lower Mavora) is noted for eel weirs, which were constructed on the lake edges for catching eels, utilising flat stones, built in a loop out from the lake edge, with gaps at either end and one in the middle. Construction of the eel weir recreates the type of environment that eels like to congregate in, hence reliable catches are made.

The tūpuna had considerable knowledge of such techniques, places for catching and gathering kai and other taonga, ways in which to use the resources of the area, the relationship of people with the area and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The mauri of Manawapōpōre/Hikuraki represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the area.

STATUTORY ACKNOWLEDGEMENT FOR MOTUPŌHUE (BLUFF HILL)

(From Schedule 44 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the area known as Motupōhue (Bluff Hill), as shown on Allocation Plan MS 8 (SO 12233).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Motupōhue as set out below.

Ngāi Tahu Association with Motupōhue

The name Motupōhue is an ancient one, brought south by Ngāti Mamoe and Ngāi Tahu from the Hawke's Bay region where both tribes originated. The name recalls a history unique to the Ngāi Tuhaitara and Ngāti Kurī hapū that is captured in the line, `Kei korā kei Motupōhue, he pāreka e kai ana, nā tō tūtae' (`It was there at Motupōhue that a shag stood, eating your excrement').

Oral traditions say that the Ngāti Mamoe leader, Te Rakitauneke, is buried upon this hill. Te Rakitauneke's saying was: `Kia pai ai tāku titiro ki Te Ara a Kiwa' (`Let me gaze upon Foveaux Strait'). Some traditions also place another Ngāti Mamoe leader, Tū Te Makohu, on this hill.

For Ngāi Tahu, histories such as this represent the links and continuity between past and present generations, reinforce tribal identity and solidarity, and document the events which shaped Ngāi Tahu as an iwi.

The mauri of Motupōhue represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with Motupōhue.

STATUTORY ACKNOWLEDGEMENT FOR MOTURAU (LAKE MANAPŌURI)

(From Schedule 45 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the Lake known as Moturau (Lake Manapōuri), the location of which is shown on Allocation Plan MD 40 (SO 12257).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Moturau, as set out below.

Ngāi Tahu Association with Moturau

Moturau (or Motu-ua) is one of the lakes referred to in the tradition of `Ngā Puna Wai Karikari o Rakaihautu' which tells how the principal lakes of Te Wai Pounamu were dug by the rangatira (chief) Rakaihautu. Rakaihautu was the captain of the canoe, Uruao, which brought the tribe, Waitaha, to New Zealand. Rakaihautu beached his canoe at Whakatū (Nelson). From Whakatū, Rakaihautu divided the new arrivals in two, with his son taking one party to explore the coastline southwards and Rakaihautu taking another southwards by an inland route. On his inland journey southward, Rakaihautu used his famous kō (a tool similar to a spade) to dig the principal lakes of Te Wai Pounamu, including Moturau. Rakaihautu named the lake Motu-ua, a reference to the persistent rain which troubled his party here.

Tamatea and his party passed this way in their journey back to their homeland after their waka, Takitimu, broke its back at the mouth of the Waiau River. It was Tamatea who named the lake Moturau (possibly a woman's name but more likely to relate to the many islands found in the lake). Tamatea's party established a camp on the edge of the lake, which is probably under water now, and called it

Whitiaka-te-rā (the shining of the sun), indicating that they enjoyed a very different experience of the lake from Rakaihautu. Other traditional names associated with the lake include Te Māui (North Arm), Te Tukeroa (Beehive), Manapōuri (north-eastern reach), Wairoa River (upper Waiau River), Te Rakatū (Garnock Burn), Te Konuotu-te-Makohu (Monument), and Huatea (South Arm).

For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

A number of wāhi taonga and nohoanga associated with the lake are now under its waters. Eel weirs have been found at the Monument and Hope Arm of the lake, and there was a canoe manufacturing site at Pigeon Island. Such wāhi taonga are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna.

As a mahinga kai, the lake was important for the fowling it offered Murihiku coastal settlements in summer. The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka (landing places), places for gathering kai and other taonga, ways in which to use the resources of Moturau, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The mauri of Moturau represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the lake.

STATUTORY ACKNOWLEDGEMENT FOR ŌRETI RIVER

(From Schedule 50 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the River known as Ōreti, the location of which is shown on Allocation Plan MD 123 (SO 12262).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to the Ōreti River, as set out below.

Ngāi Tahu Association with the Ōreti River

The Ōreti River traverses a significant area of Murihiku, stretching from its mouth at Invercargill almost to the edge of Whakatipu-wai-māori (Lake Wakatipu). As such, it formed one of the main trails inland from the coast, with an important pounamu trade route continuing northward from the headwaters of the Ōreti and travelling, via the Mavora or Von River Valley, to the edge of Wakatipu and onto the Dart and Routeburn pounamu sources. Indeed, pounamu can be found in the upper reaches of the Ōreti itself.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the Ōreti, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The kai resources of the Ōreti would have supported numerous parties venturing into the interior, and returning by mōkihi (vessels made of raupō), laden with pounamu and mahinga kai. Nohoanga (temporary campsites) supported such travel by providing bases from which the travellers could go water fowling, eeling and catching inaka (whitebait), and were located along the course of Ōreti River.

There were a number of important settlement sites at the mouth of the Ōreti, in the New River estuary, including Ōmāui, which was located at the mouth of the Ōreti, where it passes the New River Heads. Ōue, at the mouth of the Ōreti River (New River estuary), opposite Ōmāui, was one of the principal settlements in Murihiku. Honekai who was a principal chief of Murihiku in his time was resident at this settlement in the early 1820s, at the time of the sealers. In 1850 there were said to still be 40 people living at the kaik at Ōmāui under the chief Mauhe.

As a result of this pattern of occupation, there are a number of urupā located at the lower end of the Ōreti, in the estuarine area. Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations.

The mauri of the Ōreti represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the river.

STATUTORY ACKNOWLEDGEMENT FOR TE ANA-AU

(LAKE TE ANAU)

(From Schedule 58 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the Lake known as Te Ana-au (Lake Te Anau), the location of which is shown on Allocation Plan MD 42 (SO 12259).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Te Ana-au, as set out below.

Ngāi Tahu Association with Te Ana-au

Te Ana-au is one of the lakes referred to in the tradition of `Ngā Puna Wai Karikari o Rakaihautu,' which tells how the principal lakes of Te Wai Pounamu were dug by the rangatira (chief) Rakaihautu. Rakaihautu was the captain of the canoe, Uruao, which brought the tribe, Waitaha, to New Zealand. Rakaihautu beached his canoe at Whakatū (Nelson). From Whakatū, Rakaihautu divided the new arrivals in two, with his son taking one party to explore the coastline southwards and Rakaihautu taking

another southwards by an inland route. On his inland journey southward, Rakaihautu used his famous kō (a tool similar to a spade) to dig the principal lakes of Te Wai Pounamu, including Te Ana-au.

For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Te Ana-au figures in Ngāi Tahu histories as one of the last places where Ngāi Tahu and Ngāti Mamoe came into conflict after the peace established between Rakiihia and Te Hautapunui o Tū. After Rakiihia had died, his bones were stripped of flesh and were buried in a cave on a cliff facing the seaside near Dunedin. However, a landslip led to the bones being uncovered. The bones were found by Ngāi Tahu fishermen and made into fish hooks, an act designed to insult. Among Māori it was a practice to take the bones of enemy leaders who had recently died, fashion them into fish hooks and present fish caught with them to the enemy as a gift. Once the fish had been eaten, the enemy would be told they had feasted on fish that had in turn feasted on their dead.

While Ngāi Tahu were fishing with their Ngāti Mamoe relations, one of the Ngāi Tahu fisherman referred to the fish biting the bones of Rakiihia. The Ngāti Mamoe fisherman recognised the insult and checked the cave in which their leader had been interred. Finding that the grave had been desecrated, the Ngāti Mamoe found and killed the son of a senior Ngāi Tahu rangatira (chief). Before Ngāi Tahu could retaliate, the Ngāti Mamoe were warned that they should leave the coast for the inland lakes where they would not be found. Ngāti Mamoe headed to Te Ana-au. Among this Ngāti Mamoe party was Rakiihia's brother, Pukutahi. Pukutahi fell sick along Te Ana-au's shoreline and rested while his followers explored the lake to find a safer place.

Approaching the lakes, Te Hau, the leader of the Ngāi Tahu party, observed that the fugitives had divided in two, and unfortunately for Pukutahi decided to follow the trail up to Te Ana-au. The Ngāti Mamoe camp was found and in the morning the chiefs of Ngāti Mamoe, including Pukutahi, were killed. This was to be one of the last battles between the tribes.

The lake was an important mahinga kai in the interior. The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of Te Ana-au, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

The mauri of Te Ana-au represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the lake.

STATUTORY ACKNOWLEDGEMENT FOR TOI TOI WETLAND, RAKIURA

(From Schedule 63 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the Wetland known as Toi Toi, the location of which is shown on Allocation Plan MD 135 (SO 12266).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Toi Toi, as set out below.

Ngāi Tahu Association with Toi Toi

Toi Toi wetland is particularly significant to Ngāi Tahu as a kākāpō habitat. The kākāpō, once a prized mahinga kai for Ngāi Tahu, used the wetland as a feeding ground.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of Toi Toi, the relationship of people with the wetland and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

Much of Toi Toi's value lies in its pristine and unmodified character. The mauri of Toi Toi represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the wetland.

STATUTORY ACKNOWLEDGEMENT FOR TŪTOKO

(From Schedule 66 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the mountain known as Tūtoko, as shown on Allocation Plan MS 3 (SO 24747 (Otago Land District) and SO 12231 (Southland Land District)).

Preamble

Under Sections 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Tūtoko as set out below.

Ngāi Tahu Association with Tūtoko

The Fiordland area, within which Tūtoko stands, represents, in tradition, the raised up sides of Te Waka o Aoraki, after it foundered on a submerged reef and its occupants, Aoraki and his brothers, were turned to stone. These people are now manifested in the highest peaks in Kā Tiritiri o Te Moana (the Southern Alps). The fiords at the southern end of the Alps were carved out of the raised side of the

wrecked Waka o Aoraki by Tū Te Rakiwhānoa, so as to make the waka (canoe) habitable by humans. The deep gorges and long waterways that are the fiords were provided as safe havens on this rugged coast, and stocked with fish, forest and birds to sustain humans.

For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events that have shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Tūtoko is not, in fact, the original name of the maunga (mountain), but was applied by Dr J Hector in 1863 after he met the old rangatira (chief) Tūtoko and his two daughters, Sara and May. The hills to the north of the Kōtuku River are named the Sara Hills, and those to the south May Hills, after these daughters. The use of this name is seen as appropriate to Ngāi Tahu, as Tūtoko was an important rangatira of this region at that time, and is represented by the mountain.

Tūtoko is the kaitiaki (guardian) of Whakatipuwaitai, the westernmost creation of Rakaihautu and the southernmost kāinga (settlement) of Te Tai Poutini (West Coast) pounamu trails, which provides access to koko-takiwai (a type of pounamu) at Piopiotahi (Milford Sound) and Poison Bay further to the south. The kāinga was also an important staging post for travel into the Lake Wakatipu area via the Hollyford Valley. All of these trails, whether by land or by sea, lie under the shadow of Tūtoko.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the land, the relationship of people with the land and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

Mountains such as Tūtoko are linked in whakapapa to the gods and, being the closest earthly elements to Raki the sky father, they are likened to the children of Raki and Papa, reaching skyward. The mauri of Tūtoko represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the land.

STATUTORY ACKNOWLEDGEMENT FOR URUWERA (LAKE GEORGE)

(From Schedule 68 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the Wetland known as Uruwera (Lake George), the location of which is shown on Allocation Plan MD 59 (SO 12261).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Uruwera, as set out below.

Ngāi Tahu Association with Uruwera

Lake George is known to Ngāi Tahu as Uruwera, named after a descendant of the Waitaha rangatira (chief), Rakaihautu. Uruwera's descent lines lead to Te Ropuake, the wife of Mako, a leading chief of Ngāti Irakehu of Banks Peninsula. Te Ropuake's mother was Hine Te Awheka, wife of Te Rakiwhakaputa, another leading Ngāi Tahu chief who eventually occupied Rapaki on Banks Peninsula. Both Mako and Te Rakiwhakaputa migrated to Canterbury with the Ngāi Tahu hapū, Ngāi Tuhaitara. Examples such as this demonstrate the interconnected nature of Ngāi Tahu whakapapa.

For Ngāi Tahu, histories such as this reinforce tribal identity and solidarity and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Foods taken from this mahinga kai included tuna (eels), inaka (whitebait) and water fowl. Uruwera has been in continual use by Ngāi Tahu as a mahinga kai for many generations. The lake is a particularly important resource for Ngāi Tahu from Ōraka, Awarua and Ruapuke.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of Uruwera, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

As a result of this history of use, there a number of urupā associated with Uruwera. Urupā are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations.

The mauri of Uruwera represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the lake.

STATUTORY ACKNOWLEDGEMENT FOR WAIAU RIVER

(From Schedule 69 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the river known as Waiau, the location of which is shown on Allocation Plan MD 124 (SO 12263).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to the Waiau, as set out below.

Ngāi Tahu Association with the Waiau

The Waiau River features in the earliest of traditional accounts, and was a place and resource well known to the earliest tūpuna (ancestors) to visit the area. Rakaihautu and his followers traced the

Waiau from its source in Te Ana-au (Lake Te Anau) and Motu-ua or Moturau (Lake Manapōuri), to its meeting with the sea at Te Wae Wae Bay.

The waka Takitimu, under the command of the rangatira (chief) Tamatea, was wrecked near the mouth of the Waiau River and the survivors who landed at the mouth named the river `Waiau' due to the swirling nature of its waters. Tamatea and his party made their way up the river to Lake Manapōuri where they established a camp site. The journey of Tamatea was bedevilled by the disappearance of Kaheraki who was betrothed to Kāhungunu, a son of Tamatea. Kaheraki strayed away from the party, and was captured by the Maeroero (spirits of the mountain).

For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

The Waiau has strong links with Waitaha who, following their arrival in the waka Uruao, populated and spread their influence over vast tracts of the South Island. They were the moa hunters, the original artisans of the land. There are remnants of Waitaha rock art associated with the river. Surviving rock art remnants are a particular taonga of the area, providing a unique record of the lives and beliefs of the people who travelled the river.

There is also a strong Ngāti Mamoe influence in this area of the country. Ngāti Mamoe absorbed and intermarried with the Waitaha and settled along the eastern coast of Te Wai Pounamu. The arrival of Ngāi Tahu in Te Wai Pounamu caused Ngāti Mamoe to become concentrated in the southern part of the island, with intermarriage between the two iwi occurring later than was the case further north. The result is that there is a greater degree of Ngāti Mamoe influence retained in this area than in other parts of the island. These are the three iwi who, through conflict and alliance, have merged in the whakapapa (genealogy) of Ngāi Tahu Whānui.

Numerous archaeological sites and wāhi taonga attest to the history of occupation and use of the river. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna. The main nohoanga (occupation site) on the Waiau was at the mouth and was called Te Tua a Hatu. The rangatira (chief) Te Wae Wae had his kāinga nohoanga on the left bank of the Waiau River mouth.

The Waiau, which once had the second largest flow of any river in New Zealand, had a huge influence on the lives and seasonal patterns of the people of Murihiku, over many generations. The river was a major mahinga kai: aruhe (fernroot), tī root, fish, tuna (eels), shellfish and tutu were gathered in the summer, a range of fish were caught in the autumn, kanakana (lamprey) were caught in the spring, while the people were largely reliant during winter on foods gathered and preserved earlier in the year. Rauri (reserves) were applied to the mahinga kai resources, so that people from one hapū or whānau never gathered kai from areas of another hapū or whānau. Some 200 species of plants and animals were utilised by Ngāi Tahu as a food resource in and near the Waiau.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the Waiau, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

Place names provide many indicators of the values associated with different areas, including Waiharakeke (flax), Papatōtara (tōtara logs or bark), Kirirua (a type of eel found in the lagoon), Te Rua o te Kaiamio (a rock shelter that was a ‘designated meeting place’ for the local Māori, similar to a

marae) and Kā Kerehu o Tamatea — (`charcoal from the fire of Tamatea' — black rocks near old Tuatapere ferry site).

The Waiau River was a major travelling route connecting Murihiku and Te Ara a Kiwa (Foveaux Strait) to Te Tai Poutini (the West Coast) and, as such was a important link between hapū and iwi. Pounamu on the West Coast, and summer expeditions to Manapōuri (Motu-ua or Moturau) for mahinga kai were the main motivations for movement up and down the Waiau. Mōkihi (vessels made from raupō) were utilised for travel down the river and were a very effective and common mode of travel, making transportation of substantial loads of resources possible.

The tūpuna had an intimate knowledge of navigation, river routes, safe harbours and landing places, and the locations of food and other resources on the Waiau. The river was an integral part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the river.

The Waiau was once a large and powerful river, up to 500m across at the mouth, narrowing to 200m further upstream. The water flow from the Waiau River was an important factor in the ecological health and bio-diversity of the coastal resources.

The mauri of the Waiau represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the river.

STATUTORY ACKNOWLEDGEMENT FOR WAITUNA WETLAND

(From Schedule 73 – refer to Sections 205 and 206 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The statutory area to which this statutory acknowledgement applies is the wetland known as Waituna, the location of which is shown on Allocation Plan MD 58 (SO 12260).

Preamble

Under section 206, the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Waituna, as set out below.

Ngāi Tahu Association with Waituna

Intermittently open to the sea, Waituna wetland (with the western end, where the lagoon breaks out to sea known as Kā-puna-wai) was a major food basket utilised by nohoanga and permanent settlements located in the immediate vicinity of the wetlands, and further away, for its wide variety of reliable mahinga kai. The great diversity of wildlife associated with the complex includes several breeds of ducks, white heron, gulls, spoonbill, kōtuku, oyster-catcher, dotterels, terns and fernbirds. The wetlands are important kōhanga (spawning) grounds for a number of indigenous fish species. Kaimoana available includes giant and banded kōkopu, varieties of flatfish, tuna (eels), kanakana (lamprey), inaka (whitebait), waikākahi (freshwater mussel) and waikōura (freshwater crayfish).

Harakeke, raupō, mānuka, tōtara and tōtara bark, and pingao were also regularly harvested cultural materials. Paru or black mud was available, particularly sought after as a product for making dyes.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of Waituna, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

As a result of this history of use and occupation of the area, there are wāhi tapu and wāhi taonga all along its shores. It is also possible that particular sections of the wetland were used for waiwhakaheketūpāpāku (water burial).

Urupā and wāhi tapu are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are frequently protected by secret locations.

The mauri of Waituna represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the area.

STATUTORY ACKNOWLEDGEMENT FOR WHENUA HOU

(From Schedule 108 – refer to Section 332 Ngāi Tahu Claims Settlement Act 1998)

Statutory Area

The area to which this statutory acknowledgement applies is the area known as Whenua Hou, as shown on Allocation Plan SS 431 (SO 12251).

Preamble

Under section 332 (clause 12.2.2 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional association to Whenua Hou as set out below.

Ngāi Tahu association with Whenua Hou

Ko Whenua Hou te motu
Ko Waikoropupu te whaka
Ko Waituna te awa
Ko Te Ara a Kewa te moana
Ko Kāi Tahu, Kāti Mamoe, Waitaha kā iwi
Kei Kāi tahu Whānui
Te ihi, te wehi, te mana, te tapu
Tehei mauri ora!

Whenua Hou is an extremely important tūrangawaewae (literally 'a place to stand') to Ngāi Tahu Whānui. Ngāi Tahu connect with Whenua Hou spiritually, culturally and physically.

Whenua Hou was also an important stopping-off point for birders converging on the tītī islands in their waka (canoes) and waka hunua (double-hulled canoes). The right to use this island in this way flowed from whakapapa (genealogy), just like the right to use the tītī islands themselves. Birders would use various kaika (settlements) and resting places on the island as a respite from their difficult travels.

One tragic account attests to the loss of life that occurred in the rough waters of Foveaux Strait. A waka hunua with about forty people aboard, commanded by the rangatira (chief) Te Pahi, foundered in heavy seas with the loss of all hands while on its journey from Whenua Hou to Ruapuke Island at the close of the mutton birding season. This was witnessed by Taiaroa and his people who were aboard an accompanying waka hunua, but were unable to offer assistance as their waka was also in dire circumstances. The harvesting of tītī from these rugged islands, despite such treacherous conditions, attests to the importance of this resource to the economy and customs of the iwi over many generations.

Despite Ngāi Tahu's long association with Whenua Hou, that name is not, in fact, the original name of this island, but commemorates an important time in more recent Ngāi Tahu history. It relates to the occasion when the rangatira Honekai declared the island as the place sealers and their Māori wives could stay under his protection. The reason for this was to remove the sealers from the Rakiura and mainland villages where they were annoying the Kāi Tahu women. Hence the new land (Whenua Hou) became the first European settlement in the south.

Many Ngāi Tahu are able to trace their whakapapa (genealogy) to these early unions between Ngāi Tahu women and European sealers. It is for this reason that Whenua Hou plays an extremely significant role in Ngāi Tahu's contemporary whakapapa. For Ngāi Tahu, histories such as this represent the links and continuity between past and present generations, reinforce tribal identity and solidarity, and document the events which shaped Ngāi Tahu as an iwi.

There are a number of urupā on Whenua Hou which are the resting places of Ngāi Tahu tūpuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of our tūpuna, and are frequently protected by secret locations.

Ngāi Tahu whānau from Murihiku have erected a pouwhenua (carved post denoting a tribe's relationship with an area of land) on Whenua Hou in memory of the Murihiku women who resided on the island. The establishment of such markers is significant in that they serve to reaffirm the tribe's association with the island, and to act as a tangible reminder of that association. The following waiata (song) was composed to commemorate the dedication of this pouwhenua:

Ka Pouwhenuatia te motu o Whenua Hou hei tohu
maumahara mō kā uri whakatupu i raro ake kā iwi
whānui o Kāitahu me kā hapū karakamaha.
Ka titiro, kei te ora me te kaha tonu te mauri o te
iwi whānui i Kāitahu i roto kā tikaka i rātou
kua karo kanohi atu.
Ka herea a Kāitahu Whānui hei kaipupuri i te ihi,
te wehi, te mana, te tapu o kā tikaka mō te
motu o whenua Hou.

Ka ū, ka ū, kia kikii, kia kikii,
Ka tū te pō, ka tū te ao
mo ake ake tonu atu.

A symbol of ownership and remembrance was placed on the island Whenua Hou as a guardian for future generations of the families of Kāi Tahu Whānui. Looking on, seeing that the principal life source of Kai Tāhu's extended family is and will always be as it was in the days of those who have passed on. To this we tie ourselves as Kāitahu, being the traditional keepers of the gifts, the strength, humility, prestige, the sacredness, and all that Whenua Hou holds.

Hold fast, hold fast, tighter, tighter
let night come, let daylight come
for ever, ever, everlasting.

The mauri of Whenua Hou represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the island.

TŌPUNI FOR MOTUPŌHUE (BLUFF HILL)

(From Schedule 85 – refer to Sections 238 and 239 Ngāi Tahu Claims Settlement Act 1998)

Description of Area

The area over which the Tōpuni is created is the area known as Motupōhue, as shown on Allocation Plan MS 8 (SO 12233).

Preamble

Under section 239 (clause 12.5.3 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Motupōhue as set out below.

Ngāi Tahu Values Relating to Motupōhue

The name Motupōhue is an ancient one, brought south by Ngāti Mamoe and Ngāi Tahu from the Hawke's Bay region where both tribes originated. The name recalls a history unique to the Ngāi Tuhaitara and Ngāti Kurī hapū that is captured in the line, `Kei korā kei Motupōhue, he pāreka e kai ana, nā tō tūtae' (`It was there at Motupōhue that a shag stood, eating your excrement').

Oral traditions say that the Ngāti Mamoe leader, Te Rakitauneke, is buried upon this hill. Te Rakitauneke's saying was: `Kia pai ai tāku titiro ki Te Ara a Kiwa' (`Let me gaze upon Foveaux Strait'). Some traditions also place another Ngāti Mamoe leader, Tū Te Makohu, on this hill.
For Ngāi Tahu, histories such as this represent the links and continuity between past and present generations, reinforce tribal identity and solidarity, and document the events which shaped Ngāi Tahu as an iwi.

The mauri of Motupōhue represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with Motupōhue.

TŌPUNI FOR TAKITIMU RANGE, SOUTHLAND

(From Schedule 89 – refer to Sections 238 and 239 Ngāi Tahu Claims Settlement Act 1998)

Description of Area

The area over which the Tōpuni is created is the area known as Takitimu Range located in Murihiku (Southland), as shown on Allocation Plan MS 5 (SO 12232).

Preamble

Under section 239 (clause 12.5.3 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Takitimu as set out below.

Ngāi Tahu Values Relating to Takitimu

The Takitimu maunga (mountains) were named by Tamatea, the captain of the Takitimu waka (canoe) in memory of the waka after it struck trouble in Te Waewae Bay, and was eventually wrecked near the mouth of the Waimeha Stream.

Tradition states that the Takitimu waka was overtaken by three large waves known as Ō-te-wao, Ō-roko and Ō-kaka, followed by a cross wave, which resulted in the Takitimu being hurled well inland, with its cargo being strewn about. In some accounts the ranges inland from Te Waewae Bay are likened to the huge waves that caused the demise of the waka Takitimu. In other accounts the Takitimu maunga are considered to be the upturned hull of the waka.

For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events that have shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Tamatea and his crew made their way overland from the site of the wreck. Tamatea likened the majestic and upright Takitimu maunga when he viewed them from the south coast, to the crew of the Takitimu struggling to control the waka in adverse conditions. During the overland journey past the Takitimu maunga, Tamatea lost one of his party, a woman named Kaheraki who strayed away from the party and was captured by the maeroero (spirits of the mountain) and never seen again. Kaheraki had been betrothed to Kahungunu, who was a son of Tamatea.

The Takitimu maunga are, therefore, a symbolic reminder of the famous exploits of Tamatea in the south, and a reminder forever locked into the landscape, of the tūpuna (ancestral) waka Takitimu, adding lustre to the noted spiritual values of the western Southland landscape. The Takitimu maunga are visible from all points of the Murihiku landscape, and are also a noted weather indicator.

The mauri of Takitimu represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a

life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the land.

TŌPUNI FOR TŪTOKO

(From Schedule 93 – refer to Sections 238 and 239 Ngāi Tahu Claims Settlement Act 1998)

Description of Area

The area over which the Tōpuni is created is the area known as Tūtoko located in Fiordland National Park, as shown on Allocation Plan MS 3 (SO 24747 (Otago Land District) and SO 12231 (Southland Land District)).

Preamble

Under section 239 (clause 12.5.3 of the deed of settlement), the Crown acknowledges Te Rūnanga o Ngāi Tahu's statement of Ngāi Tahu's cultural, spiritual, historic, and traditional values relating to Tūtoko, as set out below.

Ngāi Tahu Values Relating to Tūtoko

The Fiordland area, within which Tūtoko stands, represents, in tradition, the raised up sides of Te Waka o Aoraki, after it foundered on a submerged reef and its occupants, Aoraki and his brothers, were turned to stone. These people are now manifested in the highest peaks in Kā Tiritiri o Te Moana (the Southern Alps). The fiords at the southern end of the Alps were carved out of the raised side of the wrecked Waka o Aoraki by Tū Te Rakiwhānoa, so as to make the waka (canoe) habitable by humans. The deep gorges and long waterways that are the fiords were provided as safe havens on this rugged coast, and stocked with fish, forest and birds to sustain humans.

For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events that have shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Tūtoko is not, in fact, the original name of the maunga (mountain), but was applied by Dr J Hector in 1863 after he met the old rangatira (chief) Tūtoko and his two daughters, Sara and May. The hills to the north of the Kōtuku River are named the Sara Hills, and those to the south, May Hills, after these daughters. The use of this name is seen as appropriate to Ngāi Tahu, as Tūtoko was an important rangatira of this region at that time, and is represented by the mountain.

Tūtoko is the kaitiaki (guardian) of Whakatipuwaitai, the westernmost creation of Rakaihautu and the southernmost kāinga (settlement) of Te Tai Poutini (West Coast) pounamu trails, which provides access to koko-takiwai (a type of pounamu) at Piopiotahi (Milford Sound) and Poison Bay further to the south. The kāinga was also an important staging post for travel into the Lake Wakatipu area via the Hollyford Valley. All of these trails, whether by land or by sea, lie under the shadow of Mt Tūtoko.

The tūpuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the land, the relationship of people with the land and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today.

Mountains such as Tūtoko are linked in whakapapa to the gods, and being the closest earthly elements to Raki the sky father, they are likened to the children of Raki and Papa, reaching skyward. The mauri of Tūtoko represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the land.

TAONGA SPECIES

(From Schedule 97 – refer to section 287 Ngāi Tahu Claims Settlement Act 1998)

Birds

Name in Māori	Name in English	Scientific Name
Hoiho	Yellow-eyed penguin	Megadyptes antipodes
Kāhu	Australasian harrier	Circus approximans
Kākā	South Island Kākā	Nestor meridionalis meridionalis
Kākāpō	Kākāpō	Strigops habroptilus
Kākāriki	New Zealand parakeet	Cyanoramphus spp.
Kakaruai	South Island robin	Petroica australis australis
Kakī	Black stilt	Himantopus novaezelandiae
Kāmana	Crested grebe	Podiceps cristatus
Kārearea	New Zealand falcon	Falco novaeseelandiae
Karoro	Black-backed gull	Larus dominicanus
Kea	Kea	Nestor notabilis
Kōau	Black shag Pied shag Little shag	Phalacrocorax carbo Phalacrocorax varius varius Phalacrocorax melanoleucos brevirostris
Koekoeā	Long-tailed cuckoo	Eudynamys taitensis
Kōparapara or Korimako	Bellbird	Anthornis melanura melanura
Kororā	Blue penguin	Eudyptula minor
Kōtare	Kingfisher	Halcyon sancta
Kōtuku	White heron	Egretta alba
Kōwhiowhio	Blue duck	Hymenolaimus malacorhynchos
Kūaka	Bar-tailed godwit	Limosa lapponica
Kūkupa/Kererū	New Zealand wood pigeon	Hemiphaga novaeseelandiae
Kuruwhengu/ Kuruwhengi	New Zealand shoveller	Anas rhynchotis
Mātā	Fernbird	Bowdleria punctata punctata and Bowdleria punctata stewartiana and Bowdleria punctata wilsoni and Bowdleria punctata candata
Matuku moana	Reef heron	Egretta sacra
Miromiro	South Island tomtit	Petroica macrocephala macrocephala

Name in Māori	Name in English	Scientific Name
Miromiro	Snares Island tomtit	Petroica macrocephala dannefaerdi
Mohua	Yellowhead	Mohoua ochrocephala
Pākura/Pūkeko	Swamp hen/Pūkeko	Porphyrio porphyrio
Pārera	Grey duck	Anas superciliosa
Pateke	Brown teal	Anas aucklandica
Pīhoihoi	New Zealand pipit	Anthus novaeseelandiae
Pīpīwharauroa	Shining cuckoo	Chrysococcyx lucidus
Pīwakawaka	South Island fantail	Rhipidura fuliginosa fuliginosa
Poaka	Pied stilt	Himantopus himantopus
Pokotiwha	Snares crested penguin	Eudyptes robustus
Pūtakitaki	Paradise shelduck	Tadorna variegata
Riroriro	Grey warbler	Gerygone igata
Roroa	Great spotted kiwi	Apteryx haastii
Rowi	Ōkārito brown kiwi	Apteryx mantelli
Ruru koukou	Morepork	Ninox novaeseelandiae
Takahē	Takahē	Porphyrio mantelli
Tara	Terns	Sterna spp.
Tawaki	Fiordland crested penguin	Eudyptes pachyrhynchus
Tete	Grey teal	Anas gracilis
Tīeke	South Island saddleback	Philesturnus carunculatus carunculatus
Tītī	Sooty Shearwater/ Muttonbird/ Hutton's shearwater Common diving petrel South Georgian diving petrel Westland petrel Fairy prion Broad-billed prion White-faced storm petrel Cook's petrel Mottled petrel	Puffinus griseus and Puffinus huttoni and Pelecanoides urinatrix and Pelecanoides georgicus and Procellaria westlandica and Pachyptila turtur and Pachyptila vittata and Pelagodroma marina and Pterodroma cookii and Pterodroma inexpectata
Tītitipounamu	South Island rifleman	Acanthisitta chloris chloris
Tokoeka	South Island brown kiwi	Apteriyx australis
Toroa	Albatrosses and Mollymawks	Diomedea spp.
Toutouwai	Stewart Island robin	Petroica Australis rakiura
Tūī	Tūī	Prosthemadera novaeseelandiae
Tutukiwi	Snares Island snipe	Coenocorypha aucklandica huegeli
Weka	Western weka	Gallirallus Australis australis
Weka	Stewart Island weka	Gallirallus Australis scotti
Weka	Bluff weka	Gallirallus Australis hectori

Plants

Name in Māori	Name in English	Scientific Name
Akatorotoro	White Rata	Metrosideros perforata
Aruhe	Fernroot (bracken)	Pteridium aquilinum var. esculentum
Harakeke	Flax	Phormium tenax
Horoeka	Lancewood	Pseudopanax crassifolius
Houhi	Mountain ribbonwood	Hoheria lyalli and H. glabata
Kahikatea	Kahikatea/White pine	Dacrycarpus dacrydioides
Kāmahi	Kāmahi	Weinmannia racemosa
Kānuka	Kānuka	Kunzia ericoides
Kāpuka	Broadleaf	Griselinia littoralis
Karaeopirita	Supplejack	Ripogonum scandens
Karaka	New Zealand laurel/Karaka	Corynocarpus laevigata
Karamū	Coprosma	Coprosma robusta, coprosma lucida, coprosma foetidissima
Kātote	Tree fern	Cyathea smithii
Kiekie	Kiekie	Freycinetia baueriana subsp. banksii
Kōhia	NZ Passionfruit	Passiflora tetranda
Korokio	Korokio Wire-netting bush	Corokia cotoneaster
Koromiko/ Kōkōmuka	Koromiko	Hebe salicfolia
Kōtukutuku	Tree fuchsia	Fuchsia excorticata
Kōwahi Kōhai	Kōwhai	Sophora microphylla
Mamaku	Tree fern	Cyathea medullaris
Mānia	Sedge	Carex flagellifera
Mānuka Kahikātoa	Tea-tree	Leptospermum scoparium
Māpou	Red matipo	Myrsine australis
Mataī	Mataī/Black pine	Prumnopitys taxifolia
Miro	Miro/Brown pine	Podocarpus ferrugineus
Ngaio	Ngaio	Myoporum laetum
Nīkau	New Zealand palm	Rhopalostylis sapida
Pānako	(Species of fern)	Asplenium obtusatum
Pānako	(Species of fern)	Botrychium australe and B. biforme
Pātōtara	Dwarf mingimingi	Leucopogon fraseri
Pīngao	Pīngao	Desmoschoenus spiralis
Pōkākā	Pōkākā	Elaeocarpus hookerianus
Ponga/Poka	Tree fern	Cyathea dealbata
Rātā	Southern rātā	Metrosideros umbellata
Raupō	Bulrush	Typha angustifolia
Rautāwhiri/Kōhūhū	Black matipo/Māpou	Pittosporum tenuifolium
Rimu	Rimu/Red pine	Dacrydium cypressinum
Rimurapa	Bull kelp	Durvillaea antarctica
Taramea	Speargrass, spaniard	Aciphylla spp.
Tarata	Lemonwood	Pittosporum eugenioides
Tawai	Beech	Nothofagus spp.

Name in Māori	Name in English	Scientific Name
Tētēaweka	Muttonbird scrub	Olearia angustifolia
Ti rākau/Tī Kōuka	Cabbage tree	Cordyline australis
Tīkumu	Mountain daisy	Celmisia spectabilis and C. semicordata
Tītoki	New Zealand ash	Alectryon excelsus
Toatoa	Mountain Toatoa, Celery pine	Phyllocladus alpinus
Toetoe	Toetoe	Cortaderia richardii
Tōtara	Tōtara	Podocarpus totara
Tutu	Tutu	Coriaria spp.
Whararikī	Mountain flax	Phormium cookianum
Whīnau	Hīnau	Elaeocarpus dentatus
Wī	Silver tussock	Poa cita
Wīwī	Rushes	Juncus all indigenous Juncus spp. and J. maritimus

Marine Mammals

Name in Māori	Name in English	Scientific Name
Ihupuku	Southern elephant seal	Mirounga leonina
Kekeno	New Zealand fur seals	Arctocephalus forsteri
Paikea	Humpback whales	Megaptera novaeangliae
Parāoa	Sperm whale	Physeter macrocephalus
Rāpoka/Whakahao	New Zealand sea lion/Hooker's sea lion	Phocarctos hookeri
Tohorā	Southern right whale	Balaena australis

CUSTOMARY FISHERIES

(From Schedule 98 – refer to Section 297 Ngāi Tahu Claims Settlement Act 1998)

Part A—Taonga Fish Species

Name in Māori	Name in English	Scientific Name
Kāeo	Sea tulip	Pyura pachydermatum
Koeke	Common shrimp	Palaemon affinis
Kōkopu/Hawai	Giant bully	Gobiomorphus gobioides
Kōwaro	Canterbury mudfish	Neochanna burrowsius
Paraki/Ngaiore	Common smelt	Retropinna retropinna
Piripiripōhatu	Torrentfish	Cheimarrichthys fosteri
Taiwharu	Giant kōkopu	Galaxias argenteus

Part B—Shellfish Species

Name in Māori	Name in English	Scientific Name
Pipi/Kākahi	Pipi	Paphies australe
Tuaki	Cockle	Austrovenus stutchburgi
Tuaki/Hākiari, Kuhakuha/Pūrimu	Surfclam	Dosinia anus, Paphies donacina, Mactra discor, Mactra murchsoni, Spisula aequilateralis, Basina yatei, or Dosinia subrosa
Tuatua	Tuatua	Paphies subtriangulata, Paphies donacina
Waikaka/Pūpū	Mudsnail	Amphibola crenata, Turbo smaragdus, Zedilom spp.

SITES OVER WHICH NOHOANGA ENTITLEMENTS GRANTED IN SOUTHLAND

(From Schedule 95 – refer to Section 246 Ngāi Tahu Claims Settlement Act 1998)

Site No.	Waterway	Site	Legal Description/Allocation Plan
45	Lake Manapōuri	Lake Manapōuri	1 hectare, approximately, being Part Manapōuri Lakebed. Subject to survey, as shown on Allocation Plan MN 73 (SO 12234).
46	Lake Te Anau	Lake Mistletoe	1 hectare, approximately, being Part Section 6, Block III, Eglington Survey District (SO 6989). Subject to survey, as shown on Allocation Plan MN 446 (SO 12254).
47	Lake Te Anau	Lake Te Anau – (9 Mile Creek)	1 hectare, approximately, being Part Run 301B (SO 4685). Subject to survey, as shown on Allocation Plan MN 486 (SO 12256).
48	Mataura River	Ardlussa	1 hectare, approximately, being Parts Crown Land, Mataura Riverbed and unformed legal road, Block III, Wendonside Survey District. Subject to survey, as shown on Allocation Plan MN 475 (SO 12255).
49	Mavora Lakes	Mavora Lakes	1 hectare, approximately, being Part Run 568 (SO 6800). Subject to survey, as shown on Allocation Plan MN 77 (SO 12235).
50	Ōreti River	Junction of Ōreti River and Irthing Stream	1 hectare, approximately, being Part Section 136, Eyre Survey District (SO1). Subject to survey, as shown on Allocation Plan MN 263 (SO 12248).
51	Waiau River and Lagoon	Waiau River (No 1)	1 hectare, approximately, being Part Section 10 and Part Waiau Riverbed, Block I, Alton Survey District (SO 2840). Subject to survey, as shown on Allocation Plan MN 90 (SO 12236).
52	Waiau River and Lagoon	Waiau River (No 2)	1 hectare, approximately, being Part Sections 7 and 7A, Block XV, Longwood Survey District (SOs 2021 and 3726). Subject to survey, as shown on Allocation Plan MN 444 (SO 12253).
53	Waiau River	Queen's Reach	1 hectare, approximately, being Part Section 25, Block II, Manapōuri Survey District (SO 10887). Subject to survey as shown on Allocation Plan MN 258 (SO 12245).
54	Waikaia River	Piano Flat	5800 m^2, approximately, being Sections 8, 9, 10, 11 and Part Section 7, Block VI, Gap Survey District (SO 6837) Subject to survey, as shown on Allocation Plan MN 259 (SO 12246).
55	Waikawa River and Harbour	Waikawa River	3085 m^2 approximately, being Part Section 42, Town of Niagara Comprised in Document 084684.1. Subject to survey, as shown on Allocation Plan MN 260 (SO 12247). Special conditions: Public access to the river along track to continue

ALTERATION OF PLACE NAMES

(From Schedule 96 – refer to section 269 Ngāi Tahu Claims Settlement Act 1998)

Current Name	**Amended Name**
Colac Bay	Colac Bay/Ōraka
Colac Bay *(Township)*	Colac Bay/Ōraka
Doubtful Sound	Doubtful Sound/Patea
East Cape	East Cape/Koromere
Hollyford River	Hollyford River/Whakatipu Kā Tuka
Howells Point	Howells Point/Taramea
Lords River	Lords River/Tūtaekawetoweto
Mount Anglem	Mount Anglem/Hananui
Milford Sound	Milford Sound/Piopiotahi
Paterson Inlet *(North and South West Arms)*	Paterson Inlet/Whaka a Te Wera
Port Pegasus	Port Pegasus/Pikihatiti
Port William	Port William /Potirepo
Riverton	Riverton/Aparima
Ship Cone	Ship Cone/Ōtaupiri
South Cape	South Cape/Whiore
South West Cape	South West Cape/Puhiwaero
Stewart Island	Stewart Island/Rakiura
The Bluff (Bluff Hill)	The Bluff/Motupōhue

Appendix 2: Schedule of Threatened, At Risk and Rare Habitat Types

The Schedule below describes characteristics of habitat types as they are expressed at the regional scale. This Schedule will continue to evolve as more information on habitat types comes to light. It provides an indication of areas likely to be significant and significance will be determined through an ecological assessment using the ecological significance criteria listed in Appendix 3.

Habitat types with less than 20% indigenous vegetation cover remaining are classified as "threatened", habitat types with between 20% to 50% indigenous vegetation cover remaining are classified as "at risk" and originally rare habitat types are classified as "rare".

The "Habitat Type Label" column provides a general description of each habitat type.
The "Physical Setting" column defines the setting/location of each habitat type.
The "Biological Description" column provides a more expansive description of each habitat type and typical vegetation/species composition. The species list is by no means definitive.

Note:

1. Patches of any given habitat type may not exhibit all elements considered characteristic of that habitat type. Sites of the same habitat type can exhibit differences from each other. Further, there may be differences in predicted composition and actual composition on the ground, particularly as a result of site modification and pest impacts. Unless otherwise stated, the habitat types listed in the table comprise vegetation that is indigenous.
2. Representative localities are examples only and represent a proportion of each of the habitat types across the region.
3. Marine habitat types in the region have yet to be assessed. Council intends to include marine habitat types in conjunction with the next Regional Coastal Plan review.

Threatened Forest or Treeland Habitat Types

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Kahikatea forest or treeland	Small fragments of swamp forest confined to poorly drained soils on lowland floodplains.	Forest canopy dominated by kahikatea (*Dacrycarpus dacrydiodes*) with matai (*Prumnopitys taxifolia*), totara (*Podocarpus totara*), pokaka (*Elaeocarpus hookerianus*) and lowland ribbonwood (*Plagianthus regius*) also present in canopy.	Thomsons Bush (Invercargill) Browns Bush Grove Bush Forest Kew Bush Bushy Point
Totara–kahikatea forest or treeland	Podocarp forest associated with stable sand dunelands.	Forest canopy dominated by totara and locally with kahikatea, pokaka, lemonwood (*Pittosporum eugenoides*), kohuhu (*Pittosporum tenuifolium*) and wineberry (*Aristotelia serrata*) components of canopy. Matai occurs in dune hollows.	Sandy Point, Otatara (including Otatara South Scenic Reserve Otatara Scenic Reserve and Oreti River Mouth Bush) Waipapa Beach East Waikawa Harbour
Matai-kahikatea-rimu-miro/broadleaf forest and treeland	Podocarp dominant and mixed podocarp/broadleaved forest and treeland occurring on floodplains, coastal alluvial plains, outwash fans and gentle hillslopes of varying drainage and fertility.	Broadleaf forest canopy dominated by kamahi (*Weinmannia racemosa*), pokaka and lemonwood with numerous emergent matai, rimu, kahikatea, miro (*Prumnopitys ferruginea)*. Halls totara (*Podocarpus hallii*) component of broadleaf canopy. Adjacent margins may be dominated by kowhai (*Sophora microphylla*), lowland ribbonwood and kaikomako (*Pennantia corymbosa*). Forest gaps and margins may include the "Nationally endangered" *Olearia hectorii* and at risk species such as *Pseudpoanax ferox*, *Melicytus flexuosus* and *Pittosporum obcordatum*. Important seasonal food supply for kereru, tui and bellbird.	Lonekers Bush Turnbulls Bush (Tussock Creek) Mabel Bush Forest Mararua Bush Edendale Scenic reserve Part of Forest Hill Reserve
Matai-kahikatea-totara forest and treeland	Mixed podocarp forest and treeland occurring on inland alluvial plains, and gentle hillslopes of varying drainage and fertility.	Forest canopy dominated by matai, kahikatea and totara with wineberry, lowland ribbonwood, kaikomako, fuchsia and cabbage trees components of the understorey. The at risk shrub *Teucridium parvifolium* may be present around the forest margins.	Remnants and fragments at Kauana and Centre Bush

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Hall's totara/broadleaf forest	Podocarp/broadleaved forest confined to humid climate on moist ridge crests with skeleteal soils (>300 metres asl.).	Hall's totara, broadleaf (*Griselinia littoralis*) and marbleleaf (*Carpodetus serratus*) are dominant canopy species. The at risk shrub *Olearia fragrantissma* may be present around the forest margins.	Garvie Burn Dome Burn
Matai-totara/mountain beech forest	Mountain beech forest confined to free-draining relatively fertile soils of valley floor and adjacent hillslopes.	Mountain beech (*Fuscospora cliffortiodes*) is the dominant canopy tree with red beech and silver beech as sub-dominants. Matai and totara emergent above beech canopy.	Relic fragments at Cattle Flat
Rimu-matai-kahikatea-miro-totara/kamahi-Southern rata forest	Lowland-montane podocarp/broadleaved forest and scrub and shrubland.	Forest canopy dominated by a mixture of broadleaved species including kamahi and southern rata (*Metrosideros umbellata*) broadleaf, lemonwood, kohuhu, mahoe, wineberry, marbleleaf, kowhai, lowland ribbonwood, kaikomako, fuchsia (*Fuchsia exorticata* with scattered emergent podocarps. Locally kamahi and southern rata may be prominent. Halls totara (*Podocarpus hallii*) component of broadleaf canopy. Forest forms mosaic with scrub and shrubland dominated by mapou (*Myrsine australis*) and small leaved *Coprosma* spp. At risk shrub species such as *Pseudopanax ferox*, *Meilcytus flexuosus* and *Olearia fragrnatissma* are present in fringing scrub and shrubland cover. Important seasonal food supply for kereru, tui and bellbird.	Ben Bolt The Bastion Croydon Bush Scenic Reserve Part of Forest Hill Scenic Reserve Otapiri Forests Hokonui Forest Waimumu Forest
Lowland Silver Beech Forest	Lowland silver beech remnants confined to gullies.	Silver beech *(Lophozonia menziesii)* forest with scattered podocarps and an understorey of small trees such as marbleleaf and broadleaf.	Kaiwao Hill gullies Mt Wendon gullies Pourakino Valley Dean Forest Lower Mataura Valley
Bog Pine Shrubland	This shrubland occurs on strongly leached terraces, outwash plains or dry shingle fans of glacial or fluvial-glacial origin.	Bog pine is a characteristic species, which forms scattered clumps surrounded by a matrix of mat-forming vegetation or moss/lichenfields. Other	Upper Whitestone River Takaro Basin Dale Flat Upper Waterloo Burn

Habitat Type	Physical Setting	Biological Description	Examples of Localities
	They are free-draining with very low fertility and have been described as examples of early post-glacial succession arrested because of low fertility. They are sometimes erroneously referred to as 'frost flats'.	woody species may include celery pine, manuka and *Coprosma* spp.	The Wilderness Reserve

Threatened Wetland Habitat Types

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Raised peatland bogs	Peatland bogs found on relatively level or gently sloping ground including plains, basins, terraces and within other wetlands. These bogs are rain fed, nutrient poor, poorly drained and aerated, and usually acid. The water table is often close to or just above the ground surface. They typically develop extensive convex domes raised above the ground.	The bogs are dominated by restiad (jointed rush) species such as wire rush (*Empodisma minus*) which are the primary peat formers. Other common plants include tangle fern, shagnum moss and manuka (*Leptospermum scoparium*) as well as cushion plants, sedges, shrubs and trees tolerant of the waterlogged, low-nutrient and acidic conditions. Plants with a threat category of at risk species include the shrub *Coprosma pedicellata* and the tufted hair grass *Deschampsia cespitosa*. Some bogs contain threatened lichens and mosses.	Borland Mire Castle Down Swamp Bayswater Peatland Otapiri Stream Bogs (Browns) Makarewa Peatland

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Swamps (flaxland) and marshes	Swamp and marsh wetlands can usually be found on plains, valley floors and basins. Swamp wetlands are generally of high fertility, receiving nutrients and sediment from surface run-off and groundwater. Marsh wetlands can be differentiated from swamp wetlands by having better drainage, generally a lower water table and usually a more mineral substrate and higher pH. Standing water and surface channels are often present, with the water table either permanently, or periodically, above much of the ground surface.	Swamp and marsh wetlands support indigenous sedges, rushes, reeds, flaxland, tall herbs, herbfield, shrubs, scrub and forest. They are usually dominated by flax, raupo and sedges (*Carex* spp.) and to a lesser degree cabbage trees. These wetlands support the at risk sedge *Carex tenuiculmis.* Exotic species are frequently present in both wetland types.	Redcliff Wetlands Kakapo Swamp Dismal Swamp Taylor Road Swamp Waituna Wetlands

At Risk Forest and Treeland, Scrub or Shrubland Habitat Types

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Broadleaf forest and scrub	Broadleaf forest and scrub found on hillslopes and gullies of moderate fertility and moisture in the lowland and montane zones.	This forest and scrub type is in various stages of regeneration as a result of natural or human induced disturbance. This habitat type is dominated by broadleaf species such as marbleleaf (Carpodetus serratus), mahoe (Melicytus ramiflorus), broadleaf (Griselinia littoralis), lemonwood (Pittosporum eugenioides). wineberry (Aristotelia serrata), black mapou (Pittosporum tenufolium), fuchsia (Fuchsia exorticata), kowhai (Sophora microphylla) and lancewood (Pseudopanax crassifolius) This habitat type typically occurs around the fringes of beech forest and podocarp-broadleaf forest. Provides important seasonal food supply for kereru, tui and bellbird.	Happy Valley, Tuatapere Mataura River (upstream of Cattle Flat) Argyle Burn Winding Creek Mimihau Stream
Grey scrub and shrubland	Scrub and shrubland found on alluvial terraces, hillslopes and in gullies.	The scrub consists of a variety of small-leaved, highly branched shrubs dominated by matagouri (Discaria toumatou), Coprosma spp. and Olearia spp. and Corokia cotoneaster, along with koromiko (Hebe salicifolia), bog pine (Halocarpus bidwillii) and climbing plants of Rubus and Muehlenbeckia genuses. Other shrubs present may include at risk species such as Teucridium parvifolium, Olearia fragrantissma, Celmisia hookeri and Coprosma wallii. Grey scrub and shrubland can be important habitat for lizards with an at risk threat category including jewelled gecko (Naultinus gemmeus), green skink (Oligosoma chloronoton), cryptic skink (Oligosoma inconspicuum) and Otago large gecko (Woodworthia sp. “Otago large”).	Mararoa River Upper Oreti River North Range Steeple Burn Bare Hill (Hokonui Hills

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Mountain beech forest	Mountain beech forest generally found on dry valley floor and hillslope sites of low fertility in montane zone between 300-900 metres asl.	Forest canopy dominated by mountain beech with Halls totara as a minor canopy and sub canopy component.	Snowdon Forest Western valleys of Takitimu Mountains Upper Mataura tributaries Upper Nokomai Waikaia Bush
Rimu-miro-totara/kamahi-rata forest	Podocarp/broadleaved forest growing on lowland hillslopes with moderate rainfall.	Kamahi dominant forest canopy with scattered emergent rimu (*Dacrydium cupressinum*) and miro. Halls totara component of canopy. Common understorey plants include stinkwood (*Coprosma foetidissima*), *Coprosma rhamnoides* and pepperwood (*Pseudowintera colorata*). Important seasonal food supply for kaka	Mokoreta Forest Mararua Bush Bluff-Omaui Environs Stewart Island Mores Reserve, Riverton
Mountain-red beech forest	Beech forest found on broad crests and steep colluvial slopes of moderate fertility and moisture in montane zone between 350 and 750 metres asl.	Mixed beech forest dominated by red beech (*Fuscospora fusca)*) and mountain beech with silver beech (*Nothofagus menziesii*) increasing in importance with altitude. Understorey vegetation includes Hall's totara, marbleleaf, lancewood (*Pseudopanax crassifolius*), weeping mapou (*Myrsine divaricata*), pepperwood (*Pseudowintera colorata*) and various *Coprosma* spp. The forest can provide important habitat for Otago large gecko (*Woodworthia* sp. "Otago large").	Eglinton Valley Mavora Lakes Waikaia Forest Snowdon Forest Upper Aparima catchments
Mixed broadleaf forest and scrub	Broadleaf forest and scrub found on hillslopes and gullies of moderate fertility and moisture in the lowland and montane zones.	This forest and scrub type is in various stages of regeneration as a result of natural or human induced disturbance. This habitat type is dominated by broadleaf species such as marbleleaf (*Carpodetus serratus*), mahoe (*Melicytus ramiflorus*), broadleaf (*Griselinia littoralis*), lemonwood (*Pittosporum eugenioides*). wineberry (*Aristotelia serrata),* black mapou (*Pittosporum tenufolium*), fuchsia (*Fuchsia exorticata*), kowhai (*Sophora microphylla*) and	Happy Valley, Tuatapere Mataura River (upstream of Cattle Flat) Argyle Burn Winding Creek Mimihau Stream

Habitat Type	Physical Setting	Biological Description	Examples of Localities
		lancewood (*Pseudopanax crassifolius*) This habitat type typically occurs around the fringes of beech forest and podocarp-broadleaf forest. Provides important seasonal food supply for kereru, tui and bellbird.	
Riparian forest or treeland	Forest confined to generally isolated riparian margins located on river terraces, terrace risers and also on steep rocky toe slopes, cliffs or bluffs.	Forest or treeland dominated by kowhai, lowland ribbonwood and kaikomako occurring with with shrubland and rushland. Some podocarp species (matai, kahikatea and totara) be present. Important seasonal food supply for kereru, tui and bellbird.	Deans Burn Kowhai Reach (Winton Channel near Kauana) Dunsdale Stream Waihopai River (Waikiwi) Waikawa River
Riparian vegetation	Riparian vegetation comprises indigenous woody vegetation, exotic woody vegetation, or a combination of both indigenous and exotic woody vegetation.	Any indigenous or exotic woody vegetation that is forest, treeland, scrub, or shrubland, that is not classified elsewhere in the Schedule as rare or threatened that occurs within 20 metres landward from the top of the river bank adjacent to a waterbody identified as being a Site of Aquatic Significance.	Home Creek, Manapouri Weydon Burn North Braxton Burn Taylor Stream (upper Otapiri catchment) Pourakino River Titiroa Stream (lower Mataura catchment)

At Risk Tussockland Habitat Types

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Red tussock grassland	Red tussock (*Chionochloa rubra* subsp. *rubra* var. *rubra*) dominated tussockland occurring on on valley floors and outwash terraces below the treeline. Generally occurs in areas with natural or human induced disturbance regimes, with high water tables or temperature	Red tussock (*Chionochloa rubra*) is particularly dominant in humid climates on moist soils. Other tussock species that can be present include silver tussock and blue tussock and often occur in association with sedgeland and rushland. Indigenous woody species (e.g. manuka, matagouri (*Discaria toumatou)*, inaka (*Dracophyllum longifolium*) and *Hebe* spp.) are likely to be increasingly present as natural	Fiordland valley floors Waterloo Burn Upper Oreti Valley Pukerau Red Tussock Scientific Reserve Otapiri Stream headwaters

Habitat Type	Physical Setting	Biological Description	Examples of Localities
	inversions (frost hollows), very occasionally on dry alluvial terraces.	successional processes advance.	

Rare Coastal Habitat Types

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Active sand dunes	Active sand dunes are dune lands whose physical landscape and ecological character results from continuously moving wind–blown sand. They are geomorphically unstable, mobile and bare to sparsely vegetated.	This continual instability of sand prevents the formation of soil and therefore the vegetation type that an active duneland can support is limited. Many dunes have been colonised by the introduced (invasive) marram grass. Indigenous pingao sedgeland occurs where marram grass is absent. Other indigenous species can also be present e.g. Sand convolvulus and sand sedge.	Martins Bay, Colac Bay Oreti Beach, Toetoes Harbour Beach Mason Bay
Shingle/stoney beaches and ridges	Shingle and stoney beaches are comprised primarily of a mixture of sand, water-smoothed gravel and cobbles. Shingle beaches occur where rivers deliver large quantities of shingle and cobbles to the coast or where it is being eroded from nearby coastal cliffs. These beaches usually rise to a ridge or a series of ridges beyond the high tide mark that is rarely disturbed by the sea. A lagoon or wetland may be impounded behind. They may be fronted by shingle beaches or shell barrier beaches	Where situated adjacent to coastal forest and scrub, the vegetation cover is dominated by woody plants that form either continuous forest cover or discontinuous hummocks of shrubs. Characteristic species include broadleaf, kowhai, lemonwood, mahoe, mingimingi (*Coprosma propinqua*) and scramblers such as wire vine (*Muehlenbeckia complexa*) and leafless lawyer (*Rubus squarrosus*). Woody plants provide shelter for woody regeneration and for ferns such as leather-leaf fern (*Pyrrosia eleagnifolia*). On beaches distant from native woody ecosystems, exotic species such as the grass Yorkshire fog (*Holcus lanatus),* the herbs catsear (*Hypochaeris radicata,* hawkbit (*Leontodon taraxacoides)*, and gorse (*Ulex europaeus)* increase in importance.	Big Bay Tiwai Point Tihaka Beach Te Waewae Bay

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Stable sand dunes	Stable sand dunes originate from active sand dunes. Through coastal aggradation, sand dune migration, or uplift of marine terraces these dunes are now sufficiently distant from the sea to no longer be impacted by coastal disturbances. As they have become stabilised, their soils have accumulated organic matter and they are more or less completely covered in woody vegetation.	Stable coastal sand dunes may support mature podocarp forest and areas of shrubland dominated by mutton-bird scrub (*Brachyglottis rotundifolia* var. *rotundifolia*), manuka and gorse. At many sites, the dunes have been converted to plantation forest, mostly of radiata pine. Totara forest is also a feature of stable duneland.	Waipapa Beach Mason Bay Three Sisters
Coastal wetlands	Three types of wetlands occur in the coastal zone. These are defined as dune deflation hollows, dune slacks and damp sand plains. Dune deflation hollows occur between sand dunes where wind has removed sand down to a level where an armoured surface exists. Dune slacks are small, nutrient-enriched, vegetated, moist depressions between dunes close to the sea. They occur where wind has eroded hollows or depressions in raw sand, or where water is permanently or seasonally ponded especially during high tides when they periodically hold slack water (scarcely moving). Damp sand plains are flat areas where wind has removed sand down to a level where the water is permanently just below the surface	Dune deflation hollows and dune slacks support a mosaic of indigenous shrubland, flaxland, low-growing indigenous herbfield and grassland. Exotic species are frequently present. The dune deflation hollows and dune slacks are colonised by small plants such as sand sedge (*Carex pumila*) and taller plants over time such as knobby club rush (*Ficinia nodosa*). Damp sand plains are colonised by small plants such as sand sedge), *Selliera radicans* and *Gunnera dentata*.	Dune deflation hollows: Tiwai Point Stewart Island Dune Slacks: Big Bay Martins Bay Waimatuku Stream Mouth Oreti Beach Dunes Awarua Bay Toetoes Bay Beach/Spit Damp Sand Plains: Waipapa Beach, Kawakaputa Bay

Habitat Type	Physical Setting	Biological Description	Examples of Localities
	or occasionally above it. They often form between a series of sand dunes.		
Coastal turfs	Coastal turfs are communities of tightly interlaced, ground-hugging, short-statured herbs, grasses, and sedges occupying hard-rock landforms exposed to persistent salt-laden onshore winds and occasional high water. Originally sandwiched between the shoreline and inland coastal scrub and forest on the most exposed headlands, today they have expanded inland with clearance of the bordering woody communities.	Coastal turfs contain an array of plants including sea primrose (*Samolus repens*) and the nationally critical *Crassula peduncularis*. Coastal turfs are subject to invasion by exotic species such as creeping bent (*Agrostis stolonifera*), Yorkshire fog and cat's ear and several clovers.	Waitutu Point Oraka Point Barracouta Point/Bay Blue Cod Bay Black Point to Slope Point
Coastal cliffs and rock stacks	Coastal cliffs are very steep rock faces near the sea that are greater than 5 m in height. They may have ledges, crevices and overhangs. Coastal cliffs may rise directly from the sea or be separated from it by a narrow shore. A coastal rock stack is an isolated pinnacle of rock off the coast, generally with steep to vertical sides. Their summits are well above the storm surge line (over 10m in height).	Cliffs and rock stacks provide many varied habitats: from bare rock colonised only by mosses and lichens, to deeper soils supporting woody vegetation; from highly exposed situations, to heavily shaded and sheltered habitats; and from very dry to permanently wet surfaces. Coastal cliffs are particularly influenced by salt spray, with halophytes and succulents, characteristic of these habitats. Woody plants are frequently stunted and wind-shorn.	Fiordland Coast Catlins Coast Stewart Island
Marine mammal haulouts	Marine mammal rookeries and haulouts result in coastal areas that are compacted and enriched by nutrients.	Originally haulouts might have supported quite a wide range of vegetation, as animals inhabited coastal scrub and dune vegetation, but now that they are largely confined to rocky areas, only low herbs and grasses are present.	Seal colonies on Fiordland and Catlins Coasts. Note: The seal population on the south coast is not sufficient to influence vegetation patterns.

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Seabird burrowed soils	These areas are where soils have been disturbed and enriched by seabirds burrowing for nesting, track formation, and guano (excrement).	Bird colonies may be in the open with almost no vegetation or where there is a cover tussock grasses. The colonies may also be beneath a low forest canopy where the cover of vegetation is proportional to the amount of bird activity.	Shearwater/Petrel colonies on Titi Islands Note: Small remnant colonies on the Southland mainland are restricted to predator free land.
Seabird guano deposits	These are areas affected by nesting sea birds and guano deposition that can accumulate to form deposits of varying depth. These areas commonly have only very limited vegetation because of bird trampling and the guano. Towards the edges of colonies vascular plants can occur.	Halophytic plants such as native ice plant (*Disphyma australe*) and native shore groundsel (*Senecio lautus*) are the most common. Green algae are also associated with guano, like the recently discovered species from the order Prasiolales (*Prasiola novaezelandiae*). These communities grade into coastal turfs and other coastal communities.	Gannet colony - Solandar Islands, Coastal rock stacks, Fiordland and Catlins Coasts.

Rare Wetland Habitat Types

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Estuaries	Estuaries lie within the intertidal zone. They are formed behind barriers such as sand spits and coastal embayments, at river mouths, in drowned river valleys with gently sloping substrates, and in fiords. Water within estuaries is of varying salinity or brackish. Estuaries often contain extensive mudflats.	Saltmarshes associated with estuarine mudflats support a mosaic of indigenous plant species herbfield, rushland and scrub. Estuaries support a diverse range of habitats affording shelter, breeding and feeding opportunities for migratory and resident birds, fish and shellfish.	Head of Fiords (Fiordland) Jacobs River Estuary New River Estuary Awarua Bay Waikawa Harbour
Coastal Lagoons	Coastal lagoons are impounded behind barrier beach ridges, usually in association with a river or stream	Lagoons support threatened indigenous aquatic plants (emergent, floating, submerged or rafted), and wetland vegetation (rushes, reeds, sedges,	Waiuna Lagoon (Big Bay) Waiau River Mouth Waituna Lagoon

Habitat Type	Physical Setting	Biological Description	Examples of Localities
	mouth. They are of variable depth and intermittently connected to the sea. Their salinity ranges from almost fresh water, through brackish, to almost pure sea water and it can change over time. The barrier bars are often not permanent but are formed and re-formed by wave action, especially during storm events.	sedgeland, flaxland, reedland turf (< 3 cm tall), herbfield, scrub and shrubs) on the margins. Indigenous terrestrial vegetation (such as scrub, shrub species, shrubland, treeland and forest) can also be found in association with lagoon margins. Exotic species (aquatic, wetland or terrestrial) may also be present.	Lake Brunton Lake Vincent
Lake margins	Lakes are areas of standing (non-flowing) water. These range from the large glacial lakes of Fiordland through to many smaller bodies of water including sand dune lakes, oxbow lakes and tarns. They occur in the coastal, lowland, montane and alpine zones. Lakes can exist in isolation, be entirely within, or have elements of, other wetland habitat types. Tarns are small lakes where water levels can fluctuate considerably. They form mainly in association with glacial features such as cirque basins and kettleholes (moraines) and on a wide range of erosional landforms such as small fault scarps and slumps.	Lake margins support a range of indigenous aquatic and terrestrial plants adapted to varying degrees of inundation. These are emergent, floating, submerged or rafted plants, rushes, reeds, sedges, sedgeland, flaxland, reedland turf (< 3 cm tall), herbfield (low turfs), and terrestrial vegetation such as scrub, shrubs, treeland and forest on the margins that are periodically inundated. Smaller lakes such as tarns support low turfs around their margins while vegetation more characteristic of the surrounding environment occurs (i.e. tussock grassland, scrub or forest) around their extremities. Local vegetation composition reflects altitude and the duration and frequency of inundation. Exotic species (aquatic, wetland or terrestrial) may also be present.	Glacial Lakes: Lakes McKerrow, Pyke, Alabaster, Fergus, Gunn, Mavora, Te Anau, Manapouri, Monowai, Hauroko, Poteriteri, Hakapoua. Lowland Lakes: Lake George Lake Murihiku Kettlehole Tarns: Upper Oreti Valley Tarns: Valley headwaters in Umbrella, Garvie, Eyre, Livingstone, Dunton Range, Takitimu, Fiordland Mountains, Longwood Range
Ephemeral wetlands	Ephemeral wetlands are formed in closed depressions lacking a surface outlet. They are characterised by marked	Ephemeral wetlands support a mosaic of indigenous turf (<3 cm tall) species, indigenous rushland and indigenous scrub. Fluctuations in composition between aquatic and	Upper Mararoa Valley Floor Gorge Burn (Upper Oreti Valley)

Habitat Type	Physical Setting	Biological Description	Examples of Localities
	seasonal variations in water level due to seasonal fluctuations in rainfall and evaporation. They may experience complete drying in summer months or dry years. Substrates are usually mineral and they occur on a range of landforms including fluvial systems, bedrock, dunes, and volcanic deposits.	terrestrial plant species often occur and exotic species are frequently present.	
Cushion bogs	Cushion bogs primarily occur in gently sloping catchment headwater basins in the alpine zone. They occur in areas where there are obvious drainage flow paths from surrounding slopes or on flatter areas fed directly by rainfall.	The plants associated with the bogs are cushion or mat forming. Some of the most widespread wetland cushion plants include the comb sedge (*Oreobolus pectinatus*), *Centrolepis ciliata*, *Phyllachne colensoi* and *Donatia novae-zelandiae*, and the mat-formers *Coprosma perpusilla* subsp. *perpusilla* and *Pentachondra pumila* plus a range of mosses.	Key Summit (Fiordland) Dunton Bog Waikaia River Headwaters
Blanket mires	Blanket mires are peatlands (i.e. bogs and fens) that extensively cover the crests, slopes, flats, and hollows of an undulating landform, usually of low relief. If the blanket mire is wholly rain-fed, it is termed a blanket bog.	Typical plants encountered include *Sphagnum* mosses, *Empodisma minus*, *Dracophyllum* spp., manuka, tangle fern, cushion plants and red tussock. Dominance of sedges, shrubs and trees, reflect areas where drainage and fertility are marginally better. Threatened plants include the nationally endangered hook sedge (*Uncinia strictissima*). Notable avifauna include fernbird (*Bowdleria punctata*) and Australasian bittern (*Botaurus poiciloptilus*).	West Cape Southern Stewart Island Waituna wetlands
String mires	String mires are distinctive string-pool and island patterned peatland wetlands that have slightly elevated ridges at right angles to the direction of water flow. They are formed by the interaction of	The plants associated with the mires are cushion or mat forming. Some of the most widespread wetland cushion plants include the cushion plants comb sedge, *Centrolepis ciliata*, *Phyllachne colensoi* and *Donatia novae-zelandiae*, and the	Head of Dome Burn (Garvie Mountains) Dome Mire Kepler Mire Garnock Burn (Manapouri)

Habitat Type	Physical Setting	Biological Description	Examples of Localities
	topography, underlying substrate, hydrological and drainage properties, as well as differential peat formation associated with differences in plant cover. String mires occur in lowland, montane and alpine zones.	mat-formers *Coprosma perpusilla* subsp. *perpusilla* and *Pentachondra pumila.*	
Seepages and flushes and spring fed wetlands	Seepages and flushes form where groundwater emerges on hillsides where there is a change of slope. A spring occurs at the point that an underground stream emerges at a point source. Soils that are mostly permanently saturated with relatively nutrient and oxygen rich water. Seepage, flush and spring wetlands are often small and usually occur as isolated systems covering no more than a few dozen square metres. They merge with cushion bogs in certain situations.	Seepage, flush and spring wetlands support indigenous sedgeland, cushionfield and mossfield vegetation with a dominance of herbaceous species. They are particularly rich in species where they form on limestone rock. The high water table excludes most woody plants from these habitats. Some seepages and flushes support the nationally endangered *Iphigenia novae-zelandiae* and at risk species such as the herb *Tetrachondra hamiltonii* and the sedge *Carex capillacea*.	Mataura, Waikaia, Oreti, Mararoa, Aparima, Whitestone, Upukerora River valley hill slopes usually in mid to upper reaches.
Snowbanks	Snow bank communities occur in the alpine zone in situations where snow lies for up to seven months of the year. They are saturated well into summer, and often have loamy soils with capacity to hold water for much of the remainder of the year, so that they tend to accumulate organic matter.	Snowbanks support small grasses and herbs. Some of the prominent plant species in snow banks are mountain snow tussock (*Chionochloa oreophila*), silky alpine buttercup (*Ranunculus sericophyllus*) and marsh marigold (*Psychrophila obtusa*).	Umbrella, Garvie, Eyre, Livingstone, Takitimu, Fiordland Mountains, Longwood Range

Rare Inland and Alpine Systems & Substrates Habitat Types

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Braided or semi-braided riverbeds	Braided and semi-braided riverbeds contain mobile channels within a gravel floodplain. The channels can branch and rejoin creating an intervening pattern of low islands and shallow bars. They are a dynamic habitat. Braided and semi-braided rivers carry high sediment loads. They form in alluvial outwash plains deposited during the glacial periods. Reworking of the sediments from a variable flow regime results in the development of gravel beaches, bars, runs, riffles and backwaters.	Braided and semi-braided riverbeds provide habitat for rare and threatened plants, fish, birds and invertebrates. Threatened plants include native broom, leafless pohuehue and prostrate plants (*Epilobium* spp. and *Raoulia* spp.). Rare and threatened birds include black-fronted tern (*Chlidonias albostriatus*), black-billed gull (*Larus bulleri*) and banded dotterel (*Charadrius bicinctus*) as well as the black fronted dotterel (*Elseyornis melanops)* which is classified as a coloniser.[46] Common species include oystercatchers and pied stilts. Threatened native fish include long finned eel, lamprey, torrent fish, bluegill and redfin bully, and koaro.	Eglinton River Upukerora River Whitestone River Mararoa River Mataura River Oreti River Aparima River Wairaki Rvier
Karst Landforms	Karst landforms are found on limestone, marble, dolomite or calcareous rock, and can be subterranean or semi-subterranean. Karst landforms include cliffs, steep faces and scarps and tors, and caves. Some limestone outcrops are important sites for fossils and New Zealand biota that has become	Karst landforms provide habitat for highly specialised indigenous species (often endemic) including species that are adapted to subterranean environments. They provide many varied habitats - from bare rock that are colonised only by mosses and lichens to deeper soils supporting woody vegetation, (e.g. broadleaf, kowhai and the nationally threatened fierce lancewood from highly exposed situations to heavily shaded and sheltered habitats, and	Fiordland's Murchison Mountains Castle Rock (West Dipton) Forest Hill Limehills Clifden Bridge

[46] T*axa that otherwise trigger threatened categories because of small population size but have arrived in New Zealand without direct help or indirect help from humans and have been successfully reproducing in the wild since 1950.*

Habitat Type	Physical Setting	Biological Description	Examples of Localities
	extinct since humans arrived.	from very dry to permanently wet surfaces. Hebes, some heath-like shrubs, flaxes and native grasses are important on limestone cliffs. Plants seldom grow on the massive cliff faces but are rooted within the instices of ledges, crevices, and cracks. Long tap-like roots are a noteable trait of limestone cliff plants. Many native shrubs, grasses, and herbs that have been lost from neighboring habitats find refuge in or on karst system.	
Ultramafic Landforms	Ultramafic landforms include hills, screes, cliffs, tors and boulderfields. Ultrabasic (also known as ultramafic) rocks contain very little quartz or feldspar and are composed essentially of ferromagnesium silicates, metal oxides, and native metals. They form soils with low concentrations of major nutrients and high concentrations of toxic metals such as nickel, chromium, and cobalt. These soil conditions result in vegetation that is often characterised by stunted, slow growing, small-leaved trees and shrubs. The oxidation of the ferromagnesium minerals in these rocks produces the red coloration after which the geographical features are named e.g. Red Hills.	Below treeline vegetation includes scattered trees of mountain beech (*Nothofagus solandri var. cliffortioides*) and several small podocarps such as yellow-silver pine (*Lepidothamnus intermedius*). Above timberline small-leaved shrubs (*Coprosma* spp., *Dracophyllum* spp., manuka, and cushion plants (*Phyllachne colensoi* and *Myosotis pulvinaris*) and herbs (e.g. *Myosotis lyalli*, *Epilobium crassum* and *Cardamine* spp.) are important. Threatened and rare plants include the naturally uncommon *Celmisia spedenii* and *Brachyscome* aff. *humilis* 'West Dome', *Cardamine* 'West Dome'.	Red Hills, Little Red Hills, Olivine River, Livingstone Mountains, West Dome

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Screes	Screes comprise loose, mobile rock, mostly smaller than boulders, lying on steep slopes (30-40°), mostly on open land Screes are often armoured on the surface with large fragments overlying finer particles that provide a rooting medium for plants.	The harsh mobile conditions result in vegetation that is often characterised by stunted, slow growing, small-leaved trees and shrubs. Plants characteristic of fertile soils can be present, but these sites also support ultrabasic endemics and ecotypes of widespread species e.g., sun orchids (*Thelymitra* spp.). Stable scree patches support scattered individuals of herbaceous species such as *Stellaria roughii* and *Haasti sinclarii* and an assortment of obligate scree plant species. Scree mobility can be indicated by lichens.	Eyre Mountains Takitimu Mountains Dunton Range Mount Luxmore,
Boulderfields	Boulderfields are a collection of very large rocks that have accumulated at the foot of a slope. Boulderfields can appear similar to moraine (material deposited by glaciers). Granite and greywacke are the most common parent rocks.	For many years, lichens and mosses may be the only colonists, particularly in alpine areas. Older boulder fields at lower elevations may support woody species (e.g. snow totara) and communities (e.g. grey scrub (*Coprosma* and *Olearia* spp.) and associated small trees), and provide fire breaks that allow remnants of vegetation to persist in otherwise disturbed landscapes. Pockets of fines can provide shaded, mesic (moist) habitats that allow herbaceous plants to persist. Over time, boulderfields may be invaded from the margins by rhizomatous plants such as ferns and lianes.	Lower Ashton Flats (Upper Oreti Valley), Lateral moraines bordering formal river channel, near Kingston Taringatura Hill
Cliffs, scarps, tors	Cliffs and scarps are steep faces on hill slopes and ridges and dropping to valleys, whereas tors are steep-sided upstanding outcrops sitting atop other landforms such as ridges. They comprise sandstones,	These landforms provide habitats ranging from bare rock holding little moisture in highly exposed situations and colonised only by mosses and lichens, to deeper moist soils in heavily shaded and sheltered habitats supporting taller plants, including trees and shrubs where these can maintain a foothold.	Hokonui Hills, Garvie Mountains, Eyre Mountains, Takitimu Mountains, Fiordland Mountains

Habitat Type	Physical Setting	Biological Description	Examples of Localities
	mudstones, andesite, granite, rhyolite, diorite, basalt gabbro and greywacke and occur over a wide altitudinal range from the lowlands to the alpine zone.	Resident plant species are tolerant either of shallow soils, full sunlight, and intermittent drought, or damp and shady crevices. Native species that have been lost from neighbouring habitats because of animal browse find refuge on cliffs, scarps and tors, including species endemic to the region.	
Outwash gravels	Inland outwash gravels are formed of assorted alluvium, mostly from retreating glaciers (ancient moraines) and more recent river deposits. In addition to their harsh montane environments, they are also excessively well drained, which makes for very stressful environments for plants. They comprise two elements: terraces and terrace risers.	Outwash surfaces support many small plants, including turfy coprosma (*Coprosma petriei*), patotara (*Leucopogon fraseri*), *Pimelea* spp., *Poa.* spp., scabweeds (*Raoulia* spp.), creeping pohuehue (*Muehlenbeckia axillaris*), and common mountain daisy (*Celmisia gracilenta*). Terrace risers are often very stony and covered in low matagouri shrubland or mixed 'grey scrub'. The terraces have assorted materials, with a high proportion of fine windblown glacial till.	Upper Oreti Valley, Upper Mararoa Valley, Trotters Plain, Upper Mataura Valley.
Granite gravel fields and sand plains	Granite gravel fields and gravel sand plains occur on very exposed sites above treeline where erosion-prone granite bedrock is close to the surface. Typically, 80% of the site cover is bare ground and bedrock. Due to their chemistry and structure, these granites weather and crumble to form angular gravels and ultimately sands.	Vegetation is very sparse and very species poor. This is characterised by low shrubs (*Dracophyllum* spp.), grasses (*Poa colensoi*) and cushion plants (e.g. *Chionohebe pulvinaris* and *C. thompsonii*) and small herbs (e.g. *Anisotome imbricata* and *Notothlaspi australe*).	Mt Titiroa (Fiordland) Eldrig Peak (Fiordland)
Frost Flats and Hollows	Frost flats and hollows are found on terrace or valley floors where, in suitable conditions, cold air accumulates during the night as a result of cold air drainage called katabatic wind. Such regions are	Frost flat and hollow vegetation is typically a shrubland/tussock grassland association. Dominant species include stunted silver beech and mountain beech, manuka, bog pine, celery pine, mingimingi, weeping matipo, red tussock,	Island Lake and adjacent basins south of Borland Saddle, Valley floor terrace systems in Fiordland, Takitimu, Livingstone and Eyre Mountains.

Habitat Type	Physical Setting	Biological Description	Examples of Localities
	subject to a greater incidence of severe frosts than the surrounding hillslopes. Often associated with sites of impeded drainage. Frosts are severe enough to prevent the establishment of many plant species that are common in the surrounding forest vegetation.	hard tussock and dwarf shrubs such as *Leucopogon fraseri*. Herbaceous plants and bryophytes are often important.	

Rare Forest Habitat Types

Habitat Type	Physical Setting	Biological Description	Examples of Localities
Cloud forests	Cloud forest grows on upland plateaux where cloud cover is generally persistent throughout much of the year. Sunshine hours are usually less than 1500 hours per annum.	Stands of kaikawaka (*Libocedrus bidwillii*) forest generally in association with southern rata, pink pine and Hall's totara.	Slopedown Hill (Catlins)

Appendix 3: Significance Assessment Criteria

The purpose of the following criteria is to determine whether an area is significant in terms of Section 6(c) of the Resource Management Act 1991.

Although Appendix 2 includes a schedule of threatened, at risk and rare habitats, this is by no means definitive. Policy BIO.2 requires site-specific (on the ground) ecological assessments to verify the ecological significance of the Schedule in Appendix 2 and determine where there is the potential for activities and development to affect other areas of indigenous biodiversity that could be deemed to be significant indigenous vegetation or significant habitats of indigenous fauna.

An area is significant if it meets one or more of the criteria listed below.

(a) Representativeness

(i) Indigenous vegetation or habitat of indigenous fauna that is representative, typical or characteristic of the natural diversity of the relevant ecological district or coastal biogeographic region. This can include degraded examples where they are some of the best remaining examples of their type, or represent all that remains of indigenous biodiversity in some areas.

(ii) Indigenous vegetation or habitat of indigenous fauna that is a relatively large example of its type within the relevant ecological district or coastal biogeographic region.

(b) Rarity/Distinctiveness

(i) Indigenous vegetation or habitat of indigenous fauna that has been reduced to less than 20% of its former extent in the Region, or relevant land environment, ecological district, freshwater environment, or coastal biogeographic region.

(ii) Indigenous vegetation or habitat of indigenous fauna that supports an indigenous species that is threatened, at risk, or uncommon, nationally or within the relevant ecological district or coastal biogeographic region.

(iii) The site contains indigenous vegetation or an indigenous species at its distribution limit within Southland Region or nationally.

(iv) Indigenous vegetation or an association of indigenous species that is distinctive, of restricted occurrence, occurs within an originally rare ecosystem, or has developed as a result of an unusual environmental factor or combinations of factors.

(c) Diversity and Pattern

(i) Indigenous vegetation or habitat of indigenous fauna that contains a high diversity of indigenous ecosystem or habitat types, indigenous taxa, or has changes in species composition reflecting the existence of diverse natural features or ecological gradients.

(d) Ecological Context

(i) Vegetation or habitat of indigenous fauna that provides or contributes to: an ecological linkage, ecological corridor or network; buffering function; or ecosystem service.

(ii) A wetland which plays an important hydrological, biological or ecological role in the natural functioning of a water body, including a river or coastal system, or springs, lakes and streams.

(iii) Indigenous vegetation or habitat of indigenous fauna that provides important habitat (including, but not limited to, refuges from predation, or key habitat for feeding, breeding, or resting) for indigenous species, either seasonally or permanently.