THE REGIONAL FORUM - SOUTHLAND CONTEXT

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Executive Summary

This report is an overview of the particular conditions that the future Regional Forum will operate within. It brings together information on Southland's characteristics, legislative requirements and the policy context. The Regional Forum forms part of the People, Water and Land Programme¹, which is a partnership with Ngai Tahu ki Murihiku and aims to maintain and improve Southland's water quality. The Programme is an integrated approach to manage freshwater in Southland incorporating action on the ground and a regulatory framework to improve our land and water².

The Regional Forum will have an advisory role to Council for methods to achieve the communities objectives for freshwater (including setting limits) across the five freshwater management units in Southland to achieve the communities' objectives. The five freshwater management units running from West to East are: Fiordland and Islands; Waiau – Waiau Lagoon; Aparima and Pourakino – Jacobs River Estuary; Ōreti and Waihōpai – New River Estuary; and Matāura – Toetoes Harbour.

Southland is a diverse landscape that encompasses a total land area of just over 3.2 million hectares (or 12 percent of New Zealand)³, 3,100 kilometres of coastline, and a population of fewer than 100,000 people. Within this population base, there are just under 70 percent living within an urban area, which is low for New Zealand where 87 percent of the population is urban⁴. The Department of Conservation manages 53 percent of the region as public conservation land, most of which is in two national parks; Fiordland National Park and Rakiura National Park. Southland's people, water and land are highly connected.

There were substantial changes during the late 19th and early 20th century, when large tracts of Southland were cleared of forest and scrubland and land was developed. There are signs that some of Southland's rivers and coastal environments are coming under increasing pressure and, in some places approaching environmental thresholds. This document will help give an understanding of what limit-setting needs to achieve to meet the requirements of the NPSFM and other obligations in Southland.

To meet the requirements of the NPSFM, there is a hierarchy of policy to consider from national direction of the Resource Management Act and a series of National Policy Statements, to fixed requirements, such as Water Conservation Orders and Statutory Acknowledgements, and management of the public conservation estate. Regional planning documents are also in the mix, and how these are developed and subsequently adopted are governed by meeting core functions of council as well as the needs of the community. For the Regional Forum there are many issues that

¹ The workstreams for the programme are Action on the Ground (projects that support, facilitate and lead integrated catchment management activities that improve land use), Values and Objectives (sharing knowledge with communities and determining their values and objectives) and a Regional Forum (to consider regulatory and non-regulatory methods to achieve the community's values, objectives and targets including the setting of limits.

² Information sourced from item 3: People Water and Land Programme (Te Mana o Te Tangara, te Wai, te Whenua) Update and Workstream Endorsement, Strategy and Policy Committee, July 2018

 $^{^{3}}$ The Southland Economic Project: Urban and Industry. Technical Report 2018

⁴ The Southland Economic Project: Urban and Industry. Technical Report 2018

will be similar across the region, but there will be a few important locally specific ones that will require special attention.

There are many existing arrangements and organisations within Southland that will be useful as the region progresses the limit-setting process. The boundaries of territorial authority wards, regional constituencies, catchment groups and community boards do not align with the boundaries of the five freshwater management units. There are also gaps for engagement with established groups within Invercargill City and the rural settlements of the Gore District including Waikaka. These areas traditionally have good representation around their respective council tables.

Key findings from this report are listed under three main headings and include:

Policy Context:

- 1. The management of fresh water is a matter of national significance and recognises Te Mana
- 2. There are numerous legislative requirements that will influence what limit-setting must achieve;
- 3. The NPSFM creates time pressure for the delivery of limits within the region.

Political and Social Context:

- 4. This report has found that the Freshwater Management Units do not align with political or social boundaries. Regional constituencies, district wards, and community boards are based on population and align with meshblocks⁵, whereas the five freshwater management units are based on river paths;
- 5. There is a low ratepayer base and a large landscape where limits must be set;
- 6. The catchment groups tend to fit (broadly) within the five freshwater management unit boundaries:
- 7. There is a lack of urban groups, forestry and mining groups set up for freshwater management;
- 8. There are many local organisations and groups involved in freshwater management in Southland including national interest groups and agencies, how to include a wide range of views within a manageable group size will require careful consideration;

Environmental Conditions:

- 9. Within each Freshwater Management Unit there are specific constraints and water management issues that must be understood to set limits in the future;
- 10. Southland's economy is reliant on the use of natural resources and people have invested heavily in the use of these land and water resources; and
- 11. Need to understand the interconnections of Southland's water and land natural resources, combined with the rate of change and environmental thresholds.

⁵ Source: Statistics New Zealand defines a meshblock as both a geographic unit and a classification. It is the smallest geographic unit for which statistical data is reported by Stats NZ. A meshblock is a defined geographic area, varying in size from part of a city block to large areas of rural land. Meshblocks are contiguous: each meshblock borders on another to form a network covering all of New Zealand, including coasts and inlets.

1 Introduction

The National Policy Statement for Freshwater Management 2017 requires (among other things) New Zealand's sixteen regional councils to set limits for water in the region. Since the NPS-FM was first issued in 2014 (and in some cases earlier) participatory processes to setting limits have been playing out in regions around New Zealand. While these regional processes share a common purpose, each region has a specific set of circumstances or 'context' that these participatory processes occur within. The purpose of this paper is to describe the context in Southland. The paper will be used to help guide development of a Regional Forum, which will have an advisory role for the setting of limit in Southland within the People, Water and Land Programme.

In general terms, Southland has a large land area (the second largest region in New Zealand), roughly half of which is in public conservation estate, and a small population (the sixth smallest region) that is dispersed across the developed land. One consequence is that Southland has a relatively small ratepayer base for its land area in comparison to other regions. Southlanders live close to the land and water, and the region's economy is strongly dependent on natural resource use.

Before starting its limit-setting process, Environment Southland took time to characterise the region and gain a better understanding of it as a system. During this period the proposed Southland Water and Land Plan, which is 'preparing the ground' for limit-setting, has been developed. Also, farmers have set up a series of catchment groups that, collectively, cover most of the agricultural land in the region. Similar groups for other interests have not yet been formed specifically for limit-setting at a local scale. These elements and others are relevant to the design of limit-setting process in Southland.

Southland's landscape is large and diverse (e.g. in its precipitation, soils, topography) and its population (and ratepayer base) is relatively small. The region has a cool wet (but changing) climate, highly connected groundwater/surface water/coastal water, with many estuaries and lakes that act as 'sinks' for pollution. Many environmental issues are similar across the region but there are also some important locally-specific issues.

There are variable levels of formal education and household incomes that may limit people's capacity to be involved. The economy is dependent on 'exporting' the region's resources; they are embodied in products from sectors such as agriculture, forestry, metal manufacturing, and tourism. Southlanders have a history of self-reliance and self-determination. Many communities have strong identities and some diversity. Improving quality of life is important across the region.

Southland FMUs are essentially collections of catchments and run north - south. They follow the mountains to the sea philosophy (iwi and NPS-FM) and include estuaries. Values for water and the potential impacts of changes in management are not limited to within the FMUs. Farmer catchment groups basically fit within the FMUs. Constituencies, wards and 'communities of interest' (defined by community board areas) all fit together. Wards and constituencies are similar, but these communities do not align well with the FMUs. Involving local communities is likely to be an important consideration in the design of the Regional Forum.

There are many other agencies and groups involved in freshwater management in Southland, such as Fish and Game New Zealand and industry bodies that represent different parts of the agricultural sector. This wider policy context highlights the complexity of the topic and intersecting considerations relevant to providing advice for limit-setting.

2 Southland

For the Regional Forum there are many issues that will be similar across the region, but there will be a few important locally specific ones that will require special attention. The information below provides an overview of the Southland and is relevant for the future design and information for the limit-setting process.

Southland (Murihiku) covers just over 3.2 million hectares (or 12 percent of New Zealand)⁶ and 3,100 kilometres of coastline around the Tasman Sea, Foveaux Strait and the Southern Ocean and Pacific Ocean. The 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.

Approximately 53% of the land and water is public conservation estate managed by the Department of Conservation (DOC). Most of this area is contained within the two national parks, Fiordland National Park and Rakiura National Park. Three of New Zealand's nine Great Walks are situated in Southland: Kepler Track, Milford Track and Rakiura Track. Figure 1 below highlights the areas of conservation land (green), the areas of developed land, and the distribution of towns and settlements across Southland. Figure 1 also highlights the boundaries of region's freshwater management units, which are essentially collections of catchments. Freshwater management units will be an important part of limit-setting and are explained further on in this section.

Southland has large lakes, including Lake Te Anau and Lake Manapōuri, and smaller coastal lakes, like Lake Vincent and Lake George. Four major river catchments run north to south: the Waiau, Aparima, Ōreti and Mataura. These major rivers are formally recognised for their cultural significance to Ngāi Tahu by Statutory Acknowledgements under the Ngāi Tahu Claims Settlement Act 1998⁷. Two Water Conservation Orders apply in the region – the Water Conservation (Mataura River) Order 1997 and the Water Conservation (Oreti River) Order 2008: these identify features and values of the river that are considered outstanding. There are 11 marine reserves, which includes the Big Glory Bay Marine Reserve, seven mātaitai reserves, two marine mammal sanctuaries and 23 'china shops'⁸ within Southland's Costal Marine Area⁹.

Water bodies in Southland are highly connected. Water flows through the landscape as surface water and groundwater and eventually to the coast. The coastlines of many catchments include an estuary, which contain high levels of biodiversity, including many species that are threatened or endangered, and retain waste from human activity. On the mainland there are 24 estuaries of four basic types: tidal lagoons (e.g. New River Estuary), tidal rivers (e.g. Waimatuku Estuary), coastal embayments (e.g. Bluff Harbour) and fiords (e.g. Milford Sound).

⁷ The other Statutory Acknowledgments in Southland include Hananui (Mt Anglem), Lake Hauroko, Manawapopore Hikuraki (Mavora Lakes), Motupohue (Bluff Hill), Moturau (Lake Manapouri), Te Ana-au (Lake Te Anau. Toi Toi Wetland in Raikiura, Tutoko Mountain in Fiordland, Uruwera (Lake George) and Waituna Wetland.

⁶ The Southland Economic Project: Urban and Industry Technical Report

^{8 &#}x27;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.
9 Environment Southland: Marine Aquaculture in Southland: Discussion Document (October 2017)

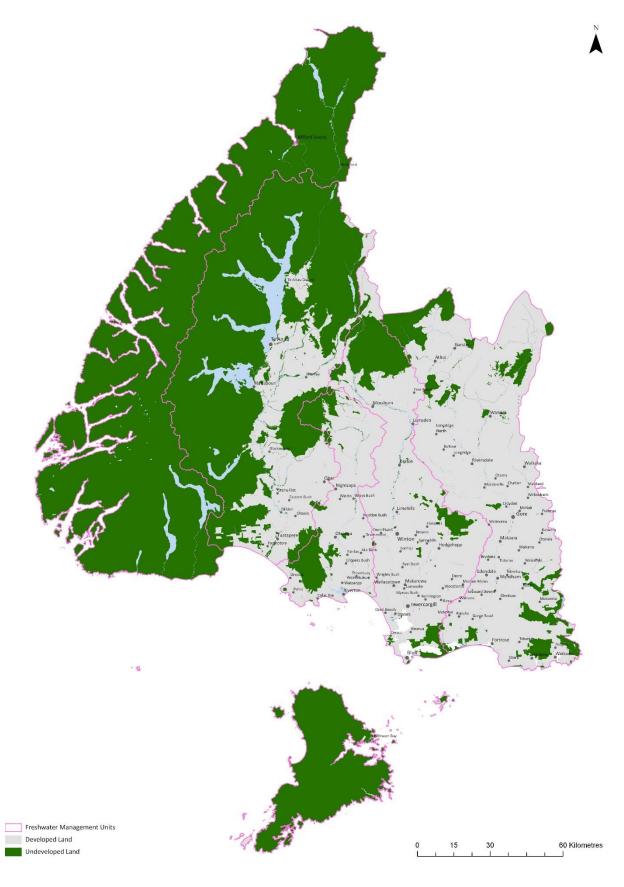


Figure 1: Distribution of developed land, conservation land within each Freshwater Management Unit

Tidal lagoon estuaries dominate within the developed river catchments. Between Te Wae Wae Bay (at the mouth of the Waiau River) and the Catlins (east of the Matāura River mouth), estuaries occupy 43 percent of the southern coastline (Robertson & Stevens, 2008). Some estuaries have been actively modified over the years either through reclamation (e.g. New River) or reduced water inflow (e.g. Te Wae Wae Bay Lagoon). The deteriorating health of a number of Southland's estuaries, particularly New River Estuary, has been an identified issue for many years (e.g. Robertson, 1993).

Southland has many wetlands¹⁰ and identified regionally significant wetlands; these wetlands provide a crucial link between land and water and play an important role in the ecology of the water catchment and are located in various areas across the region. In lowland Southland, wetlands originally covered roughly half of the area (Clarkson et al., 2011). Over the years, these wetlands have been drained using extensive networks of artificial drains for the development of agriculture. Since 1840, it is estimated that the area of wetlands on land which is now in private ownership reduced from around 220,000 hectares to 9,650 hectares (or 3.6% of the original area) by 2007 and to 8,486 hectares (or 3.2%) by 2015 (Dalley & Geddes, 2012; Ewans, 2016).

All of Southland's FMUs include Statutory Acknowledgements by the Crown under the Ngãi Tahu Claims Settlement Act 1998 and some FMUs also contain Water Conservation Orders (WCOs). As well, the Waituna-Awarua Wetland along Southland's south coast is a wetland complex of International Importance under the RAMSAR Convention¹¹. It is a 20,000 hectare site (extending from New River Estuary to Waituna) with outstanding biological diversity and cultural values that consists of a coastal lagoon, peatlands, saltmarsh, gravel beach and shallow flats (with extensive eel grass beds), ponds, and lakes. The Fiordland and Waiau FMUs include Fiordland National Park, which is the southern end of the UNESCO¹² Te Wāhipounamu – South West New Zealand World Heritage Area.

2.1 Population – and rural and urban profiles

Southland is one of New Zealand's more sparsely populated regions. It has a population of just under 100,000 (98,400 people in June 2017¹³, which is approximately 2.2 % of the New Zealand population). There are four Murihiku Papatipu Rūnanga (Awarua, Ōraka Aparima, Hokonui and Waihōpai). Invercargill is the largest urban area in Southland followed by Gore.¹⁴ There are also

¹⁰ The proposed Southland Land and Water Plan (2018) defines a wetland as: *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*.

¹¹ The Ramsar Convention (The Convention on Wetlands of International Importance) is the intergovernmental treaty that gives a framework for the conservation and wise use of wetlands and their resources (http://www.ramsar.org/). The Waituna-Awarua Wetland Complex was designated as a wetland of international importance in 1976 - along with Farewell Spit, which was designated at the same time. It was the first of six such sites in New Zealand.

¹² The UNESCO (United Nations Educational, Scientific and Cultural Organisation) World Heritage Centre gives international recognition to sites of outstanding value to humanity. Te Wāhipounamu – South West New Zealand World Heritage Area was designated as a world heritage area in 1990 and extends over 2.6 million hectares - two-thirds of the park is covered with southern beech and podocarps, some of which are over 800 years old.

 $^{^{\}rm 13}$ Statistics New Zealand Subnational Population Estimates.

¹⁴ Gore District has a population of 12,033, the Southland District has a population of 29,613 and the Invercargill City District has a population of 51,696.

many other towns in Southland including Winton, Te Anau, Bluff, Riverton, Tuatapere, Oban, Lumsden, Mossburn, Otautau, Mataura and Edendale, Wyndham as examples.

In 2013 just under 70 percent of the people living in Southland lived in urban areas, which is low for New Zealand where 87 percent of the population is urban. Of the roughly 30 percent of people living rurally, most tend to be in either 'highly rural or remote areas' or 'rural areas with low urban influence'. As a result, many Southlanders tend to live closer 'to the land' than elsewhere and there are strong connections between 'town and country'. Figure 2 shows the proportions of Southlanders living in urban and rural areas compared to New Zealand as a whole¹⁵.

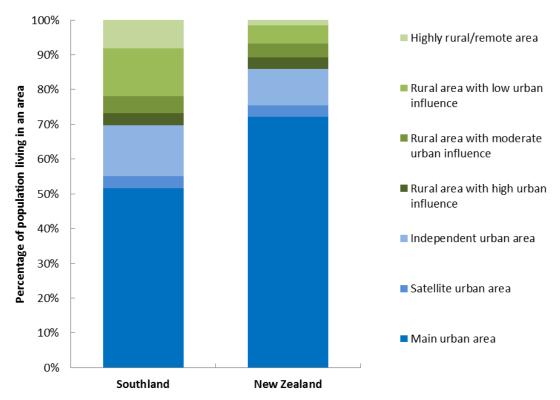


Figure 2: Urban and Rural Profiles for Southland and New Zealand

Source: The Southland Economic Project: Urban and Industry. Technical Report

The relatively high proportion of people living rurally highlights strong urban and rural connections, with most towns supporting the economic activity created in their surrounding rural areas, and these rural areas reliant on the facilities, services and amenities supplied in their local towns. It also means there is greater demand for wastewater, drinking water, stormwater services and transport networks across the region, relative to the ratepayer base — and these types of essential infrastructure are often competing priorities. The strong connections between urban and rural areas reflect the Southland economy's dependence on natural resources: primary sectors (e.g. Agriculture, forestry, fishing, and mining), related processing, metal manufacturing, and tourism. Of these

¹⁵ The Southland Economic Project: Urban and Industry. Technical Report

sectors, agriculture has always been central to the economy and tourism is becoming increasingly important.

Ethnic groups within Southland based on the 2013 census include 13 percent that identify as Maori, and 89 percent that identify as New Zealand European. Table 1 gives a breakdown of ethnic groups¹⁶ (where a person reported more than one ethnic group, they have been counted in each applicable group, and as a result the percentage does not add up to 100).

Table 1: Southland's Ethnic Groups (2013 Census)

Ethnic Group	Southland Region	New Zealand
New Zealand European	89%	74%
Maori	13%	14.9%
Pacific Peoples	2.1%	7.4%
Asian	3.2%	11.8%
Middle Eastern, Latin American, African	0.4%	1.2%
New Zealander	2.2%	1.6%
Other ethnicity	0.1%	0.1%

Ngai Tahu's legally defined takiwa (area) encompasses all of Southland and as such, Ngai Tahu are the tangata whenua of the region and hold mana whenua¹⁷ status.

This information highlights relatively high number of ethnic groups within Southland, some which have been here for many generations, and others are more recent arrivals. Some are connected to industries for example many Dutch are involved in tulip growing and a number of Filipinos work in the dairy industry. All these groups contribute to the Southland community and have interests in water.

2.2 Socio-economic conditions¹⁸

The percentage of working age people employed in Southland in the year to March 2018 was just under 70%, and unemployment was just over 4%¹⁹. Southlanders typically also have low to moderate

¹⁶ http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-

place.aspx?request_value=15112&tabname=&p=y&printall=true

17 Maori Dictionary defines Mana Whenua as territorial rights, power from the land, authority over land or territory, jurisdiction over land or territory - power associated with possession and occupation of tribal land. The tribe's history and legends are based in the lands they have occupied over generations and the land provides the sustenance for the people and to provide hospitality for guests.

¹⁸ Information in this section is sourced from The Southland Economic Project: Urban and Industry Technical Report unless otherwise stated.

incomes. In 2013, people aged 15 years and over had a median personal income of \$29,500²⁰, with 35 percent of people earning \$20,000 or less and 25 percent earning \$50,000 or more. As a region there is less income inequality in Southland than New Zealand as a whole, but there are considerable variations between localities.

Around 70 percent of Southland households either owned their own home or held it in a trust, and for those that do not, the median rent per household was \$180. Average household size was 2.4 people – although more than 10,000 households (or 27.5%) were one person only. All of these characteristics – population size, employment, income distribution, home ownership, and household size influent the demand for, and supply of, essential services across Southland.

In 2016, the value of goods and services, or total regional Gross Domestic Product (GDP), was just over \$5 billion. Although GDP fluctuates over time, \$5 billion is a fair indication of the size of the part of the economy for which there are markets for goods and services, such as construction materials, restaurant dining and interest payments. This amount does not include the value of nonmarket good and services like volunteerism, fresh water or bee pollination – which also fluctuate.

Southland's economy has two main features that single it out from other regional economies around New Zealand. First, it is a considerable distance from New Zealand's main urban centres: Auckland, Wellington and Christchurch. Distance is a factor in the region's low population density. Second, it is almost completely reliant on the use of natural resources, both directly and indirectly, and particularly the use of water. Southland's natural resources attract people to the region because of their contribution to living standards, whether it is through the production of food or raw materials or through recreation, health, tourism, and sense of place. To date, the economy has focused on its primary sectors and related manufacturing sectors, but it is increasingly developing its service sector.

These two features (distance and reliance on natural resources) both constrain Southland's economy and provide it with opportunities. Despite (or possibly because of) its distance from the major urban centres, the region has looked further afield and produced products based on natural resources for export: pastoral farming and meat and milk processing, forestry and timber processing, hydroelectricity generation and metal processing, and tourism. These exports have a value to New Zealand in terms of its balance of trade but also expose Southland's economy to external forces, particularly changes in the exchange rate, commodity prices and market access.

At a regional level, an important socio-economic measure is employment. In 2013, the ten largest sectors by employment were as follows (in order of importance): 1. retail trade, 2. livestock and cropping farming, 3. health and community services, 4. meat and meat product manufacturing, 5. business services, 6. Construction, 7. Accommodation, restaurants and bars, 8. Education, 9. wholesale trade, and 10. road transport²¹. Since 2013, tourism (indicated by sectors such as accommodation, restaurants and bars) has increased in its relative importance and agriculture has decreased.

¹⁹ http://webrear.mbie.govt.nz/theme/employment-rate/map/timeseries/2018/southland?right-transform=absolute

²⁰ In 2013, the median income for people aged 15 and over in Southland was \$29,500, which was higher than the national median of \$28,500. (Statistics New Zealand, 2013).

²¹ Market Economics (2013) Southland.

Southland's economy is not expected to change in its nature, at lease over the short to medium-term – it is closely aligned with economic activities that have high water use (both in terms of takes and waste substances), and economic growth is increasing pressure on water resources (Market Economics, 2013).

There is also a growing connection between tourism and agriculture – tourism, for example activity on the Southern Scenic Route, is increasing Southland's exposure to the rest of the world and creating increased consumer awareness in export markets. In summary, the region's water, land and its people are all highly connected.

2.3 Freshwater Management Units²²

An important step towards setting limits for water in Southland under the National Policy Statement for Freshwater Management (2017) was to divide the region spatially into five freshwater management units (or FMUs) around its water bodies.

A Freshwater Management Unit is²³:

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.

These units are the geographical areas where limits on water use will be set and existing use may need to change. These limits will be designed around the community's values for water, including ecosystem health and human health, which are compulsory for all water bodies across New Zealand. Ministry for Environment guidance²⁴ highlights that Freshwater Management Units should be not just hydrologically coherent (of similar hydrology) but also similar from a social perspective, so that communities and iwi with common interests and values are contributing to common objectives.

Within Southland the regional constituencies, community boards and wards are based on population and align with mesh blocks, whereas the Freshwater Management Units align with the river paths as is further explained below. Running from West to East, Southland's five Freshwater Management Units are: Fiordland and Islands; Waiau – Waiau Lagoon; Aparima and Pourakino – Jacobs River Estuary; Öreti and Waihōpai – New River Estuary; and Matāura – Toetoes Harbour. They are shown in Figure 3 below and described in the following sections.

The Fiordland Freshwater Management Unit covers western Fiordland and the offshore islands, including Stewart Island/Rakiura. It is predominantly land in natural vegetation held within national parks. The remaining four Freshwater Management Units (Waiau, Aparima, Ōreti, and Matāura) are based broadly on Southland's four major river catchments — and each Freshwater Management Unit also includes a number of smaller coastal river catchments that are not hydraulically connected to the main river in the area.

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²² Information in this section is sourced from The Southland Economic Project: Urban and Industry Technical Report unless otherwise stated.

²³ Definition sourced from National Policy Statement for Freshwater Management

 $^{{}^{24}\,}Source:\,\underline{http://www.mfe.govt.nz/publications/fresh-water/guide-freshwater-accounting-under-national-policy-statement-freshwater-12}$

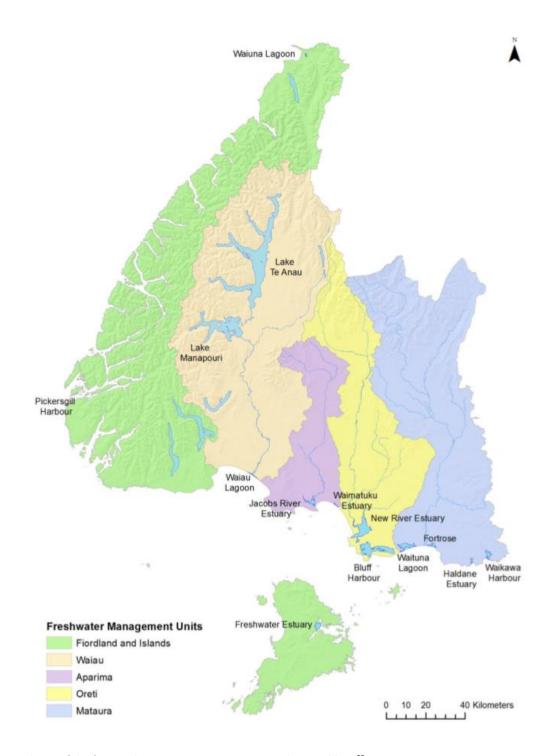


Figure 3: Boundaries of the five Freshwater Management Units within Southland²⁵

The coastal boundary of the Waiau, Aparima, Ōreti, and Matāura Freshwater Management Units is at the mouths of the estuaries, while giving regard to the wider coastal environment through the use

²⁵ Moran, E., Pearson, L., Couldrey, M., and Eyre, K. (2017). The Southland Economic Project: Agriculture and Forestry. Technical Report. Publication no. 2017-02. Environment Southland, Invercargill, New Zealand. 340pp

of existing monitoring sites. In contrast to the Fiordland Freshwater Management Unit, these four Freshwater Management Units are largely developed land and primarily agricultural and forestry – although 36 percent of the region's land in natural vegetation is located within these four Freshwater Management Units.

All of Southland's Freshwater Management Units include Statutory Acknowledgements by the Crown under the Ngāi Tahu Claims Settlement Act 1998 and some also contain Water Conservation Orders (WCOs). The Ōreti and Matāura Freshwater Management Units include the RAMSAR¹ Waituna-Awarua Wetland of International Importance. This wetland complex is a 20,000 hectare site (extending from New River Estuary to Waituna) with outstanding biological diversity and cultural values that consists of a coastal lagoon, peatlands, saltmarsh, gravel beach and shallow flats (with extensive eel grass beds), ponds, and lakes. The Fiordland and Waiau Freshwater Management Units include Fiordland National Park, which is the southern end of the UNESCO¹ Te Wāhipounamu – South West New Zealand World Heritage Area.

Through the limit-setting process, objectives, policies and rules will be developed for each FMU, depending upon the constraints and opportunities within each catchment. Environment Southland intends to complete its FMU limit-setting programme by December 2025. Detail on what is required to set limits is further explained in section 5 below. Southlanders will have interests and values that reach beyond their Freshwater Management Unit. Also, groundwater has a different spatial distribution to surface water, for example groundwater may recharge from a mix of surface water and aquifers.

2.3.1 Fiordland and Islands

The Fiordland and Islands FMU covers an area of approximately 1,073,400 hectares (33.5% of the region). It contains part of the Fiordland National Park all of Rakiura National Park as well as other offshore islands. The Fiordland and Islands FMU is the least populated of the FMUs. It has approximately 534 residents, broken down to approximately 400 living on Stewart Island/Rakiura and the remaining people living in Fiordland or on the other off-shore islands that form part of this FMU. The main settlements within the FMU include Oban and Milford Sound.

There are no known Catchment Groups within this FMU (further details on catchment groups are provided in section 4). The Milford Opportunities Project is underway, which is considering how to best manage the increasing number of tourists visiting Milford Sound.

For this Freshwater Management Unit the Statutory Acknowledgement applies to Hananui (Mount Anglem), Lake Hauroko, Toi Toi Wetland, Whenua Hou and Tautoko. The area holds considerable cultural history. Te Tangi states that:

"It was the richness of pounamu (particularly kokotangiwai) and mahinga kai resources that attracted Ngāi Tahu to Fiordland. Thus the area has a network of coastal settlements, pounamu trails, mineral working areas, kāinga, nohoanga, cultivation areas, and fishing grounds."²⁶

²⁶ Te Tangi a Tauira

There was also a sea route around the fiords links Piopiotahi (Milford Sound) to Murihiku, and this was used as the main route by which the kokotakiwai (greenstone) gathered from that end of the fiords was transported.²⁷

Given that both part of the Fiordland National Park and Rakiura National Park are contained within this FMU, the land is predominantly classed as conservation estate land. In terms of land use activities, there is approximately 1500 hectares, or 0.1 percent of the land developed in farms. There are also a large number of tourism activities provided for with tramping tracks and sightseeing in for example Milford Sound. Table 2 gives estimates of the main land uses.

Table 2: Agriculture, forestry and urban areas in the Fiordland and Islands FMU

Land Use	Total area of land use in FMU (ha)	Share of developed land in FMU	Share of total land use in region that is present in FMU	Number of properties in FMU
Urban	414	27.6%	0.9%	543
Sheep and beef	592	39.5%	0.1%	6
Dairy (incl. support)	0	0%	0.0%	0
Deer	4	0.3%	0.0%	1
Arable	0	0%	0.0%	0
Horticulture	0	0%	0.0%	0
Other	489	32.6%	-	55
Forestry	0	0%	0.0%	0
Totals	1,498	100.0%	0.1%	62

Source Southland Land Use Map, Pearson & Couldrey (2016)

The 'other' category covers livestock support, small landholdings and lifestyle blocks, other animals, horticulture, and 'unknown' pasture.

The Fiordland FMU has a large number of freshwater lakes and coastal lakes which include Lake Alabaster, Lake Hauroko, Lake Poteriteri, Lake McKerrow and Lake Hakapoua. Halfmoon Bay is an existing coastal marine area. The water within this catchment is classed as Natural State Waters which for water quality purposes is defined²⁸ as waters within:

Areas defined as National Park managed under the National Parks Act 1980 (including land for the time being administered as if it was a national park pursuant to any statute or written agreement with the owners); and

Public conservation land managed under the Conservation Act 1987 and the Reserves Act 1977 as detailed in Table 1 "Natural State Waters outside National Parks" in Appendix M "Natural State Waters outside National Parks" of this Plan where the overall water quality is largely unmodified or unaffected by human activities.

As set out in the proposed Southland Land and Water Plan, surface waterbodies within Natural State Waters requires that the natural quality of the water shall not be altered.

²⁷ Fiordland National Park Management Plan (2007)

 $^{^{28}}$ Proposed Southland Water and Land Plan (2018)

Halfmoon Bay is the receiving environment for the processing water from a fish processing factory.

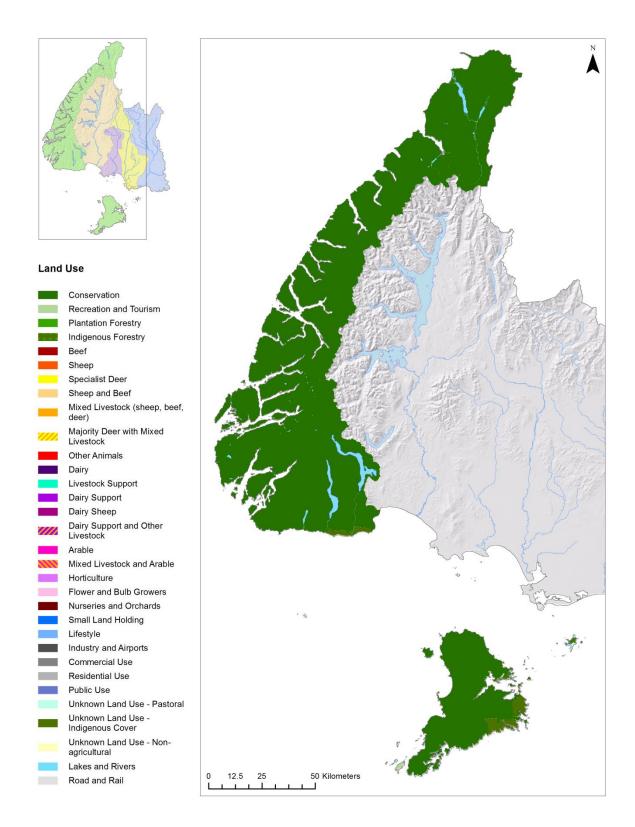


Figure 4: Land use within the Fiordland and Islands FMU Source Southland Land Use Map, Pearson & Couldrey (2016)

2.3.2 Waiau – Waiau Lagoon

The Waiau FMU covers an area of approximately 862,700 hectares (26.9% of the region). This is the largest FMU in terms of area (excluding Fiordland and Islands). Part of this FMU falls within the Fiordland National Park and the Takitumu Conservation area. The Waiau FMU has approximately 5,044 residents, which equates to less than one person per/km². The main settlements within the FMU include Tuatapere, Te Anau and Manapouri. It falls within the Southland District Council jurisdiction.

Known community interests include the Waiau Wildlife Habitat Trust. The Catchment Group has two established River Liaison committees within this FMU, being the Waiau River Catchment Liaison Committee and the Te Anau Basins River Catchment Liaison Committee. Te Anau and Waiau River Care Group Catchment Group.

A Statutory Acknowledgement applies to the Waiau River, Moturau (Lake Manapouri), Te Anau (Lake Te Anau), Manawapopore/Hikuraki (Mavora Lakes and a topuni for the Takitimu Ranges. The Waiau River was a major travel route for pounamu.

Tangata whenua associations with this catchment are (as summarised in Te Tangi a Tauria):29

- Waiau was named during the southern voyages of Tamatea Ure Haea, and his waka Takitimu. Takitimu was wrecked near the mouth of the river (Te Waewae Bay) and the survivors who landed named the river Waiau due to the swirling nature of its waters.
- The river was a major travel route connected Murihiku and Te Ara a Kiwa (Foveaux Strait) to Te Tai Poutini. Summer expeditions to Manapōuri for mahinga kai, and access to pounamu, were the main motivations for movement up and down the Waiau.
- Numerous archaeological sites and wāhi taonga attest to the history of occupation and use of the river by Ngāi Tahu and Ngāti Māmoe. An important nohoanga site at the mouth of the river was called Te Tua a Hatu, The rangatira Te Waewae had his Kāinga nohoanga on the left bank of the river mouth.
- The river was a major source of mahinga kai for Ngāi Tahu, with some 200 species of plants and animals harvested in and near the river. 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.
- ➤ Wāhi ingoa associated with the Waiau are indicators of the range of resources the river provided: Waiharakeke (flax), Papatōtara (tōtara logs or brk), Kirirua (a type of eel found in the lagoon), Te Rua o te Kaiamio (a rock shelter that was a designated meeting place, similar to a marae) and Ka Kerehu o Tamatea (charcoal from the fire of Tamatea)

The Waiau Freshwater Management Unit has approximately 240,000 hectares or 28 percent of the land within is developed. The land use consists of tourism activities, drystock farming and some dairy farming. Table 3 gives estimates of the main land uses.

²⁹ Page 153, Te Tangi a Tauria

Table 3: Agriculture, forestry and urban areas in the Waiau FMU

Land Use	Total area of land use in FMU (ha)	Share of developed land in FMU	Share of total land use in region that is present in FMU	Number of properties in FMU
Urban	13,764	5.8%	29.9%	3,173
Sheep and beef	148,113	61.9%	19.4%	272
Dairy (incl. support)	19,450	8.1%	7.4%	64
Deer	15,938	6.7%	36.8%	68
Arable	16	0.0%	0.1%	1
Horticulture	26	0.0%	0.0%	2
Other	9,805	4.1%	-	397
Forestry	32,129	13.4%	34.3%	75
Total	239,242	100.0%	18.6%	879

Source Southland Land Use Map, Pearson & Couldrey (2016)

The Waiau Freshwater Unit includes Lake Te Anau, Lake Manapouri, Green Lake and Lake Monowai. At the bottom of the catchment is Te Waewae Lagoon. Major tributaries of the Waiau River, above the Mararoa Weir³⁰, include the Mavora Lakes and Mararoa River, Eglinton, Upukerora and Whitestone Rivers and Lakes Te Anau and Manapouri. Below the Mararoa weir, major tributaries include the Borland Burn, Lake Monowai and Monowai River, Dean, Lill and Alton Burns, and the Wairaki, and Orauea Rivers. Some of the water within this catchment is also classed as Natural State Waters which requires that the natural quality of the water shall not be altered.

The consented Manapouri Power Scheme has reduced the mean annual flow of the Waiau River below the Mararoa Weir from approximately 560 cumecs to 135 cumecs between 2006 and 2016. This accounts for approximately 40 of New Zealand's total weekly consumptive allocation.

Before the control structure at Mararoa was built, the Lower Waiau River was the second largest river in New Zealand. The operation of the Manapōuri Power Station by the Electricity Corporation of New Zealand (now Meridian Energy Limited) and its use of the water resources of Lakes Manapōuri and Te Anau, the Waiau and Mararoa Rivers and their tributaries, was provided for by the Manapōuri-Te Anau Development Act 1963. In 1991 the introduction of the Resource Management Act required the renewal of water use permits for the continued operation of the power scheme. Provision of an environmental flow regime for the Waiau River was established through the permitting process to remedy and mitigate adverse effects of water abstraction on the lower Waiau River. The Waiau Working Party was convened to help develop the environmental flow regime. The Waiau Working Party included representation of a number of stakeholders with an interest in the management of the Waiau River. It took six years to develop the environmental flow

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³⁰ The Mararoa Weir controls the water level of lake Manapouri to enable power generation through the Manapouri Power Scheme. Water from the Mararoa River is diverted into Lake Manapouri at the Manapouri weir, 10 kilometres downstream from the Lake Manapouri outlet at the confluence of the Mararoa and Lower Waiau Rivers. The weir dams the entire Waiau River and controls the natural outflows of Lake Manapouri through the release of water from the lake, and release of water from the Mararoa River.

regime, reaching a consensus meant that compromises were made. The Waiau Working Party has stated that the flow regime established is the bottomline for conditions, for example instream and recreational values and flushing flows, in the Lower Waiau catchment.³¹

There is a Marine Mammal Sanctuary in Te Wae Wae Bay.

This Freshwater Management Unit also contains major infrastructure being the Monowai and Manapouri hydroelectric schemes.

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 $^{^{31}}$ Information sourced from the Regional Water Plan for Southland (2010)

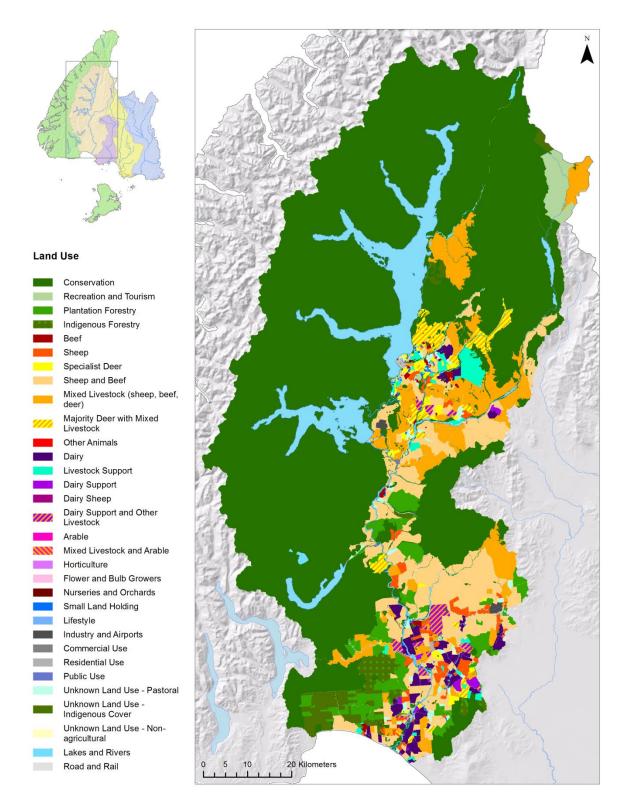


Figure 5: Land use within the Waiau FMU Source Southland Land Use Map, Pearson & Couldrey (2016)

2.3.3 Aparima and Pourakino – Jacobs River Estuary

The Aparima Freshwater Management Unit covers an area of approximately 206,700 hectares (6.5% of the region). This is the smallest freshwater management unit in terms of area. It contains some public conservation land, and it has a large beech forest management area in the Longwood Range. The FMU has approximately 5,937 residents, which equates to approximately 2.9 people per/km². The main settlements within the FMU include Otautau, Drummond, Colac Bay and Riverton. It lies within the Southland District Council jurisdiction.

The Catchment Group has an established River Liaison committee being the Aparima River Catchment Liaison Committee. Upper Aparima, Mid Aparima, Waimatuku, Lower Aparima and Pourakino Catchment Groups.

The Statutory Acknowledgement in this Freshwater Management Unit applies to the Aparima River and Uruwear (Lake George) and a topuni for the Takitimu Ranges. The mouth of the Aparima River has a permanent settlement with urupa (burial sites) nearby.

Tangata whenua associations with this catchment are (as summarised in Te Tangi a Tauria³²):

- > The mouth of the river was a permanent settlement, with associated urupā nearby. The was also an important tauranga waka located here, from which sea voyages were launched to and from Te Ara a Kiwa, Rakiura and the tītī islands. A carved tauihu (canoe prow) has been found in the estuary of the river.
- The river was an important source of mahinga kai, particularly shellfi sh, mussels, paua, tuna and inanga.
- An eel weir was constructed at the narrows where the Pourakino River enters the Aparima.
- The relationship of the Aparima to the Takitimu Hills is an important part of the relationship of Ngāi Tahu to the river.
- There are numerous archaeological sites at the river mouth

This FMU has approximately 168,000 hectares or 81 percent of the land is developed. The landuse largely consists of drystock farming and dairy farming. Table 4 gives estimates of the main land uses.

³² Page 154, Te Tangi a Tauria

Table 4: Agriculture, forestry and urban areas in the Aparima FMU

Land Use	Total area of land use in FMU (ha)	Share of developed land in FMU	Share of total land use in region that is present in FMU	Number of properties in FMU
Urban	4,163	2.5%	9.1%	2,802
Sheep and beef	68,616	40.9%	9.0%	353
Dairy (incl. support)	56,550	33.7%	21.5%	291
Deer	3,529	2.1%	8.1%	20
Arable	4,495	2.7%	19.2%	32
Horticulture	210	0.1%	0.0	1
Other	6,977	4.2%	-	533
Forestry	23,175	13.8%	24.7%	49
Total	167,715	100.0%	13.0%	1,278

Source Southland Land Use Map, Pearson & Couldrey (2016)

Whitebaiting is highly valued in this catchment. The headwaters of the Aparima catchment lie on the eastern side of the Takitimu mountains, to the west of Mossburn. The catchment covers an area of 1,375 square kilometres. Major tributaries of the Aparima River include the Waterloo Burn, Pleasant Creek, Hamilton Burn, Opio and Otautau Streams.

The Aparima Freshwater Management Unit includes Lake George, the Waimatuku Estuary, Aparima River and Jacobs River Estuary. Jacobs River Estuary has a small port for commercial fishing vessels.

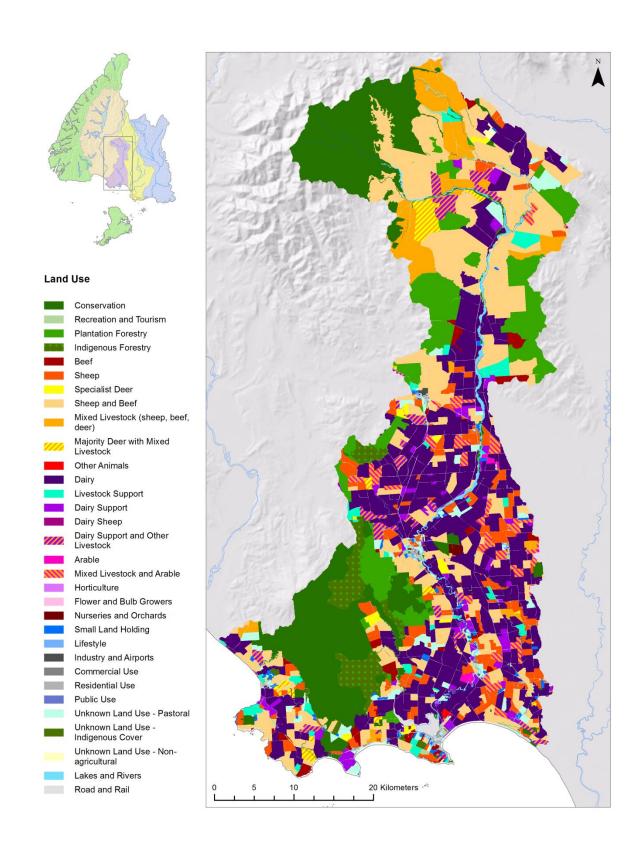


Figure 6: Land use within the Aparima FMU Source Southland Land Use Map, Pearson & Couldrey (2016)

2.3.4 Oreti and Waihopai – New River Estuary

The Oreti Freshwater Management Unit covers an area of approximately 420, 400 hectares (13.1% of the region). It falls within three districts, being Invercargill City District, Southland District Council and Gore District Council. It also contains areas of public conservation land, and part of the RAMSAR Waituna-Awarua Wetland of International Importance. The Oreti Freshwater Management Unit has approximately 61, 264 residents, which equates to approximately 14.6 people per/km². The main settlements within the Freshwater Management Unit include Invercargill, Winton, Lumsden, Bluff and Wallacetown.

The Catchment Group has two established River Liaison committees, being the Oreti River Catchment Group, and the Makarewa Catchment Liaison Committee. Upper Oreti, Mid Oreti and Hedgehope- Dunsdale Catchment Groups

A Statutory Acknowledgement applies to the Oreti River.

Tangata whenua associations with this catchment are (as summarised in Te Tangi a Tauria):33

- The river formed one of the main trails from inland Murihiku to the coast, with an important pounamu trade route continuing northward from the headwaters of the Ōreti and travelling, via the Mavora Lakes system, or Von River Valley, to the edge of Wakatipu and onto the Dart and Routeburn pounamu sources.
- There are numerous archaeological sites in the upper catchment, including sites related to stone resources that are considered to be among the oldest in New Zealand.
- > The kai resources of the Ōreti supported numerous parties venturing into the interior, and returning by mōkihi, laden with pounamu and mahinga kai. Nohoanga along the river supported such travel by providing bases from which travellers could obtain waterfowl, eels and inanga.

This Freshwater Management Unit has approximately 333,000 hectares or 78.5 percent of the land is developed. The landuse largely consists of urban, drystock farming and dairy farming. Table 5 gives estimates of the main land uses.

³³ Page 152, Te Tangi a Tauria

Table 5: Agriculture, forestry and urban areas in the Ōreti FMU

Land Use	Total area of land use in FMU (ha)	Share of developed land in FMU	Share of total land use in region that is present in FMU	Number of properties in FMU
Urban	17,221	5.2%	37.5%	25,671
Sheep and beef	152,156	46.1%	20.0%	1,091
Dairy (incl. support)	100,198	30.3%	38.1%	541
Deer	10,538	3.2%	24.3%	94
Arable	6,376	1.9%	27.2%	62
Horticulture	245	0.1%	48.8%	9
Other	23,595	7.1%	-	2,890
Forestry	19,923	6.0%	21.7%	114
Total	330,253	100.0%	25.6%	4,801

Source Southland Land Use Map, Pearson & Couldrey (2016)

The Oreti Freshwater Management Unit ends up in New River Estuary. The Freshwater Management Unit also contains Bluff Harbour and Awarua Bay. There is a Water conservation Order for the Oreti River. The New River Estuary has been partially reclaimed (approximately 12km³⁴ has been reclaimed) and is also the receiving environment for the ICC sewage treatment disposal, including stormwater and the closed landfill.³⁵

The Oreti Freshwater Management Unit extends from east of the Mavora Lakes down to Invercargill, covering an area of 3,510 square kilometres. Major tributaries of the Oreti include the Windley River, Acton, Cromel, Irthing, Dipton and Winton Streams. Downstream in the tidal reach the Makarewa and Waikiwi Rivers flow into the Oreti River.

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³⁴ Background Information for Process Assessment for Implementation of the National Policy Statement for Freshwater Management, Staff report, September 2014.

³⁵ Coastal Connections background paper, dated 16 September 2014.

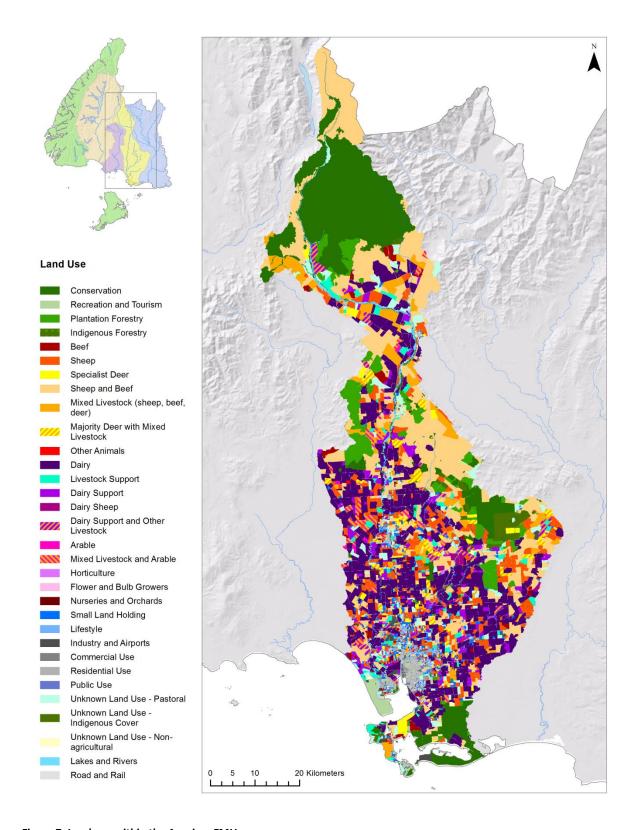


Figure 7: Land use within the Aparima FMU Source Southland Land Use Map, Pearson & Couldrey (2016)

2.3.5 Mataura – Toetoes Harbour

The Mataura Freshwater Management Unit covers an area of approximately 640, 000 hectares (20% of the region). This is the second largest Freshwater Management Unit in terms of area. Part of this contains public conservation land. The Freshwater Management Unit is located within both the Gore District and the Southland District. The Mataura Freshwater Management Unit has approximately 18, 035 residents, which equates to approximately 2.8 people per/km². The main settlements within it include Gore, Edendale, Wyndham, Waikaia and Mataura.

The Catchment Group has an established River Liaison committee, being the Mataura Catchment Liaison Committee. Wendonside, Balfour, Waikaka, Three Rivers, Lower Mataura and Waikawa Catchment Groups.

Statutory Acknowledgements apply to the Mataura River and Waituna Wetland.

Tangata whenua associations with this catchment are (as summarised in Te Tangi a Tauria):³⁶

- Several important Ngāti Māmoe and Ngāi Tahu tupuna are associated with the Matāura River, including the Ngāti Māmoe rangatira Parapara Te Whenua, whose descendents traditionally used the resources of the river, and Kiritekateka, daughter of Parapara Te Whenua, who was captured by Ngāi Tahu at Te Anau.
- Tuturau, once a Ngãi Tahu fishing village, was the site of the last inter tribal Mãori war, in 1836. Ngãi Tahu (under Tuhawaiki) repelled the challenge and threat from northern invaders thus the south was kept from passing into the hands of the northern tribes.
- > The Matāura was noted for its customary native fishery. Te Apa Nui (Matāura Falls) were particularly associated with the taking of kanakana. Inanga remains an important resource on the river. The estuary (known as Toetoe) is a particularly important customary food gathering location.
- Matāura Falls are an important feature of the cultural landscape of this river
- There is a freshwater mātaitai reserve on the Matāura River (first in New Zealand), recognising the importance of the river in terms of customary food gathering

It has approximately 550, 500 hectares or 86 percent of the land is developed. The landuse largely consists of sheep and beef farms and dairy farming. Table 6 gives estimates of the main land uses.

³⁶ Page 157, Te Tangi a Tauria

Table 6: Agriculture, forestry and urban areas in the Matāura FMU

Land Use	Total area of land use in FMU (ha)	Share of developed land in FMU	Share of total land use in region that is present in FMU	Number of properties in FMU
Urban	10,397	1.9%	22.6%	6,958
Sheep and beef	392,399	71.3%	51.5%	1,062
Dairy (incl. support)	87,083	15.8%	33.1%	471
Deer	13,294	2.4%	30.7%	35
Arable	12,522	2.3%	53.5%	66
Horticulture	232	0.0%	46.1%	10
Other	16,394	3.0%	-	1,051
Forestry	18,139	3.3%	19.4%	87
Total	550,460	100.0%	42.7%	2,782

Source: Southland Land Use Map, Pearson & Couldrey (2016)

The Mataura Freshwater Management Unit ends up in a number of coastal environs being Waituna Lagoon, Toetoes Harbous, Haldane Bay, Waikawa Harbour, Lake Brunton and Lake Vincent. There is a strong whitebaiting community within this catchment.

The headwaters of the Mataura River lie in the Eyre mountain range, west of Kingston. The Mataura catchment covers an area of 5,360 square kilometres. Major tributaries of the Mataura include the Eyre, Nokomai, Waikaia, Waikaka, Mimihau and Wyndham Rivers.

There are numerous water takes, stormwater and sewage discharges with urban settlements for example including but not limited to Gore, Wyndham and Mataura.

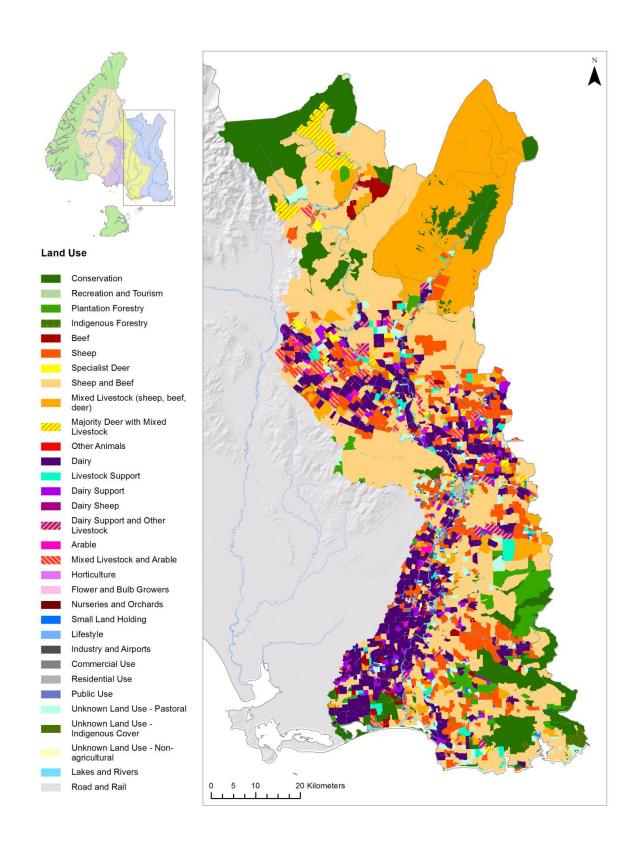


Figure 8: Land use within the Mataura FMU Source Southland Land Use Map, Pearson & Couldrey (2016)

3 Freshwater management in Southland

Fresh water is central to the Southland community's, social, cultural and economic wellbeing. It is valued for a variety of reasons including: for its intrinsic value and its use as a resource. All sectors of the community will need to participate and have a significant part to play in its integrated management. The following section details those with a 'legislative' role in the management of fresh water as well as existing organisations which have an interest in freshwater and will have role in the development of its future management.

3.1 Local Government

In Southland there are four local authorities: Southland Regional Council (Environment Southland), Southland District Council, Gore District Council and Invercargill City Council. Collectively, the boundaries of the three territorial authorities align with the regional boundary, resulting in a relatively simple local government structure (there are some places e.g. the Kaiwera Stream where they do not align). Southland District and Gore District use wards for their political representation. Figure 9 shows the extent of the wards in Southland by district.

Southland District, Gore District and Invercargill City District were formed in 1989 under the Local Government Act 1974, and amalgamated a larger number of local authorities³⁷, including Wallace County, Southland County, Stewart Island County and Invercargill City³⁸. Before 1989 county councils were responsible for all facilities and services in county towns (e.g. Te Anau, Otautau, Oban, Edendale, Tuatapere, Ohai, Nightcaps, Mossburn) and rural districts. Larger towns were usually boroughs (e.g. Winton, Riverton, Bluff, Gore, and Matāura) and had their own elected boards and were responsible for their own facilities and services. Invercargill City District and Gore District are either largely urban or rural areas with high urban influence, while Southland District is largely rural or remote areas. Southland's largest urban areas, Invercargill and Gore, are dependent on the fortunes of its export sectors (including tourism).³⁹

³⁷ This system of local government was created under the Municipal Corporations Act 1876 and the Counties Act 1876. The Counties Act 1876 replaced a system of provincial government that had existed since 1853. During the period between 1853 and 1876, Southland was part of the province of Otago, separated from Otago in 1861, and re-joined Otago in 1870. Southland became a region in 1989.

³⁸ There were a number of other authorities that merged or disappeared at that time: Southland Catchment Board; Southland Harbour Board; Southland United Council; Southland Pest Destruction Board; and two River Boards (Otautau and Waimatuku).

³⁹ Source for this paragraph is: The Southland Economic Project: Urban and Industry. Technical Report.

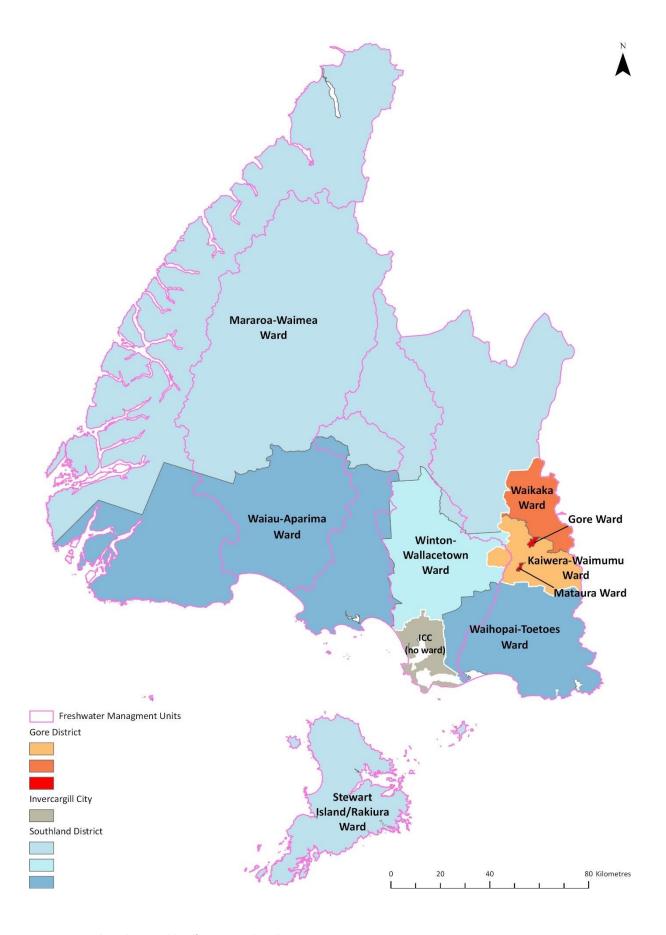


Figure 9: Wards within Southland's Territorial Authorities

Under the Resource Management Act 1991, Environment Southland is the lead authority responsible for the integrated management of fresh water in the region. The three territorial authorities also have an important role to play. The Local Government Act 2002 is a key statute for local authorities and has an important guiding role in the management of fresh water in the region.

3.1.1 The Local Government Act 2002 40

The Local Government Act 2002 (LGA) sets out roles for how New Zealand's local authorities are to operate and promotes the accountability of local authorities to their communities. The Local Government Act's purpose is democratic and effective local government that recognises the diversity of New Zealand communities. The purpose of local government (Part 2 of the Local Government Act) is:

- a) to enable democratic local decision-making and action by, and on behalf or, communities; and
- b) to meet the current and future needs of communities for good-quality local infrastructure, local public services, and performance of the regulatory functions in a way that is most cost effective for households and businesses.

This purpose recognises that local authorities provide governance at the local level and contribute to well-being. A theme is local accountability, with local authorities being answerable to their communities for the decisions they make while undertaking their functions.

Local authorities must follow a series of principles (Section 14 of the Local Government Act) while conducting their business. In summary, these principles require local authorities to:

- be open, transparent, and democratically accountable;
- be efficient and effective;
- consider the views of all its communities;
- take account of community interests and diversity;
- provide for Māori involvement;
- work with other local authorities and bodies;
- have sound business practices;
- assess expected returns and risks of investments
- have prudent stewardship and the efficient and effective use of resources, including by planning effectively for the future management of its assets;
- use a sustainable development approach.

If any of these principles conflict the local authority should resolve the issue in an open, transparent and democratically accountable manner (the first principle).

Triennial agreement⁴¹

The powers under the Local Government Act given to local authorities apply equally to regional councils and territorial authorities (district councils). Local authorities need to actively seek to work with other local authorities and bodies to improve their effectiveness and efficiency. Southland's

⁴⁰ Information used to develop this section is obtained from: http://www.localcouncils.govt.nz/lgip.nsf/wpg URL/Policy-Local-Government-Legislation-Local-Government-Act-2002

⁴¹ Information to compile this section was taken from the Triennial Agreement Southland Region (2016)

local authorities have developed a 'triennial agreement' for co-ordinating collaboration between them. The Triennial Agreement for Southland encourages local authorities to work together to recognise and promote the needs and interests of their communities in all of their social, economic, environmental and cultural aspects, consistent with the principles of sustainable development. Triennial agreements are typically reviewed every three years following the election of new governing bodies through local elections.

The current agreement (2016-2019) recognises the benefit of early, multi-level collaboration i.e. governance and operational. It sets a framework to ensure opportunities for meaningful collaboration are available across a range of matters including: shared services; consultation on the regional policy statement, joint approaches to dealing with external agencies and consultation processes for the establishment of significant new activities by a regional council in addition to that detailed in section 16 of the Local Government Act. Southland's Triennial Agreement is an important guiding document in the progress of freshwater management programmes in the region, as each of the four local authorities will need to actively participate in the limit-setting process.

Long Term Plans and Annual Plans⁴²

Under the Local Government Act, local authorities have to prepare long-term plans every three years to provide a longer term focus for their decisions and activities. Local authorities must also prepare annual plans to allocate funding to their activities.

Long-term plans are key planning documents for local authorities. The plans must cover a period of not less than ten years⁴³. They describe the council's activities and the community outcomes it aims to achieve. In addition, long-term plans also outline how councils will provide integrated decision-making and coordination of their resources, including budgets for each of the activities of the council over the period covered by the long-term plan. They provide a basis for accountability of the council.

Environment Southland's Long-Term Plan 2018-2028⁴⁴ identifies four community outcomes for the region:

- managed access to quality natural resources;
- diverse opportunities to make a living;
- communities empowered and resilient; and
- communities expressing their diversity.

Of specific relevance to freshwater management is the People, Water and Land Programme. The programme integrates regulation and on-the-ground action to support regional stakeholders to change their activities which impact on land and water. The 3 Water programme is also of relevance to freshwater management. Its focus is on encouraging local councils to have systems, for example infrastructure that are fit for purpose. The aim of this programme is to improve the management of drinking water, stormwater and wastewater (three waters) for our health safety and the environment.

⁴² Information used to develop this section has been sourced from: <a href="http://www.localcouncils.govt.nz/lgip.nsf/wpg_url/About-Local-Government-Participate-in-Local-Government-Council-Planning-and-Consultation-Processes#LongTermPlanhttps://www.es.govt.nz/council/consultations/Documents/2018/Long-term%20Plan%202018-2028%20consultation/ES_LTP%20Consultation%202018_Final.pdf

⁴³ The plans can be amended at any time through a special consultative process. Council is required to review their LTPs every three years.

⁴⁴ Environment Southland (2018). Long-Term Plan 2018-2028. Sourced from:

https://www.es.govt.nz/Document%20Library/Plans,%20policies%20and%20strategies/Long-term%20plan/2018-2028%20Long-term%20Plan%20-%20Volume%201.pdf

Annual plans are required to be prepared for each of the two years between Long-Term Plan reviews. Annual plans focus on year-to-year budgets. Annual plans also report progress against the direction set in the Long-Term Plan. As with the Long-Term Plan process annual plans are publicly consulted on prior to their adoption by the council.

Asset Management Strategies

Asset Management Strategies are also required under the Local Government Act as part of the councils' responsibilities to provide the prudent stewardship of resources. The purpose of asset management planning to ensure the effective and efficient management of infrastructure assets (e.g. water supplies) to meet the future needs of their communities. Infrastructure management Strategies have a 30-year timeframe. The management of infrastructure falls under the '3 Waters' concept. Local councils have responsibilities in relation to the management of '3 Waters'. The three waters are: drinking water, wastewater and stormwater. In Southland there is a focus on extending the concept to include fresh water. The '4 Waters' concept recognises the underlying importance of fresh water. Under the '4 Waters' concept Environment Southland is encouraging the territorial authorities to have systems that are fit for purpose and to make improvements to infrastructure, where necessary to minimise failures that can contaminate waterways.

The Resource Management Act 1991 and the Local Government Act 2002⁴⁵

In addition to the Local Government Act, the local councils also operate under the Resource Management Act (RMA), which has particular importance for the management of fresh water. As discussed in section 4.1 of this report, the Local Government Act has a strong focus on how the council should operate and accountability, for example providing frameworks for long term plans which identify community outcomes and direct the council work plans and consultation processes. Whereas, the RMA has a specific focus on the sustainable management of natural and physical resources and directs the work of the councils to achieve this.

How the two statutes interact depends on the issue. A principle of law is that specific provisions in one act override general provisions in another act. For example, the LGA contains provisions for consultation processes, as does the RMA. The Local Government Act consultation principles are designed to be used if there is no specific consultation process outlined for a particular matter. As the RMA contains specific direction for consultation the RMA provisions would override the Local Government Act provisions.

There are also areas where the statues work together, for example Long-term plans prepared under the Local Government Act include community outcomes, these are the outcomes the council intends to achieve while working towards achieving its vision. These community outcomes may also be incorporated into policy statements and plans under the RMA. Further, Long-term plans detail the councils' funding commitments (usually ten years) as such their activities under the RMA are included in this public process.

3.1.2 Environment Southland

Environment Southland's jurisdiction covers the entire region. Southland is the second largest region in New Zealand by land area, and one of the smaller regions by population.⁴⁶ Established in 1989,

⁴⁵ Information used to compile this section is from the Quality Planning Website. Source: http://www.qualityplanning.org.nz/index.php/related-laws/relationship-between-the-local-government-act-and-the-resource-management-act

Environment Southland took over from the Southland Catchment Board which was formed in 1945, under the Soils Conservation and River Control Act 1941. The Catchment Board combined the functions of many smaller boards. The Board was established to promoted soil conservation, mitigation of soil erosion, the control of flooding, and use of land to achieve these objectives.⁴⁷

Environment Southland is governed by 12 elected Councillors. Councillors are elected every three years through local body elections. The next local body election is to be held in 2019. The Electoral Act 2001 governs the conduct of local election and polls. The Electoral Act (Part 1A) details requirements for local authority representation. Amongst other things, for regional councils it states:

- there must be at least 6 members and not more than 14 members of the Council;
- the region must be divided into constituencies;
- members must be elected by the constituency members;
- each constituency must elect at least one member; and
- the members representing the respective constituencies of the regional must be elected by the electors of those constituencies respectively.

The current council has a governing body structure of 12 elected councillors, has been in place since 2007. The Chair of the Council is appointed by the elected councillors. The 12 councillors are elected from six constituencies: Fiordland, Western, Eastern Dome, Hokonui, Southern, Invercargill Rakiura that geographically cover the entire region. Broadly the political representation consists of six urban seats and six rural seats. The boundaries of the constituencies are generally marked by geographic features and are predominantly based on the wards of the three district councils. The boundaries do not align with the boundaries of the five Freshwater Management Units (FMUs) identified for the limit-setting process. Each of the FMUs is intersected by at least two of the constituencies. In the case of the Oreti FMU it intersects with five constituencies: Eastern Dome, Southern, Invercargill-Rakiura, Hokonui and Western. Figure 10 below shows the boundaries of the constituencies:

⁴⁶ Environment Southland (2016). Pre-election Report 2016. Source: https://www.es.govt.nz/Document%20Library/Research%20and%20reports/Various%20reports/Pre-election%20report%202016%20web.pdf

⁴⁷ An Encyclopaedia of New Zealand (1996). Sourced from: https://teara.govt.nz/en/1966/soil-conservation/page-2 and https://teara.govt.nz/en/1966/soil-conservation/page-2 and https://teara.govt.nz/en/soil-erosion-and-conservation/page-5

⁴⁸ Environment Southland (2018). Environment Southland's Representation Proposal for 2019. Source: https://www.es.govt.nz/council/consultations/Documents/2018/Representation%20review/Representation%20Review%20-%20Initial%20Proposal.pdf

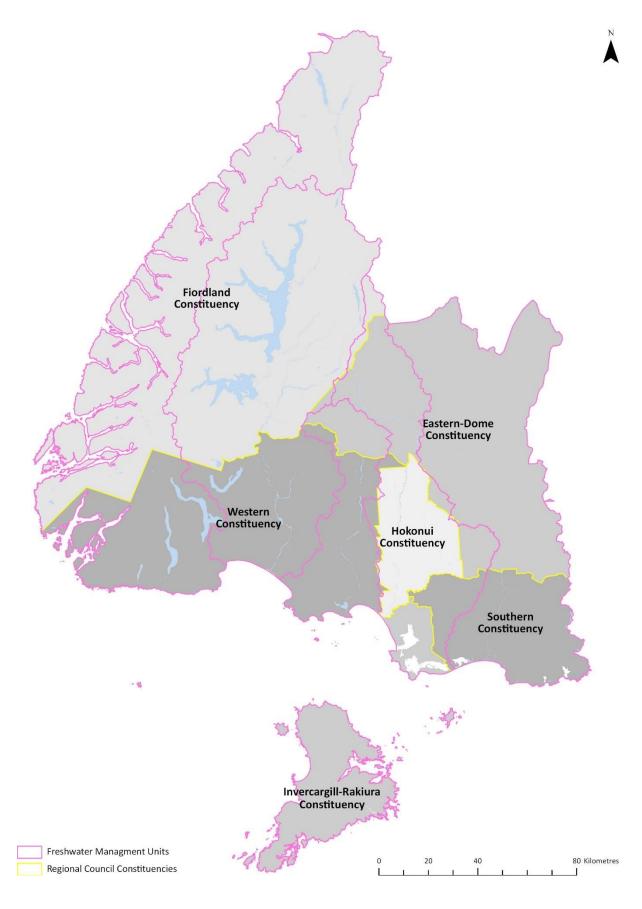


Figure 10: Map of Environment Southland Constituencies and Freshwater Management Units

Table 7 below shows the estimated population represented by each of the elected members, for each of the constituencies. The current structure does not meet the generic population representation requirements of the Local Electoral Act 2001, for the Fiordland, Invercargill-Rakiura and Southern constituencies. When compared to the requirements of the LEA, the Fiordland constituency is considered to be over represented and the Invercargill-Rakiura and Southern constituencies under represented. The Local Electoral Act does allow for some variation if it is justified in terms of the community of interest. The Local Government Commission has determined for Fiordland the community of interest is distinct from the rest of the region both physically and socio-economically and it is considered effective representation of the Fiordland community. Similarly, the Local Government Commission has determined the variation for the Invercargill-Rakiura and Southern constituencies is justified as they enable effective representation of the communities of interest.

Table 7: Population and FMUS by Constituencies for Southland 49

Constituency	Estimated Resident Population (30 June 2017)	Members	Population per Member	FMUs within constituency
Fiordland	3,630	1	3,630	Fiordland and Islands
				Waiau
				Oreti (small)
Eastern-Dome	16,750	2	8,375	Mataura
				Oreti
				Aparima
				Waiau (small)
Invercargill-	55,200	6	9,200	Oreti
Rakiura				Fiordland and Islands
Hokonui	7,910	1	7,910	Aparima (small)
				Oreti
Western	8,110	1	8,110	Fiordland and Islands
				Waiau
				Aparima
				Oreti (small)
Southern	6,720	1	6,720	Mataura
				Oreti

⁴⁹ Environment Southland (2018). Environment Southland's Representation Proposal for 2019. Source: https://www.es.govt.nz/council/consultations/Documents/2018/Representation%20review/Representation%20Review%20-%20Initial%20Proposal.pdf

3.1.3 Regional Council Functions, Roles and Responsibilities

Environment Southland has a range of functions which are required under various acts, for example the Resource Management Act 1991 (RMA) or the Biosecurity Act 1993. The Council's responsibilities include⁵⁰:

- sustainable well-being within the region;
- managing the environmental effects of using freshwater, land, air and coastal waters;
- managing rivers, mitigating soil erosion and flow control;
- natural hazards planning;
- regional emergency management and civil defence preparedness;
- regional land transport planning;
- harbour navigation and safety, oil spills and other marine pollution services;
- monitoring contaminated land;
- regional biosecurity management.

A large volume of the work undertaken by Environment Southland, including freshwater management work, is required under the RMA. Under Section 30 specific responsibilities have been identified for regional councils to steer them in achieving the sustainable management of the regions natural and physical resources. These responsibilities include (list not exhaustive):

- preparing objectives to achieve the integrated management of the regions resources (i.e. through the Regional Policy Statement);
- establish objectives, policies and methods to:
 - o control the use of land for the purpose of, amongst other things, maintenance and enhancement of ecosystems in water bodies and coastal water;
 - o control the take, use damning or diversion of water;
 - o control discharges of contaminants into, or onto land, air or water; and
 - control discharges of water to water;
 - maintain indigenous biological diversity;
 - o manage activities (in conjunction with the Minister for Conservation) for example discharges or occupation, within the Coastal Marine Area.

As discussed elsewhere in this report Environment Southland is the lead authority responsible for the sustainable management of Southland's freshwater resources. It is a core function of the Councils work. The freshwater programme of work is vast and covers multiple teams across the Council, including Environment Monitoring, Science, Land Sustainability, Policy and Planning, Catchment and Consents.

3.1.4 Environment Southland significance and engagement policy⁵¹

Under the Local Government Act councils are required to adopt a Significance and Engagement Policy. Environment Southland's policy uses the IAP2 Public Participation Spectrum which gives a range of community engagement options from "inform, "consult", "involve" "collaborate" to "empower". The purpose of the policy is:

⁵⁰ http://www.localcouncils.govt.nz/lgip.nsf/wpg_url/About-Local-Government-Local-Government-In-New-Zealand-Councils-Roles-and-Functions#RegionalCouncils

⁵¹ Environment Southland (2018). Long-Term Plan 2018-2028. Sourced from: https://www.es.govt.nz/Document%20Library/Plans,%20policies%20and%20strategies/Long-term%20plan/2018-2028%20Long-term%20Plan%20-%20Volume%201.pdf

- To enable Council and its communities to identify the degree of significance attached to particular issues, proposals, assets, decisions and activities.
- To provide clarity about how and when communities can expect to be engaged in decisions made by Council.
- To inform Council from the beginning of a decision-making process about the extent, form and type of engagement required.

3.1.5 Water and Land 2020 & Beyond Steering Group

What was it and who was in it?

Water and Land 2020 & Beyond was a project established to help Environment Southland manage the cumulative effects of intensive agricultural land use on the region's water quality. From late 2011 to 2014 a Water and Land 2020 & Beyond Steering Group was set up to help achieve the aims of the Water and Land 2020 project. Its members⁵² were interested parties who were approached by Council included iwi, conservation groups, industry and farmers who provided feedback on actions to improve land practice and develop recommendations to the Council. It was a partnership project to achieve community goals for maintaining and improving water quality and quantity within the region. The group meet as often as required, typically approximately every one-three months. Meetings were held both in the office and out in the field. The meeting was chaired by an elected Councillor; other Councillors at times observed the meetings or joined in field days but were not active members of the group.

The overall goal of the project was "to enable sustainable land use while maintaining and improving water quality and water quantity across the catchments within the Southland region, ensuring the region is resilient to changing factors".

Specifically, the group was tasked with providing advice to Environment Southland around five focus activities, they were agricultural activities which were deemed to have the largest impact on water quality in Southland at that time. The five focus activities were: hill and high-country development; nutrient management; intensive winter grazing; overland flow; and riparian management.

The aim for each focus activity was to identify good management practice for each of the activities, using existing science around on-farm contaminant losses, and then develop a response that combined this advice, with filling gaps in the Councils policy framework.

Who was missing and why?

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Group membership did not go through a formal nomination or election type process. Group membership was predominately from farmers who volunteered their time to contribute their knowledge, or professionals who were involved in environmental and policy development as part of their day-to-day jobs.

⁵² Group membership consisted of: Te Ao Marama Inc, Farmers, Southland District Council, Gore District Council, Deer Farmers Assn, Fonterra, Ballance Agri-Nutrients, Department of Conservation, Ravensdown, Fish & Game NZ, Federated Farmers NZ, NZ Fert Research, Beef and Lamb NZ, Dairy NZ, Environment Southland Councillors, Environment Southland staff and additional parties as required depending on the topic.

Additional representation from, for example the urban environment of both Invercargill and rural support towns, recreational groups, Public Health South (who did attend some meetings, but were not permanent group members), Horticulture New Zealand, Foundation for Arable Research, NZPork, Forestry Groups, Forest & Bird, Landcare, Alliance, and coastal interests would have contributed additional knowledge and skills to the group. Some group members thought additional and independent' scientists and a group facilitator would also have been beneficial. Bringing in economic skills at the start of a project to understand the costs and benefits of proposals would also have been useful. As an example, economic skills and analysis was applied early in the development of the riparian management focus activity to understand potential costs from proposed riparian fencing which assisted with shaping potential policy outcomes.

How did it operate?

The group convened through meetings organised by Environment Southland Policy & Planning staff. Meetings were largely held at Environment Southland, commencing mid-morning and running to mid-afternoon generally. This timing worked for people flying in from other regions, and for the farmers who had for example stock to feed.

Agendas were prepared and pre-circulated by Council staff, setting out the relevant topic and items for discussion.

Broadly the group was tasked with:

- Identify and provide feedback on actions to improve land use practice for the focus activities.
- Understand how science will be used to work out what actions and changes are most likely to achieve improvements.
- Provide advice and opinions on the challenges in meeting good practice in each of the focus activities.
- Make recommendations to the Council on practical and effective actions to achieve good practice in each of the focus areas.
- Avoid duplication of effort across organisations and agencies involved and where possible, align and enhance initiatives underway to ensure that water quality outcomes are achievable in each of the focus activities.
- Reach agreement, where possible, on the most effective methods to achieve the aims of the Water and Land 2020 project.
- Act as a project champion for Water and Land 2020 to achieve community support for the focus activities initiatives.

Field days were also held, when additional farmers were invited to attend and share their knowledge, for example on the hill and high-country field days.

The use of strawman examples?

As part of the development of policy responses for the five focus activities (detailed above) strawman examples where used. A strawman in this context can broadly be described as a draft written concept e.g. a draft rule framework for wintering activities, circulated amongst the group to generate discussion and to received feedback on for future refinement. In a policy context, this meant that planning staff developed draft policy responses on the five focus activities based on meeting feedback and to address the environmental effects from the activity. These were then included in agendas for discussion at the next meeting or sent out via email for individual feedback from group members.

The intent of a strawman is to generate discussion on the topic for refinement and improvement to reflect the group's feedback. There was both positive and negative feedback on the use of strawman examples, but their use needs to be put in context. Positives included having some words in which to start a conversation, negatives included that some members felt policy staff had too much ownership and input into the drafting. Strawman proposals should be deemed as a starting point for conversations to discuss the benefits and drawbacks of the draft policy framework (which will depend on where you sit on the spectrum of the particular topic), and for groups to use the policy framework to discuss why, or why not in their opinion changes are needed.

What went well and what could've gone better?

There were many positives and lessons learnt from the development of the Steering Group. The positives included groups working together in Southland to reduce duplication on issues, raising awareness and sharing knowledge around water quality issues in Southland and building relationships with the community. Practical on-farm days assisted with understanding each other's viewpoints such as impact of hill country development on iwi values.

Things that could've gone better include:

- Forms of reference for group, including roles and responsibilities and reporting requirements;
- Look at having a meeting chair as well as an independent and trained facilitator which would help with working towards group consensus on issues to report back to council for their recommendations and decisions;
- Explore how group members are used as a conduit to get information out to the community to ensure success in spreading messages.
- ➤ Look at overall group membership and how group membership is selected as well as optimal group size;
- Moving meetings around the region rather than always holding them in Invercargill e.g. hill and high-country discussion days held in rural towns or on-farms went well and gained difference group membership;
- Time taken to draft policy, prepare agendas and report to Council needs to be streamlined, particularly when additional feedback and questions from Council are rightfully sought. This can add months to a process due to meeting times and time required to prepare meeting agendas. Set regular and specific meeting times months in advance to align with providing feedback to Council would assist with this;
- Having administration support is critical;
- Clear budgets for work required for example science, policy, economics, cultural work and if consultants are required for example Technical science reports were prepared with input from external scientists; and
- ➤ Having other members of a group present work at times rather than council planning staff for example presenting strawman proposal. Planning staff could give input to ensure that anything prepared is in accordance with legislation.

3.1.6 Southland District Council⁵³

The Southland District was formed in 1989, from the former Wallace Country Council, Southland County Council, Stewart Island County Council and Winton Borough Council. The Southland District Council (SDC) has the largest land base on the three territorial authorities within the region. The SDC's vision for the district is "Southland – one community offering endless opportunities"⁵⁴. The SDC covers a population of 31,100 people across 30,000km², of which 14,300km² is managed by the Department of Conservation. The council has jurisdiction within all five freshwater management units identified for the region.

The Southland District Council's community governance and political structures have recently been through a review process, which has seen some proposed changes to the previous structure. The current political representation arrangement for the Southland District Council is one Mayor (elected at large) and 12 councillors elected from five wards. The wards are: Mararoa Waimea (three councillors); Stewart Island/Rakiura (one councillor); Waiau Aparima (three councillors); Winton Wallacetown (three councillors) and Waihopai Toetoe (two councillors). The populations of each of the wards are detailed in Table 8 below:

Table 8: Population and FMUs by Ward for Southland District55

Ward	2013 Census	Number of Elected members	Population per councillor	FMUs in Ward
Mararoa Waimea	7803	3	26	01 Fiordland and Islands
				Waiau
				Oreti
				Aparima
				Mataura
Winton Wallacetown	7890	3	26	30 Oreti
				Aparima
				Mataura
Waiau Aparima	8139	3	27	11 Fiordland and Islands
				Waiau
				Aparima

⁵³ Information for this section sourced from: https://www.southlanddc.govt.nz/assets/Repreview2018/Community-Governance-Reference-Document-aligned-version.PDF
Southland District Council (). Community Governance Reference Document. Source:

 $[\]underline{\text{https://www.southlanddc.govt.nz/assets/Repreview2018/Community-Governance-Reference-Document-aligned-version.PDF}$

⁵⁴ Southland District Council (2018). We're just getting started, Southland, Long Term Plan 2018-2028.

⁵⁵ Southland District Council (2018). Adoption of final proposal for the Representation Review. Sourced from: http://southland.infocouncil.biz/Open/2018/07/CO 20180711 AGN 1069 AT.PDF

Waihopai Toetoe	5421	2	2713	Mataura Oreti
Stewart Island	384	1	384	Fiordland and Islands

The SDC has recently completed a review of their community representation arrangements. As a result of the review it is proposed there will be nine community boards, which cover the whole district. The community boards are: Ardlussa, Fiordland, Northern, Oraka-Aparima, Oreti, Stewart Island/Rakiura, Tuatapere-TeWaewae, Waihopai Toetoe and Wallace Takitimu. Community boards are established under the Local Government Act 2002. The proposal has been appealed by eight parties. Their purpose is to enable democratic decision making by and on behalf of their respective area and to help in the achievement of the purpose of local government. The community boards within the Southland District generally support local priorities, service needs and oversee delivery of services. They are used by the Council to promote local input into decision making. In addition to these community boards, SDC has 19 community development areas that are designed to obtain local community input to issues of concern to local communities and support local projects. Following the 2019 local body elections SDC plans to make a decision on the future look of community development areas in light of the new community board structure⁵⁷.

The community boards will have between six and eight members. Representatives are democratically elected to act on behalf of their respective area which allows good opportunity to seek initial input from those people who are based in small rural and urban settlements. The boundaries of the community boards are one way of representing Southlands rural and smaller urban communities. The boundaries of the community boards do not neatly align with the five freshwater management units. Figure 11 below shows the boundaries of the FMUs in comparison to the community board boundaries.

⁵⁶ Appeals are made to the Local Government Commission. Final determinations on the proposal will be made by 10 April 2019.

⁵⁷ Previously community boards cover did not span the whole district.

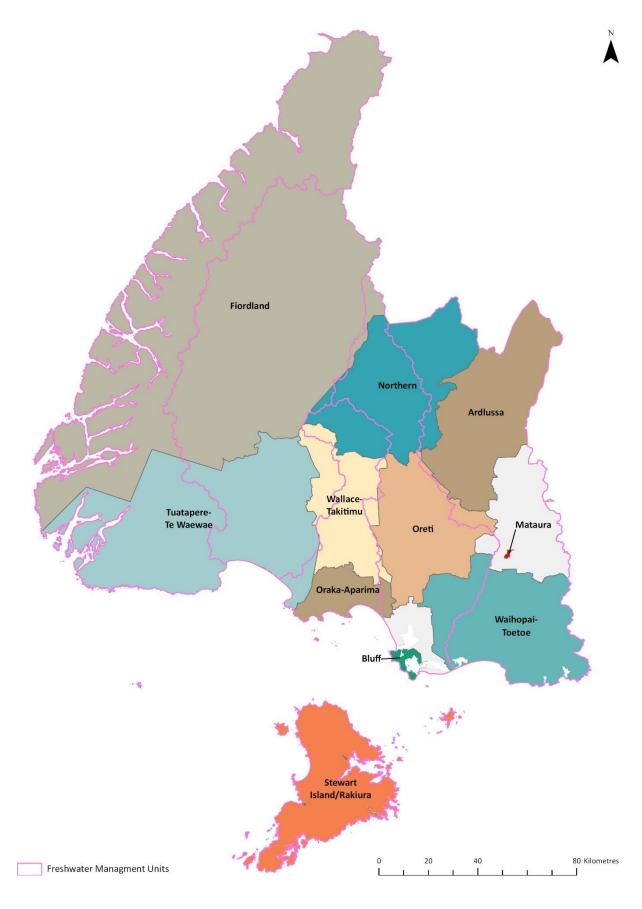


Figure 11: Boundaries of the nine community boards in Southland district wards and the Freshwater Management Units

3.1.7 Gore District Council⁵⁸

The Gore District was formed in 1989, it incorporates the former Gore and Mataura borough councils. The vision for the Gore District Council (GDC) is "to provide an environment that allows people to enjoy the lifestyle and culture of their choice"⁵⁹. The District covers the smallest land area of the three territorial authorities within the region. It covers 1,254km² and has a population of approximately 12,033 (2013) people. The majority of the Gore District is contained within the Mataura Freshwater Management Unit (FMU), a small area on the western boundary of the district lies within the Oreti FMU.

The GDC is governed by one Mayor and eleven Councillors elected from four wards across the Gore District. The four wards are: Gore (five councillors); Mataura (one councillor); Kaiwera-Waimumu (one councillor); and Waikawa ward (one councillor). The remaining three councillors are elected from the district as a whole. The two urban wards of Mataura and Gore have a lower income than the two rural wards. The wards are shown in Figure 9. The mixed system of three Councillors elected district wide and the remaining eight elected from the district's wards is considered the best fit for the Gore District. It has been determined this system will give rural voters more opportunity for representation than a straight ward system and provides for more diversity on the Council⁶⁰.

There is one community board, Mataura, in the Gore District. The Mataura community board consists of five elected members, as well as one representative of the Council from the Mataura Ward. Mataura has been identified as a distinct community of interest, identified as having a need for a designated voice and forum in which to debate and determine localised issues.

A community board has not been established for the Gore township, as Gore is the centre and base for the Council's administrative services, and thus it is unnecessary for a community board to be established within this community. 61 Although, the Gore District Council contains at least five elected Councillors from the Gore Ward, each member representing 1522 people within the ward.

Table 10: Population and FMU by Ward for Gore District

Ward	Estimated Resident Population (30 June 2016)	Number of Elected Members	Population per councillor		FMUs in Ward
Gore	7610	5		1522	Mataura
Kaiwera-Waimumu	1690	1		1690	Oreti
					Mataura
Mataura	1590	1		1590	Mataura

⁵⁸ Information to compile this section was taken from the Gore District Council website. Source: www.goredc.govt.nz

⁵⁹ Gore District Council (2018). 2018-2028 10 year Plan are we ready.

⁶⁰ Report on the Review of Representation Arrangements for the 2019 Local Authority Elections, source: www.goredc.govt.nz/assets/documents/elections/30102017-Representation-review-report-for-public-consultation.pdf

⁶¹ Report on the Review of Representation Arrangements for the 2019 Local Authority Elections. Source: www.goredc.govt.nz/assets/documents/elections/30102017-Representation-review-report-for-public-consultation.pdf

Waikaka	1590	1	1590 Mataura
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3.1.8 Invercargill City Council

The vision for the Invercargill District is "creating an exciting, innovative, safe, caring and friendly City offering lifestyles based on a healthy environment and diverse growing economy"⁶². Invercargill District covers 49,142 hectares.⁶³ In 2013 the population of the District was 51,696 people⁶⁴, making it the most populated district in the region. The District lies wholly within the Oreti Freshwater Management Unit.

The Invercargill City Council is governed by one mayor and 12 Councillors. The Invercargill City District is not divided into wards⁶⁵. Therefore, the councillors are elected city wide. There is one community board, being the Bluff Community Board. The Bluff Community Board has five elected representatives. As with other community boards in the region the board provides an opportunity to engage with members of the urban population.

Functions of Territorial authorities

Territorial authorities have a substantial role in delivering and maintaining services across their respective districts. Activities they are responsible for include: roading; urban and rural water supplies; sewerage schemes; cemeteries; community halls, centres and housing; libraries; and parks and reserves. Many of these activities either use or can affect freshwater resources, for example rural water supplies or discharges from sewerage schemes.

Territorial authorities also have responsibilities under the RMA, albeit they differ to the focus of the regional council's responsibilities. Section 31 of the RMA details the functions of territorial authorities, their functions include:

- integrated management of resources across the district;
- making sure there is sufficient development capacity for housing and business land;
- control effects of the use, development or protection of land;
- control emission of noise and management of its effects; and
- control effects of activities on the surface of water in rivers and lakes.

3.2 Tangata Whenua⁶⁶

Te Runanga o Ngāi Tahu are the Murihiku (Southland) tangata whenua. They have a special recognition in terms of RMA activities and are the iwi authority for Southland. They have multiple roles under the RMA and there are specific requirements for their consultation on various matters, including the development of RMA plans.

⁶² Invercargill City Council (2016). Governance Statement 2016-2019. Sourced from: https://icc.govt.nz/wp-content/uploads/2014/10/Governance-Statement-2016-2019.pdf

⁶³ Invercargill City Council (2018). 2018-2028 Long Term Plan. Sourced from: https://icc.govt.nz/wp-content/uploads/2018/06/2018-2028-LTP-complete-updated-4-July-2018.pdf

⁶⁴ Invercargill City Council (2013). Annual Report 2013/2014. Sourced from: https://icc.govt.nz/wp-content/uploads/2014/10/AR-2013-2014-Introduction-web.pdf

⁶⁵ Invercargill City Council (2016). Governance Statement 2016-2019. Sourced from: https://icc.govt.nz/wp-content/uploads/2014/10/Governance-Statement-2016-2019.pdf

⁶⁶ Information to compile this section has been sourced from: https://www.es.govt.nz/council/about-council/Pages/Partnership-with-iwi.aspx

Ngāi Tahu are also required to recognise any iwi management plans for the region. Te Tangi a Tauira (The Cry of the People) is the recognised iwi management plan for Murihiku (Southland)⁶⁷ (refer to section 5.2.4). The plan details iwi issues and policies that assist tangata whenua in effectively participating in planning processes as well as assisting local authorities in developing RMA plans.

Te Ao Mārama (TAMI) is the organisation that represents the four mana whenua Rūnanga in Murihiku. The four Rūnanga are:

- Te Rūnaka o Awarua;
- Hokonui Rūnanga;
- Oraka/Aparima Rūnaka; and
- Waihopai Rūnaka.

The Rūnanga do not have defined geographical boundaries meaning, direction will need to be sought from TAMI to ensure appropriate involvement of tangata whenua as the limit-setting process progresses.

TAMI represents Rūnanga interests in resource management and other aspects related to local government in Southland, for example under the Local Government Act. They actively participate in planning and resource consent processes in the region. A key focus for TAMI is the protection of the spiritual and cultural values of the region, including wahi tapu (sacred places), mahinga kai (gathering of food and resources) and other natural resources.

Environment Southland's relationship with tangata whenua is a productive partnership. Tangata whenua involvement in freshwater management is explicitly provided for in the National Policy Statement for Freshwater Management (NPSFM). The NPSFM requires tangata whenua values and interest are identified and reflected in the management of freshwater. For tangata whenua:

"... water is a taonga, or treasure of the people. It is the kaitiaki responsibility of tangata whenua to ensure that this taonga is available for future generations in as good as, if not better quality."⁶⁸

Tangata whenua have a resource management philosophy of 'Ki uta ki tai (mountains to the sea)'. This approach is reflected in the management of freshwater in Murihiku. The five freshwater management units identified for the region have been developed based on how water flows down the catchments and include the freshwater coastal water interface at the bottom of the catchments for example estuaries. The partnership between Environment Southland and tangata whenua is currently reflected in a number of areas, including joint funding of Kaitohutohu (Iwi Advisor), tangata whenua representation on RMA hearing panels and joint Council and Te Runanga o Ngāi Tahu Executive workshops. The People, Water and Land Programme is a partnership between Council and TAMI.

https://www.es.govt.nz/Document%20Library/Plans,%20policies%20and%20strategies/Regional%20plans/lwi%20Management%20Plan/Te%20Tangi%20a%20Tauira%20-%20The%20Cry%20of%20the%20People.pdf

⁶⁷ Te Tangi a Tauira can be sourced here:

⁶⁸ Te Tangi a Tauria (page 147) source:

https://www.es.govt.nz/Document%20Library/Plans,%20policies%20and%20strategies/Regional%20plans/lwi%20Management%20Plan/Te%20Tangi%20a%20Tauira%20-%20The%20Cry%20of%20the%20People.pdf

3.2.1 Ngai Tahu Claims Settlement Act 1998⁶⁹

The Ngāi Tahu Claims Settlement Act 1998 gives effect to the Deed of Settlement signed by the Crown and Te Runanga o Ngāi Tahu on 21 November 1997 to achieve a final settlement of Ngāi Tahu's historical claims against the Crown.

Statutory Acknowledgements recognise Ngāi Tahu's mana in relation to a range of sites and areas in the South Island, and provide for this to be reflected in the management of those areas. Statutory Acknowledgements impact upon RMA processes concerning these areas. There are several areas Statutory Acknowledgement Areas within Southland, which need to be considered through RMA processes.

3.2.2 Charter of Understanding

The Charter of Understanding is based on a co-management model. The Charter of Understanding establishes and provides for a clear understanding of the basis and on-going conduct of the relationship between the signatory Councils and the tangata whenua, in the context of both the RMA and the LGA. The purpose of the Charter is to develop the relationship of the mutual benefit between the local authorities within the Murihiku rohe and the mana whenua of the Murihiku and Te Rūnanga o Ngāi Tahu.

The four local authorities within the region are signatories to the Charter of Understanding as well as three local authorities outside the region⁷⁰. The additional local authorities are signatories as the boundaries of the Murihiku rohe is wider than Southland, encompassing part of the Otago region. For the purpose of the Charter, tangata whenua are represented by Te Ao Mārama (TAMI) Incorporated.

In the 1990s Te Rōpū Taiao, a joint management committee was established. The committee, meets four times a year, is made up of the signatories to the Charter of Understanding. The aim of the committee is to develop relationships between the local authorities and tangata whenua of Murihiku. The focus of the committee is high level decision making with a resource management focus.

3.3 Department of Conservation

The Department of Conservation (DOC) is the largest land manager in the region. They are responsible for the management of various areas across the region of conservation land as well as Southland's two national parks: Fiordland National Park and Rakiura National Park. To assist with the management of public conservation land DOC prepares conservation management strategies and national park management plans. Representatives of DOC are active participants in freshwater management processes, under both their responsibilities as land managers as well as advocating for the conservation of natural resources including freshwater resources. The Department of Conservation do not pay rates unless it is on developed land.

⁶⁹ Environment Southland (2016). Evaluation Report: Proposed Southland Water and Land Plan. Source: https://www.es.govt.nz/document-library/plans-policies-and-strategies/regional-plans/proposed-southland-water-and-land-

plan/background-documents/Documents/Public%20notification/Section%2032%20Report.pdf

⁷⁰ Local authorities from outside of Southland are the Otago Regional Council, the Clutha District Council and the Queenstown Lakes District Council.

In addition to DOC's land management and advocacy role, the Minister of Conservation has a specific role in the Coastal Environment. The Minister of Conservation is responsible for the preparation of the New Zealand Coastal Policy Statement. The Minister of Conservation is also responsible for the approval of coastal plans prepared by Environment Southland. This is particularly relevant for the limit-setting process because of the Ki uta ki tai (mountains to the sea) approach. Meaning limits may also be set for water quality within the coastal environment as these areas are included within the regions five freshwater management units. DOC also prepare conservation management strategies and national park management plans to direct the management of public conservation lands within Southland, and an overview of the relevant documents within Southland provided in section 5.2.5 below.

3.4 Southland Conservation Board⁷¹

The Southland Conservation Board consists of 11 local members nominated by the public and appointed by the Minister of Conservation. The Minister looks for individuals with experience, expertise and links with the local community. The board's members come from across the region and include people with other "hats'. The board has a conservation advisory and community liaison role in Southland. They are active participants in the development of DOC's conservation management strategies and national park management plans, they also have an approval role for these documents. From time-to-time they participate in RMA planning processes. The board meets four times a year.

3.5 Venture Southland⁷²

Venture Southland was established in 2001 and is a joint initiative of Southland's three district councils. It is designed to promote and develop the region on behalf of the councils. The organisations mission is "working with people and organisations to enhance the prosperity and quality of life of Southlander's".

The agency receives funding from the three councils, as well as contributions from the Community Trust of Southland⁷³ and Environment Southland. It has three key areas of focus: economic development, destination promotion, and community development. Figure 12 shows Venture Southland's three focus areas and their corresponding workstreams. A Joint Committee of elected representatives and appointed representatives from the three district councils and Environment Southland approve Venture Southland's activities.

⁷¹ Information for this section was compiled from: https://www.doc.govt.nz/about-us/statutory-and-advisory-bodies/conservation-boards/southland/

⁷² Information from this section has been compiled from Venture Southlands http://venturesouthland.co.nz/about

⁷³ The Community Trust of Southland is a community owned grant making organisation. It operates across the region as well as covering Queenstown, Glenorchy, Arrowtown, Tapanui and Heriot.

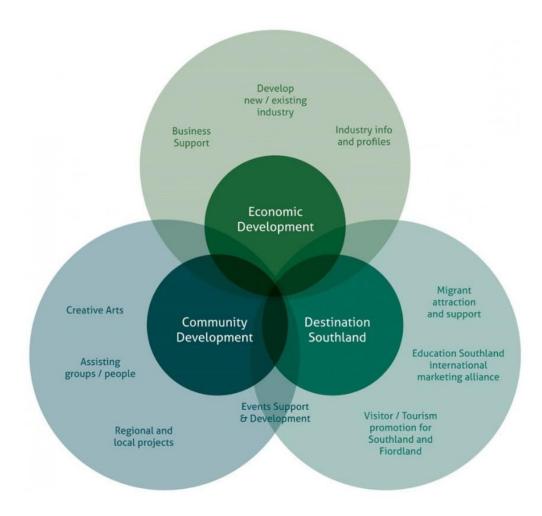


Figure 12: Venture Southland areas of focus

3.6 Southland Regional Development Strategy (SoRDS)⁷⁴

In late 2014 the Mayoral Forum commissioned this Strategy project, and in 2015 the Southland Regional Development Strategy was released.

The overall goal of the Strategy is to have 10,000 more people living in Southland by 2025. The reason for this is that more people is the key to Southland's social and economic future.

The Strategy can be considered in two parts: the first presents information of the issues that Southland faces in the future and outlines a framework for development solutions. The second part is about making it happen, and this has become the Action Plan.

The SoRDS Action Plan was launched on 30 November 2016 with a range of projects to give the region a broader and more resilient base. The three challenges outlined within the document are to grow population, diversify the regional economy and to strengthen local business. This is supported

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⁷⁴ Information for this section sourced from https://www.sords.co.nz

by nine projects called attraction, inclusion/participation, Invercargill rejuvenation, aquaculture, tourism, international students, ease of doing business and primary sector extension. There are also four other énablers' within the Action Plan which focus on water, digital connectivity, transport and talent and training.

3.7 Our Way Southland⁷⁵

From 2003 to 2014 the four local authorities of Southland worked together on the 'Our Way Southland' project. The project was established to identify community outcomes for Southland. Following extensive community consultation seven community outcomes where identified for Southland. The outcomes were included in the local authorities Long-Term and Annual Plans to guide the work undertaken by the councils. Although the project was discontinued in 2014, the identified outcomes still provide useful direction for future community processes. These outcomes are:

- Southland is a great place to live.
- A diverse economy built from our strengths for growth and prosperity.
- Safe places in a caring society that is free from crime.
- We are healthy people.
- Strong, effective leadership taking us into the future.
- A treasured environment which we care for and which supports us now and into the future.
- A well-educated and skilled community continually seeking further opportunities to learn.

3.8 Public Health South⁷⁶

In a Resource Management Act context Public Health South has an advocacy role within Southland, at a community and environment level. They operate within the Southern District Health Board boundaries, which includes both Southland and Otago regions and is funded by the Southern District Health Board. Public Health South are focused on ensuring that the places and spaces people live, learn, work and play contribute to their good health. Their focus is on trying to prevent disease and disability by creating healthy environments and conditions that prevent harm and support health and well-being. Public Health South will have an important role in the application of the NPS FM national value for human health in Southland.

3.9 River Liaison Committees

Environment Southland has seven River Liaison Committees being Mataura River, Aparima River, Te Anau Rivers, Makarewa River, Waituna, Waiau River and Waimatuku Stream Liaison Committees.

⁷⁵ Information for this section has been sourced from: https://www.es.govt.nz/council/about-council/Pages/Community-outcomes.aspx

⁷⁶ Information for this section has been compiled from: https://www.southerndhb.govt.nz/pages/phsouth/

The representatives of these committees are spread throughout each of the respective river catchments and are elected annually by the community. The role of the committees is to advise and assist Council in the development of annual maintenance works programmes and budgets and provide an important local contact for each river community regarding special river and land drainage management issues.⁷⁷

3.10 Catchment Groups

The reliance on natural resources, and the rising awareness of water quality issues has contributed to the rise in catchment groups around the region. These groups predominately have a rural focus and have been created by famers within a number of catchments around the region. Farmers want to understand the implications of future limit-setting, and to understand how their on-farm activities may impact water quality and water quantity, and steps that they can take such as good management practices and getting ready to become involved in future conversations around limit-setting. Figure 13 shows the location of farmer catchment groups⁷⁸ in Southland in relation to the Freshwater Management Unit boundaries. The boundaries of these Catchment Groups do not necessarily represent specific catchments but maybe parts thereof or multiple sub-catchments/ areas of interest. The boundaries are relatively fluid and can evolve over time.

These catchment groups have largely been driven by farmers, some with the assistance of DairyNZ, and each group is its own unique entity, and have their own goals and vision. Their aim is to raise awareness and educate people on how to improve water quality through good management practices, and help communities identify what they can do to improve water quality in their area, and then do it. At the time of writing, there were 16 Catchment Groups across the region, which could expand to 25 in time.⁷⁹

⁷⁷ Information for this section has been complied from https://www.es.govt.nz/community/community groups/Pages/default.aspx

⁷⁸ This is a project to support existing and new farmer catchment groups and is supported financially and in-kind by Beef + Lamb New Zealand, NZ Landcare Trust, Southland Branch of the Deer Farmers Association, Deer Industry New Zealand, Environment Southland, Dairy NZ, rural professionals and many catchment farmers.

⁷⁹ Information sourced from Southland's Farmer Driven Community Catchment Groups information sheet, prepare by NZ Landcare Research, Dated February 2018

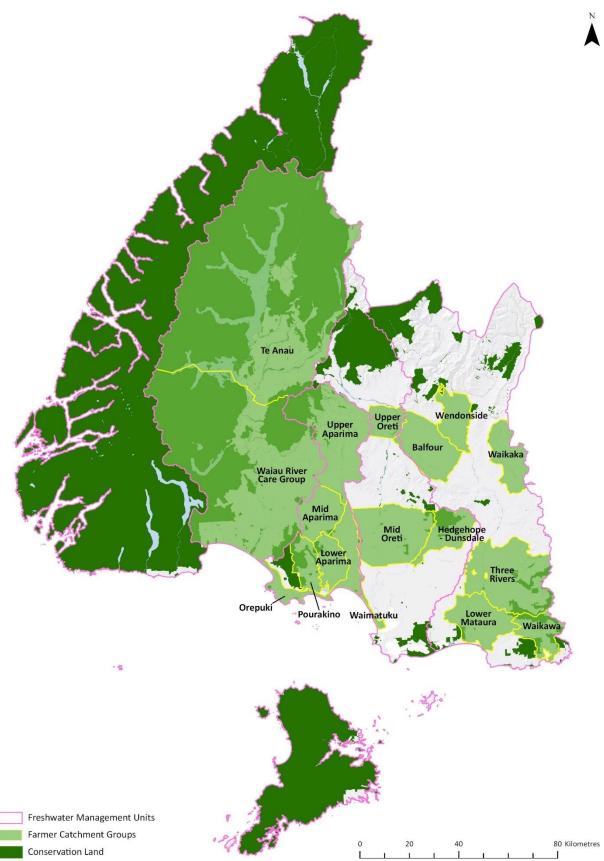


Figure 13: Known Catchment Groups in Southland by Freshwater Management Units

While farmer catchment groups have been running for several years in some places, there are still gaps is areas where Catchment Groups have not been set-up which raises questions regarding who to engage with during the limit-setting process. Also, some catchment groups fall into two Freshwater Management Units, namely the Balfour and the Waimatuku Catchment Groups. Table 11 identifies the established Catchment Groups within each Freshwater Management Unit.

Table 11: Catchment groups within FMUs

Freshwater Management Unit	Known Catchment Groups
Fiordland and Islands	None identified
Waiau – Waiau Lagoon	Te Anau
	Waiau River Care Group
Aparima and Pourikino - Jacobs River Estuary	Upper Aparima
	Mid Aparima
	Waimatuku
	Lower Aparima
	Pourakino
	Orepuki
Oreti and Waihopai – New River Estuary	Upper Oreti
	Mid Oreti
	Hedgehope- Dunsdale
	Balfour (small area included)
	Waimatuku (small area included)
Mataura-Toetoes Harbour	Wedonside
	Balfour
	Waikaka
	Three Rivers
	Lower Mataura
	Waikawa

The following sections give a brief overview of each of the five Freshwater Management Units⁸⁰.

⁸⁰ This information on the five FMUs has largely been adapted from the contents of The Southland Economic Project: Urban and Industry. Technical Report.

3.11 Freshwater Management Summary

This section has provided an overview of existing arrangements and organisations within Southland that will be useful as the region progresses the limit-setting process. It has not captured every organisation with a role or interest in fresh water. Examples of other existing networks where a wide reach includes groups and organisations including but not limited to Fish and Game, Forest and Bird, DairyNZ, Fonterra, Beef + Lamb and Federated Farmers.

There are eleven community boards established across the region's three districts. The boundaries of the community boards do not align with the boundaries of the Freshwater Management Units. Obvious gaps in the reach of existing and future community boards are the Gore township, Invercargill City and the rural settlements of the Gore District including Waikaka. These areas traditionally have good representation around their respective council tables.

There are various visions for Southland and its respective districts. All of these visions are relevant to the management for freshwater in the region. Generally, these visions have common themes around lifestyles and a healthy environment, which are integral to community economic well beings. Table 12 below provides a summary of the visions.

Table 12: Summary of Council Vision Statements

Organisation	Vision
Environment Southland	Thriving Southland – te taurikura o Murihiku
Southland District Council	Southland – one community offering endless opportunities.
Gore District Council	To provide an environment that allows people to enjoy the lifestyle and culture of their choice.
Invercargill City Council	Creating an exciting, innovative, safe, caring and friendly City offering lifestyles based on a healthy environment and diverse growing economy.
Venture Southland	Working with people and organisations to enhance the prosperity and quality of life of Southlander's.

Tangata whenua have a special relationship with water. This relationship is reflected in the direction in the National Policy Statement for Freshwater Management 2014. It requires tangata whenua values and interest are identified and reflected in the management of freshwater. Te Ao Marama Incorporated represent tangata whenua in Southland in resource management matters.

The Department of Conservation, Public Health South, the Southland Conservation Board and Venture Southland play an important role in the future of the region. They have existing networks which can be used to gather and disseminate information on freshwater values and management in Southland. Other existing networks where a wide reach in terms of communicating with Southland residents includes groups and organisations including but not limited to Fish and Game, Forest and Bird, DairyNZ, Fonterra, Beef + Lamb and Federated Farmers.

4 Policy Context

Every limit-setting process undertaken across the country is required to be completed in accordance with New Zealand's legislative and regional policy requirements. Regional planning falls within an existing hierarchy of planning and statutory documents that are relevant at either a national or regional level. The RMA sets out how regional plans must align with these documents to ensure that they are robust enough to meet the required statutory tests. All levels of the hierarchy will be important for the limit-setting process.

The following section looks at acts and policy documents that have a direct impact on the scope of Southland's limit-setting process within the People, Water and Land Programme. The Programme's core aim is to maintain and improve Southland's water quality, ultimately helping the Southland community achieve its goals for the region's water. The programme will have an integrated approach incorporating action on the ground and a regulatory framework to improve land and water management.⁸¹

To achieve this aim, clearly identifying the policy context that limit-setting will operate within is important for both the Values and Objectives workstream (which will share knowledge with the communities and determine their values and objectives) and the Regional Forum (which will consider regulatory and non-regulatory methods to achieve the community's values, objectives and targets including the setting of limits). Understanding the policy context is crucial as it sets the operating parameters for conversations around community's values and objectives and what is "in" and what is "out" in terms of meeting policy requirements.

4.1 National

4.1.1 The Resource Management Act (1991)

The Resource Management Act (RMA) provides the statutory framework for managing for New Zealand's natural and physical resources. The purpose of the RMA is to promote the sustainable management of natural and physical resources.

Sustainable management⁸² is:

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

- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
- (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment."

⁸¹ Information sourced from item 3 People Water and Land Programme (Te Mana o Te Tangara, te Wai, te Whenua) Update and Workstream Endorsement, Strategy and Policy Committee, July 2018

⁸² http://www.legislation.govt.nz/act/public/1991/

The Council is responsible for controlling discharges of contaminants to land, water and air, controlling the use of water and controlling the use land in certain circumstances, under section 30 of the RMA.

These functions include developing objectives, policies and methods to achieve integrated management of the natural and physical resources within the region. In undertaking these functions, the council must 'recognise and provide for' matters of national importance (section 6), other matters such as (section 7) and principles of the Treaty of Waitangi (section 8).

The RMA sets out a framework for standards, policy statements and plans (Part 5). This framework includes the purpose of national policy statements⁸³ (section 45), such as the National Policy Statement for Freshwater Management. The purpose of regional plans (section 63) is to help the Council carry out its functions in ways that will achieve the purpose of the RMA. The council must consider specific matters when preparing or changing a regional plan (section 66), such as:

- take into account any relevant planning document recognised by an iwi authority;
- shall have regard to any relevant entry on the New Zealand Heritage List/Rārangi Kōrero required by the Heritage New Zealand Pouhere Taonga Act 2014;
- shall have regard to any management plans and strategies prepared under other acts.

In summary, the Resource Management Act is the highest-level document and the development of limits must meet the requirements for the development of regional plans while achieving the purpose of the Act, namely to achieve sustainable management of natural and physical resources.

National Policy Statements and National Environmental Standards

Central government issues national policy statements and national environmental standards⁸⁴ to give local government direction on what they must do to achieve their responsibilities and the purpose the RMA. The more relevant national policy statements for limit-setting in Southland are the National Policy Statement for Freshwater Management (NPSFM) and the New Zealand Coastal Policy Statement (NZCPS). Both of these national policy statements include direction of water management. The two statements implemented together in Southland, seek to achieve the integrated management of water from its source to the sea (Ki uta ki tai). The most relevant national environmental standard is the National Environment Standards for Plantation Forestry. These three documents are explained in more detailed below.

Other relevant National Policy Statements and National Environmental Standards include85:

- > The National Policy Statement for Renewable Electricity Generation 2011. Policy B and Policy E2 are relevant when decisions are made for fresh water.
- National Environmental Standard for Sources of Human Drinking Water 2007. councils to consider effects on drinking water sources in plan development and in applications and decisions for resource consents.

84 National environmental standards are technical environmental regulations which must be complied with to achieve the purpose of the

⁸³ Section 45 details the purpose of national policy statements other than the New Zealand Coastal Policy Statement.

⁸⁵ At the time of writing this report, the Government is considering bringing in a National Policy Statement (NPS) for Versatile Land and High Class Soils.

In summary, the development of limits must meet with the requirements of all relevant National Environmental Standards and National Policy Statements. The Resource Management Act is the highest-level document and the development of limits must meet the requirements for the development of regional plans while achieving the purpose of the Act, namely to achieve sustainable management of natural and physical resources.

4.1.2 National Policy Statement for Freshwater Management 2014 (amended 2017)

The NPSFM is the main policy document directing the limit-setting process. It is the first step to improving freshwater management at a national level to address over-allocation of water in Southland for water quantity and water quality. Council will achieve this for each of Southland's freshwater management units through the limit-setting process, where freshwater objectives, policies, limits and methods will be developed for each catchment by 2025. Limit-setting will build on the existing framework contained within the proposed Southland Water and Land Plan, which currently does not give, nor was intended to give full effect to the NPSFM.

The National Policy Statement for Freshwater Management 2014⁸⁶ (NPSFM) gives national direction for freshwater management in New Zealand by setting out national objectives and policies. It establishes a framework for the limit-setting process and introduces key terms which are fundamental to its effective implementation. Regional plans including, those developed through the limit-setting process, must give effect to the NPSFM. For Environment Southland this means that regional plans, for example the proposed Southland Water and Land Plan must give effect to the requirements contained within the NPSFM. To achieve this Environment Southland, in consultation with the community must develop regional objectives for freshwater management (both water quality and quantity) including setting limits on resource use to meet the regional objectives.

Broadly, the NPSFM requires all regional councils to⁸⁷:

- account for all freshwater takes and contaminants;
- set freshwater objectives, and provides a process for this;
- > set limits and methods to achieve the objectives which may require water resource users to adjust existing practices; and
- > work with iwi and hapu in the management of freshwater to identify tangata whenua values and interests and reflect these in the management of and decision-making about freshwater.
- manage freshwater in a way that considers and recognises Te Mana o te Wai as the integrated and holistic well-being of a freshwater body.

The NPSFM sets out 15 objectives that cover: Te Mana o te Wai, water quality, water quantity, integrated management, national objectives framework, monitoring plans, accounting for freshwater takes and contaminants, tangata whenua roles and interests, and the requirements for the development of a Progressive Implementation Programme. There are 30 policies, as well as six appendices that cover:

Appendix 1: National values and uses for fresh water

⁸⁶ The Freshwater NPS was amended in August 2017. The <u>amended Freshwater NPS</u> superseded the original 2014 version on 7 September 2017.

⁸⁷ Information within this section has been sourced from: Ministry for the Environment. 2017. A Guide to the National Policy Statement for Freshwater Management 2014 (as amended 2017). Wellington. Ministry for the Environment.

Appendix 2: Attribute tables

Appendix 3: Existing infrastructure for the purposes of Policy CA3(b)

Appendix 4: Freshwater management units and periods of time for transition for the purposes of Policy CA4

Appendix 5: Surveillance monitoring of E. coli at primary contact sites

Appendix 6: National target for water quality improvement

Objectives⁸⁸

Generally, the 15 objectives of the NPSFM can broadly be split into two categories: outcome objectives and, process and knowledge objectives. The objectives for Te Mana o te Wai, water quality and water quantity are outcome focused. They are summarised below.

Objective AA1 requires Council to consider and recognise Te Mana o te Wai when making decisions about fresh water. Te Mana o te Wai "recognises the connection between water and the broader environment – Te Hauora o te Taiao (the health of the environment), Te Hauora o te Wai (the health of the waterbody) and Te Hauora o te Tangata (the health of the people)"⁸⁹.

How Te Mana o te Wai is incorporated into regional planning documents will vary depending on the circumstances of the region. Council will need to work with Te Ao Marama, Ngai Tahu and the community to work out what this means for Southland. Table 12 presents a summary of the objectives for water quality and quantity.

Table 12: Summary of water quality and quantity objectives

Water Quality	
Objective A1	The safeguarding ⁹⁰ of the life-supporting capacity, ecosystem processes and indigenous species of freshwater and the health of people and communities.
Objective A2	The overall maintenance or improvement of freshwater quality.
Objective A3	The improvement of freshwater quality so it is suitable for primary contact more often ⁹¹ .
Objective A4	Communities to be able to provide for their economic well-being while sustainably managing freshwater quality within limits.
Water Quantity	
Objective B1	The safeguarding of the life-supporting capacity, ecosystem processes and indigenous species.
Objective B2	The avoidance of further over-allocation of fresh water and phasing out of existing over-allocation.

⁸⁸ Information used to compile this section was sourced from: Ministry for the Environment (2014). A Guide to the National Policy Statement for Freshwater Management 2014.

⁸⁹ National Policy Statement for Freshwater Management (2014 reviewed in 2017), Objective AA1.

⁹⁰ The word 'safeguard' implies an active duty (ie, proactive responses) for local authorities to determine ways to ensure, for example, that fresh water maintains its life-supporting capacity.

⁹¹ Unless regional targets established under Policy A6(b) are achieved or natural occurring processes mean further improvements are not possible.

Objective B3	The efficient allocation and efficient use of water.
Objective B4	The protection of significant values of wetlands and of outstanding freshwater bodies.
Objective B5	Communities to be able to provide for their economic well-being while sustainably managing freshwater quantity within limits.

The remaining five objectives, while seeking to achieve specific outcomes, are generally focused on process and knowledge building. Table 13 presents a summary of these objectives.

Table 13: Summary of process and knowledge objectives

Objective C1	The integrated management of fresh water and the use of land in catchments including their interaction with associated ecosystems and the coastal environment
Objective CA1	A nationally consistent approach for freshwater objectives for national values and other values, which provides flexibility to reflect regional and local circumstances
Objective CB1	An approach to the monitoring of progress towards the achievement of regional freshwater objectives and values
Objective CC1	A framework for the establishment of regional accounting programme to account for freshwater takes and contaminants entering freshwater bodies
Objective D1	The involvement of iwi and hapū, and to ensure that tangata whenua values and interests are identified and reflected in the management of fresh water

The NPSFM introduces key terms, for example 'limit', that are central to Southland's limit-setting process. A good understanding of these terms is important for those people participating in the process to ensure their effective participation. The section below discusses these key terms.

Compulsory values

'Ecosystem health' and 'human health for recreation' are the two 'compulsory values' identified in the NPSFM. These values must be applied to Southland's five freshwater management units, using the applicable attributes (attributes are discussed below) from Appendix 2. The compulsory values do not take priority over other values identified for a freshwater management unit; they are to be used as a 'package' in the management of fresh water.

Other National Values

There are ten 'Other Natural Values' identified within the NPSFM. These values may be applied to Southland's five freshwater management units where appropriate having regard to local and regional circumstances.

The ten values are:

- 1) 'natural form and character' (where people value particular natural qualities of the freshwater management unit),
- 2) 'mahinga kai' (Kai are safe to harvest and eat),
- 3) 'mahinga kai' (the mauri of the place is intact),
- 4) 'fishing' (the freshwater management unit supports fisheries of species allowed to be caught and eaten),

- 5) 'irrigation, cultivation and food production' (the freshwater management unit meets irrigation needs for any purpose),
- 6) 'animal drinking water' (the freshwater management unit meets the needs of stock),
- 7) 'wai tapu' (wai tapu represent places where rituals and ceremonies are performed, or where there is special significance to iwi/hapu),
- 8) 'water supply' (the freshwater management unit can meet people's potable water needs),
- 9) 'commercial and industrial use' (the freshwater management unit provides economic opportunities to people, businesses and industries) and
- 10) 'hydro-electric power generation (the freshwater management unit is suitable for hydro-electric power generation).

Limit

The NPSFM uses the term 'limit' and requires limits to be set for freshwater quality and quantity. In the context of the NPSFM, a 'limit' is defined as:

"The maximum amount of resource use available, which allows a freshwater objective to be met."

A limit will set out the maximum amount of a resource that can be used, while still enabling a freshwater objective to be met over time. For example, for freshwater quantity a limit could relate to how much water could be taken within a catchment, or for freshwater quality a limit could specific how much of a contaminant such as sediment (which can have adverse effects on water clarity) can be discharged into a waterway. Limits are often at a larger scale for example within a freshwater management unit catchment or sub-catchment i.e. not on farm limits.

Resource use

A limit is about the amount of a resource available for use. For example, how much of a resource can be used before the limit is exceeded meaning that over-allocation would occur, and consequently regional objectives will not be achieved.

Resource use and what resource use means during limit-setting needs to be considered broadly. For example, a limit could relate to stock exclusion from waterways through requiring fencing and/or riparian management strips. This restricts the resource use, being stock grazing or drinking the water in that catchment. Further examples of resource use limits include stocking rates on farms such as maximum numbers of cattle, deer and sheep per hectare, the discharge of contaminants to water such as nitrogen, phosphorous and sediment and the overall land use of a catchment. For water quantity, resource use examples could involve dams and water takes for a river.

Attribute

An 'Attribute' is defined as:

"A measurable characteristic of fresh water, including physical, chemical and biological properties, which supports particular values".

Attributes are characteristics of freshwater values that need to be managed. Appendix 2 of the NPSFM contains attributes that are required to be used to achieve the compulsory values (Appendix 1) set by the NPSFM. It is likely during the limit-setting process other attributes (aside from those in Appendix 2) will need to be used in Southland to reflect the community's values and specific circumstances.

The attribute states in Appendix 2 are considered a starting point, and not necessarily sufficient to protect the values of freshwater bodies, especially for ecosystem health. For limit-setting, these

attributes provide a way to assess the state of the values with the values that the community hope to achieve. Each of the attributes within Appendix 2 has four (A, B, C and D) 'states' associated with them. The states reflect a different level of water quality for the particular attribute. When setting limits regional councils can choose a state from A to C, dependant on the level they, along with the community, wish to provide for a value. The 'D' state means the corresponding value is not sufficiently provided for.

Over-allocation

Over-allocation is defined as:

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.

Policy A1 of the NPSFM requires ES to "establish methods (including rules) to avoid over-allocation." The use of 'avoid', rather than other RMA terms such as 'remedy' or 'mitigate', makes the policy direction strong. Examples of over-allocation could include a resource consent application to take additional water to irrigate a farm within a catchment, where all the available water⁹² has already been used. If an additional take was approved, it would mean the objectives for the catchment are no longer being met and the catchment was over-allocated. Over-allocation can also be used as a measure for water quality parameters.

Bottom Lines

A National Bottom Line is a minimum acceptable state for an attribute (NPSFM Appendix 2). All FMUs must have freshwater objectives set above the nationally-defined bottom lines, except in limited circumstances⁹³. The bottom line is the boundary between the C and D attribute states for the compulsory national values of ecosystem health and human health for recreation.⁹⁴ The National Bottom Lines are described both numerically and in words. If freshwater bodies are already degraded to a state in the bottom band (D) then an aspirational freshwater objective must⁹⁵ be set over time (i.e. improve over time).

Swimmability⁹⁶

In 2017 central government set a national target of making 90 per cent of New Zealand's large rivers and lakes swimmable by 2040, with an interim target of 80 per cent swimmable by 2030. At that time the NPSFM was changed to include specific provision for the human health risk from primary contact with water for example swimming. Primary contact is where there is a higher risk of ingesting water, than with secondary contact^[1] for example wading. The primary contact targets are based on the level of *E. coli* in rivers and lakes and cyanobacteria in lakes and lake fed rivers, which relate to the compulsory value for human health for recreation. The aim of the national target is:

⁹² Available water refers to the water allocated up to the 'limit'.

 $^{^{\}rm 93}$ Circumstances are detailed in Policy CA3 and CA4 of the NPSFM.

⁹⁴ Ministry for the Environment (2014). A Guide to the National Policy Statement for Freshwater Management 2014.

 $^{^{\}rm 95}$ Except in the circumstances listed in Policy CA3 and CA4.

⁹⁶ Information used to compile this section is from: Ministry for the Environment. 2017. A *Draft Guide to Swimming, E. Coli, and the National Targets under the National Policy Statement for Freshwater Management 2014*. Wellington: Ministry for the Environment.

^[1] The NPSFM 2014 previously contained provisions for secondary contact.

- "Increase the proportion of rivers and lakes that are suitable for swimming more often
- Decrease the proportion of time that rivers and lakes are unsuitable for swimming
- Get improvements across the board."[2]

The national target seeks 80 per cent (of total river length of fourth order rivers) to be suitable for swimming by 2030, and 90 per cent by 2040. The same target is set for fourth order rivers^[3] and lakes with a perimeter greater than or equal to 1.5km. There is also a requirement for the development of regional targets which are focused on achieving the national target. Note regional targets do not need to be adopted into a resource management plan such as the proposed Southland Water and Land Plan, however regional plans must, at the next plan change, state what improvements will be made that will contribute to achieving the regional target. Regional targets are required to be finalised by December 2018.

Other amendments to the NPSFM relevant to the swimmability target include:

- an objective to improve water quality in freshwater management units so that they are suitable for primary contact more often^[4];
- a requirement for plans to specify what rivers and lakes and primary contact sites^[5] will be improved, how they will be improved and the timeframe for improvement;
- reporting requirements to track efficacy and progress towards meeting targets; and
- monitoring requirements at primary contact sites.

In Southland 62 per cent of fourth order (or larger) rivers and 98 per cent of lakes are assessed as being swimmable. A draft regional target has been developed for an improvement to 65.7 per cent of fourth order (or larger) rivers to be swimmable by 2030.^[6] A draft target of 98% of lakes to be swimmable was also adopted, which would maintain the current status of specified lakes in the region. Final targets must be adopted by 31 December 2018.

In summary, the NPSFM sets the direction for what must occur during limit-setting. Key terms for the Regional Forum to be familiar with include compulsory values, other national values, limit, resource use, attribute, over-allocation, bottom lines and swimmability. In addition to this it is important to have an awareness and understanding of the 15 objectives that cover: Te Mana o te Wai, water quality, water quantity, integrated management, national objectives framework, monitoring plans, accounting for freshwater takes and contaminants, tangata whenua roles and interests, and the Progressive Implementation Programme. Knowledge of the 30 policies, as well as the six appendices, will also be important (Appendices cover national values and uses for freshwater,

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^[2] Ministry for the Environment (2017), National targets for improving water quality for swimming. Source:

http://www.mfe.govt.nz/fresh-water/what-government-doing/national-targets-swimming-water-quality/national-targets-improving

^[3] The term fourth order is derived from the New Zealand River Environment Classification (REC). Stream order is the numerical position of a tributary or section of river within the entire network. Headwater streams are considered first order. When two tributaries of the same stream order meet, the order increases by one for the next downstream section.

^[4] Is defined in the NPSFM as reducing the percentage and magnitude of E. coli exceedences for rivers and lakes, and cyanobacteria planktonic biovolume for lakes, according to the attribute tables in Appendix 2.

^{1. [5]} Defined in the NPSFM as: a) any part of a specified river or lake that a regional council considers is used, or would be used but for existing freshwater quality, for primary contact; and b) any other site in any other river or lake that a regional council has determined should be managed for primary contact.

^[6]Sourced from:

 $[\]frac{https://www.es.govt.nz/Document%20Library/Factsheets/Other%20factsheets/Draft%20regional%20targets%20for%20swimmable%20lakes%20and%20rivers%20in%20Southland.pdf$

attribute tables, existing infrastructure, transition times, surveillance monitoring of *E. coli*, and the national target for water quality improvement).

4.1.3 New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement 2010 (NZCPS) sets out seven objectives and 29 policies to achieve the purpose of the Resource Management Act (RMA) in relation to the coastal environment. It guides local authorities in their day-to-day management of the coastal environment, and regional policy statements, regional plans and district plans must give effect to the NZCPS.

The NZCPS recognises that activities inland can have a major impact on coastal water quality. Under the RMA coastal water includes seawater with a substantial freshwater component. Direction within the NZCPS must therefore also be given effect to during the limit-setting process, alongside the requirements of the NPSFM. The implementation of both documents in tandem also reflects the Ki uta ki tai (mountains to the sea) philosophy being followed in Southland. Unlike the NPSFM, the NZCPS does not provide for the progressive implementation its requirements. As a result, proposed resource management documents must give effect to the NZCPS in full in managing discharges to coastal water.

The NZCPS provides policy direction on national priorities. In all there are seven objectives and 29 policies. Table 14 lists the objectives and policies of particular relevance to the limit-setting process in Southland.

Table 14: Objectives and policies of particular relevance to the limit-setting process

Plan Provision	Particular relevance
Objective 1	Requires the maintenance of coastal water quality and the enhancement where it has deteriorated.
Objective 3	Requires the principles of the Treaty of Waitangi are taken into account, and the role of tangata whenua as kaitatiki is recognised.
Policy 2	Provides direction on how the principles of the Treaty of Waitangi and kaitiakitanga are to be taken into account in relation to the coastal environment
Policy 4	Provides for the integrated management of natural and physical resources in the coastal environment, and activities that affect the coastal environment.
Policy 21	Provides specific direction on improving water quality. It requires that where water quality that has deteriorated so that there are significant adverse effects on ecosystem health, recreation activities, or other existing uses of water, these areas are prioritised for improvement.
Policy 22	Provides specific direction on managing land use and discharge activities that result in sedimentation.
Policy 23	Provides specific direction in relation to the management of discharges that impact water quality in the coastal environment, including management of stormwater and wastewater discharges.

To summarise Table 14 above, the Regional Forum will need to be familiar with the requirements of Objectives 1 and 3, Polices 2, 4, 21, 22 and 24 to give effect to the NZCPS during the limit-setting process.

4.1.4 National Environment Standards for Plantation Forestry

The National Environment Standards for Plantation Forestry (NES-PF) came into effect on 1 May 2018. It applies to any forest larger than one hectare that has been planted specifically for commercial purposes and harvest. This does not include, for example, trees grown for fruit, nut crops, shelter belts, or nurseries. It provides a national set of rules aimed at:

- maintaining or improving the environmental outcomes associated with plantation forestry activities; and
- increasing the efficiency and certainty of managing plantation forestry activities.

The NES-PF delivers a general set of regulations that foresters must comply with; it also regulates eight specific activities related to plantation forestry and three ancillary activities. Rules in regional resource management plans can prevail over national environmental standards, if the standard says that a rule may be more stringent than it. In the case of the NES-PF, rules in resource management plans can prevail over the requirements of the standard, in certain circumstances (Regulation 6). For example, rules that are more stringent than the NES-PF and that are designed to achieve the objectives of the National Policy Statement for Freshwater Management prevail over the NES-PF.

This means the limit-setting process can determine more stringent requirements for plantation forestry than that detailed in the NES-PF, if it is considered necessary to provide for the values of a freshwater management unit.

4.2 Regional

A regional policy or plan must give effect to any relevant national policy statement, national environmental standard and to the New Zealand Coastal Policy Statement. Figure 14 shows the relationship between national, regional and district documents.

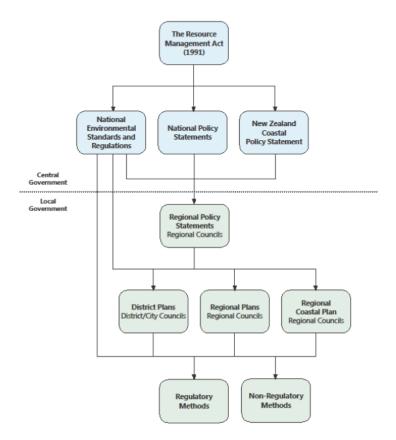


Figure 14: Relationship between national, regional and district documents⁹⁷

4.2.1 Southland Regional Policy Statement 2017

Regional Councils are required to prepare a Regional Policy Statement (RPS), which identifies their region's resource management issues and lists policies and methods to manage those issues. The purpose of a RPS (section 59 of the RMA) is:

"to achieve the purpose of the Act by providing an overview of the resource management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the whole region."

The Southland Regional Policy Statement 2017 (SRPS) is a second generation RPS. It sets the objectives, policies and methods to achieving the integrated management of the natural and physical resources in Southland. It does not contain rules. The SRPS identifies significant resource management issues for the region, including as examples issues of significance to Ngāi Tahu as tangata whenua, fresh water and rural land/soils.

The RPS has the highest rank of any planning document in a region. For Southland, that means that all district plans of Southland councils (Invercargill City Council, Southland District Council, and Gore

 $\frac{\text{https://www.es.govt.nz/Document\%20Library/Plans,\%20policies\%20and\%20strategies/Regional\%20policy\%20statement/Southland\%20Regional\%20Policy\%20Statement\%202017.pdf}$

⁹⁷ Environment Southland (2017). Sourced from:

District Council) as well as Environment Southland's regional plans must give effect to the provisions laid out in the RPS. This is to ensure that all the councils in the region are working towards common goals.⁹⁸ This is achieved by implementing the methods contained within the SRPS which either require or encourage a particular course to assist local authorities in giving effect to the SRPS. The methods also indicate how it is expected the policies will be implemented so that the objectives are achieved.

Freshwater management in the Southland Regional Policy Statement

Chapter 4 of the RPS is on fresh water. This chapter is considered in three parts water quality, water quantity and management of the beds of lakes and rivers. Management of water in the coastal marine area is addressed in Chapter 7: Coast.

The purpose of the freshwater chapter is to outline the significant resource management issues⁹⁹ for surface water and groundwater in Southland. The objectives¹⁰⁰, policies¹⁰¹ and methods¹⁰² address those issues. Overall, there are seven objectives that cover a range of matters which include effects from land use and development on water quality in the region so that water quality within Southland is maintained or improved. The objectives are implemented through 28 policies and the methods.

Objective WQUAL.1 (Water Quality Goals) 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 NPSFM.¹⁰³

The Southland Regional Policy Statement seeks to maintain water quality, as a minimum. This means that the approach contained with the Southland Regional Policy Statement is that water quality within the region will be maintained or improved in areas where water quality needs to be improved during the setting of freshwater objectives in accordance with the NPSFM. The approach also recognises that water quality in the region must be safeguarded for future generations, while also recognising that people use water to provide for their social, economic and cultural wellbeing and that this needs to be recognised in its management. The Southland Regional Policy Statement approach varies to the approach undertaken in the NPSFM which requires 'overall' water quality to be maintained or improved within an FMU. The use of 'overall' within the NPSFM allows for some variability in water quality across an FMU, by providing for some degradation of some elements of water quality provided it is offset by a proportionate improvement to ensure overall quality is maintained.

The Southland Regional Policy Statement will be a guiding document during the limit-setting process. Any policy framework developed for the five freshwater management units will need to give effect

¹⁰¹ Policies set out the course of action the Council wishes to adopt for achieving the objectives and can provide more specific guidance on how to make decisions about whether an activity is appropriate or not.

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⁹⁸ Paragraph sourced from: https://www.es.govt.nz/document-library/plans-policies-and-strategies/regional-policy-statement/

⁹⁹ An issue is an existing or potential problem that must be resolved to promote and achieve the purpose of the RMA.

 $^{^{100}}$ The objectives identify what environmental outcomes the policy statement is aiming to achieve

¹⁰² Methods set out how policies will be implemented and can be in the form of non-regulatory methods (e.g. communication, education, grants and assistance) or regulatory (e.g. rules).

 $^{^{103}}$ The Southland Regional Policy Statement 2017, explanation to Objective WQUAL.1

to the direction in the Southland Regional Policy Statement, and of particular relevance is Objective WQUAL.1 that sets out the overall framework for the management of water quality in Southland.

4.2.2 Regional Plans

The purpose of a regional plan (section 63 of the RMA) is:

"The purpose of the preparation, implementation, and administration of regional plans is to assist a regional council to carry out any of its functions in order to achieve the purpose of this Act."

Environment Southland is currently operating under two Regional Water Plans, the Regional Water Plan for Southland (2010), and the decisions version of the proposed Southland Water and Land Plan which was released in April 2018. The Regional Coastal Plan for Southland 2013 is also relevant and Policy A1 of the NPSFM requires regional councils to ensure connections between freshwater bodies and coastal water are provided for.

There is also the Regional Effluent Land Application Plan and the Transitional Regional Plan. These are not covered in detail within this report but are available on the Environment Southland website.

Regional Water Plan (2010)

The Regional Water Plan for Southland sets out the community's values and outcomes for water quality and water quantity, and policies and methods (e.g. rules) to protect the values and achieve the objectives. This Plan came into effect when it was originally notified being September 2000. This plan was a ten-year process and was adopted in 2010 before the NPSFM set out the national direction for freshwater management in New Zealand.

Within the introduction section, the purpose of this plan is set out, and it provides a framework of values (as set out below) which are later established in the relevant objectives, policies and methods.

- sustains the quality of the region's water resources to meet the needs of a range of present and future uses, while safeguarding the life-supporting capacity of water and related ecosystems;
- > ensures that water quality is maintained and wherever practicable enhanced;
- ensures that the taking, use, damming, diversion of water and the discharge of contaminants into water does not compromise water quality standards;
- recognises and provides for the relationship of Māori and their culture and traditions with water, lakes, rivers and wetlands;
- manages the use and development of water and land resources so as, wherever practicable, to maintain and enhance flow regimes;
- achieves the efficient use of water extracted from waterbodies;
- protects the natural character, heritage values and outstanding natural features of lakes, rivers and wetlands;
- maintains and enhances public access to, along and across lakes, rivers and wetlands and their margins;
- avoids, remedies or mitigates the adverse effects of activities in, on, under, over or adjacent to the beds of lakes, rivers and wetlands.

The plan provisions are based on NIWA's River Environment Classification (REC) system. The region's surface water bodies were divided into 13 classes based largely on their "source of flow". The classes are lowland (hard bed), lowland (soft bed), hill, mountain, lake-fed, spring-fed, lowland/coastal lakes and wetlands, hill lakes and wetlands, and mountain lakes and wetlands.

There are also three Mataura classes to reflect the water quality standards set under the Water Conservation (Mataura River) Order 1997, and a natural state class for surface water bodies within the region's two National Parks (Fiordland and Rakiura) and areas of public conservation land where the overall water quality is largely unmodified or unaffected by human activities and the existing water quality is high.

The water quality objectives of the Regional Water Plan (Objectives 1, 2, 3 and 4), set out the regional water quality objectives identified by the community. Essentially these can be summarised as follows:

- a) to protect the high water quality of natural state waters;
- b) to maintain water quality where water quality standards are already met; and
- c) to stop any further deterioration where water quality standards are not met and gradually improve water quality over time (a minimum of 10% improvement) in levels of microbiological contaminants, nitrate, phosphorus and clarity in surface water bodies classified as hill, lowland (hard bed), lowland (soft bed) and spring fed) over the ten year life of the plan (from 2010-2020).

Objective 4 (Gradual improvement in surface water quality parameters) requires a minimum 10 percent improvement. It was originally proposed in 2005 as 20% improvement but changed down to 10% improvement during the process. The figure below shows an example of nitrate concentrations over a ten year period (1995-2004) in the Ōreti River at Wallacetown. The graph provides an example of the potential effect of achieving a 10% improvement in nitrate concentrations.

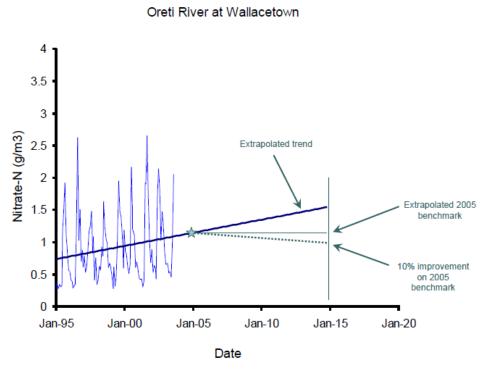


Figure 15: Example of the potential effect of achieving a 10% improvement in nitrate concentrations from the Regional Water Plan (2010)

Despite the intention of the Council and the community the minimum 10% improvement in the quality of water for key contaminants has generally not been achieved. The background to the

Regional Water Plan including (but not limited to) the water quality objectives (Objectives 1, 2, 3 and 4) is relevant to limit-setting because these are objectives previously identified by the community.

Proposed Southland Water and Land Plan (2018)

The proposed Southland Water and Land Plan is designed to manage the effects of rural and urban activities on the region's water and land. The current version of the proposed Southland Water and Land Plan is the hearing panel's decisions version, notified on 4 April 2018. At the time of writing this report this version is under appeal by 25 parties.

The Proposed Southland Water and Land Plan brings together, and updates, earlier regional plans: the Southland Regional Water Plan 2010, the Regional Effluent Land Application Plan and the Transitional Regional Plan. It also introduces elements related to implementation of the NPS-FM in Southland, which will be developed during limit-setting for each FMU.

The proposed Southland Water and Land Plan contains 18 objectives, 49 policies including Policy A4 and Policy B7 of the NPSFM and 79 rules. It "aims to address declining water quality in the region and manage land use activities that are considered to contribute a significant level of contaminants"¹⁰⁴. All objectives of the proposed Southland Water and Land Plan are relevant to the limit-setting process. They provide direction on various aspects of freshwater management, including:

Table 16 Summary of objectives in the proposed Southland Water and Land Plan with particular relevance to limitsetting

Provision	Particular relevance
Objective 1	Requires the integrated management of land, fresh water and the coast and the recognition of the connectivity of surface water and groundwater.
Objective 2	Requires the recognition of water and land as an enabler of wellbeing in the region.
Objective 3	The mauri of waterbodies provide for Te mana o te Wai.
Objective 4	Tangata whenua values are reflected in freshwater management.
Objective 6	Requires that there is no reduction in the overall quality of freshwater, and water in estuaries and coastal lagoons, by maintaining water quality where it is not degraded, and by improving water quality where water quality has been degraded.
Objective 7	Requires that further over-allocation of freshwater (quality and quantity) is avoided, and that any existing over-allocation is phased out through the Freshwater Manager Unit process.
Objective 9	Requires the safeguarding of aquatic ecosystem health, life-supporting capacity, outstanding natural features and landscapes and natural character.

¹⁰⁴ https://www.es.govt.nz/council/news-and-notices/Pages/default.aspx?newsItem=id:21ica6fzv1cxbyg11p1s

The proposed Southland Water Land Plan also contains specific policies relating to the limit-setting process. These policies detail the five freshwater management units identified for the region (Policy 46) and the application of Te Mana o te Wai in Southland. Further, guidance is provided on what the limit-setting process will do (Policy 47) and how any new provisions interact with existing proposed Southland Water and Land Plan provisions (Policy 45).

Stock exclusion 105

In 2017 Central Government released draft stock exclusion regulations for public consultation using its regulation making powers under the RMA. The proposal builds on recommendations made by the Land and Water Forum in 2015. Council's proposed Southland Water and Land Plan (decisions version) contains provisions for stock exclusions which are in line with Central Government's draft proposal. Table 17 shows these provisions.

¹⁰⁵ Information used to compile this section was taken from:

Table 17 Stock exclusion requirements

Land slope	Dairy cattle	Dairy support stock (on either land owned/leased by the dairy farmer or third party land)	Pigs	Deer	Beef cattle	Sheep (and other stock not listed in this table)
Plains (0-3°)	1 July 2017 Waterbodies over 1 metre wide 1 July 2020 Waterbodies less than 1 metre wide	1 July 2022 All waterbodies	1 July 2017 Waterbodies over 1 metre wide 1 July 2020 Waterbodies less than 1 metre wide	1 July 2022 Waterbodies where break feeding occurs 1 July 2025 All waterbodies	1 July 2022 Waterbodies where break feeding occurs 1 July 2025 All waterbodies	Not required to be excluded from waterbodies. However, Policy 18 requires sheep to be managed in critical
Undulating/ rolling land (>3-15°)	1 July 2017 Waterbodies over 1 metre wide 1 July 2020 Waterbodies less than 1 metre wide	1 July 2022 Waterbodies over one metre wide	1 July 2017 Waterbodies over 1 metre wide 1 July 2020 Waterbodies less than 1 metre wide	1 July 2022 Waterbodies where break feeding occurs 1 July 2030 Waterbodies over 1 metre wide (unless the average stocking rate on the land directly adjacent to the water body is less than 6 stock units per hectare)	1 July 2022 Waterbodies where break feeding occurs 1 July 2030 Waterbodies over 1 metre wide (unless the average stocking rate on the land directly adjacent to the water body is less than 6 stock units per hectare)	source areas and in those catchments with high <i>E.coli</i> levels.
Steeper land (>15°)	1 July 2017 Waterbodies over 1 metre wide	1 July 2022 Waterbodies where break feeding occurs	1 July 2017 Waterbodies over 1 metre wide	1 July 2022 Waterbodies where break feeding occurs 1 July 2030 Waterbodies over 1 metre wide (unless the average stocking rate is less than six stock units per hectare)	1 July 2022 Waterbodies where break feeding occurs 1 July 2030 Waterbodies over 1 metre wide (unless the average stocking rate is less than six stock units per hectare)	

In summary, while all of the objectives are relevant to the limit-setting process, the application of Te Mana o te Wai and Objectives 1, 2, 3, 4, 6, 7 and 9 are particularly relevant. Policies 45, 46 and 47 are also of importance for limit-setting.

The Regional Coastal Plan for Southland (2013)

The purpose of the Regional Coastal Plan for Southland is to control activities within the coastal marine area (CMA) to meet the obligations of council functions under section 30(1)(d). This is in conjunction with the Minister of Conservation, to achieve the purpose of the Resource Management Act (RMA) in relation to the coastal marine area.

The Regional Coastal Plan for Southland defines the extent of the Coastal Marine Area¹⁰⁶ for the region as extending from the line of mean high water springs out to the 12-nautical mile territorial sea limit (22.2 kilometres) from Awarua Point to Brothers Point. Importantly the Regional Coastal Plan for Southland also defines the extent of the coastal marine area for river mouths.¹⁰⁷

For the limit-setting process the coastal boundary of the Waiau, Aparima, Oreti and Mataura FMUs is at the mouths of the estuaries, while giving regard to the wider coastal environment using existing monitoring sites. As such, the Regional Coastal Plan for Southland is a relevant consideration for the limit-setting process and it is likely existing coastal water quality provisions will be amended as a result of the process.

Throughout the Regional Coastal Plan for Southland the cultural relationship tangata whenua has with water is outlined. Chapter 7 deals with coastal water quality. Objective 7.2.2.1 seeks to maintain the quality of coastal waters and enhance the quality of coastal waters in areas where ambient water quality has been degraded to allow for contact recreation, consumption of fish and shellfish and to enhance other ecological and recreational values. Section 7.3 addresses discharges, and outlines that the greatest threat to Southland's coastal water is from the direct and indirect discharge of contaminants. Policy 7.3.2.1 seeks to avoid, remedy or mitigate the adverse effects of the discharge of contaminants into the coastal marine area of Southland.

The Regional Water Plan and the proposed Southland Water and Land Plan can control the use of land landward¹⁰⁹ of the coastal marine area for the purposes of meeting Council functions (including in relation to the effects of land use on the quality of coastal water). Where a discharge occurs landward of the coastal marine area, the proposed Southland Water and Land Plan can also address the effects of the discharge within the coastal marine area (i.e. Contaminants that may ultimately enter coastal waters).¹¹⁰

In summary, during the limit-setting process it is important to understand that the coastal boundary for the Waiau, Aparima, Oreti and Mataura FMUs is at the mouths of the estuaries, and that Chapter 7 of the Regional Coastal Plan is important as it addresses coastal water quality.

4.2.3 Other relevant regional considerations

Aside from regional resource management planning documents, there are other directive documents that are relevant to the limit-setting process. Legislatively, Environment Southland is required to consider these documents to various degrees when preparing or changing resource management plans. The following section presents these documents.

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¹⁰⁶ The coastal marine area is defined by Section 2 of the Resource Management Act as:

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 ¹⁰⁷ The RCPS covers the management of activities within the CMA. The Regional Water Plan, proposed Southland Water and Land Plan, and district plans have jurisdiction above the mean high water springs line.

 $^{^{108}}$ The Southland Economic Project: Urban and Industry. Technical Report.

¹⁰⁹ 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:

¹¹⁰ Sourced from Hearing report: Proposed Southland Water and Plan, 2017.

Southland Water Conservation Orders

Water Conservation Orders are orders made by the Governor-General under the RMA. Their purpose is to provide recognise outstanding amenity or intrinsic values of specific water bodies. ¹¹¹ Water conservation orders can apply to rivers, lakes, streams, ponds, wetlands, geothermal water or aquifers.

A water conservation order can be created to provide for the protection of:112

- (i) as a habitat for terrestrial or aquatic organisms:
- (ii) as a fishery:
- (iii) for its wild, scenic, or other natural characteristics:
- (iv) for scientific and ecological values:
- (v) for recreational, historical, spiritual, or cultural purposes:

characteristics which any water body has or contributes to, and which are considered to be of outstanding significance in accordance with tikanga Maori.

A consent authority cannot grant a resource consent if it is 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. Regional policy statements, regional plans and district plans must not be inconsistent with the provisions of a water conservation order.

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, for example both list fisheries and angling amenity. Awareness of these two Water Conservation Orders provisions including where they are located and what the identified features and values are will be important to ensure that future regional plans developed through the limit-setting process is not inconsistent with the Water Conservation Orders.

Southland Statutory Acknowledgements

A Statutory Acknowledgement is recognition by the Crown of Ngai Tahu's special relationship with identified areas. The Ngāi Tahu Claims Settlement Act 1998 gives effect to the Deed of Settlement signed by the Crown and Te Runanga o Ngāi Tahu on 21 November 1997 to achieve a final settlement of Ngāi Tahu's historical claims against the Crown. Statutory Acknowledgements recognise Ngāi Tahu's mana in relation to a range of sites and areas in the South Island and provide for this to be reflected in the management of those areas through processes in the RMA.

Statutory Acknowledgements impact upon RMA processes concerning these areas. There are several areas Statutory Acknowledgement Areas within Southland, which are mapped and listed within Appendix B of the proposed Southland Water and Land Plan. A number of Statutory Acknowledgements apply to freshwater bodies within the region, for example the four main rivers. Figure 16 below shows the Statutory Acknowledgements for the region.

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¹¹¹ Sourced from: www.mfe.govt.nz/fresh-water/water-conservation-orders/about-water-conservation-orders

¹¹² Section 199 of Resource Management Act 1991

¹¹³ Southland Regional Policy Statement 2017Appendix 1 – Page 230

 $^{^{114}}$ Section 2.2.6, Section 32 Report, Proposed Southland Water and Land Plan

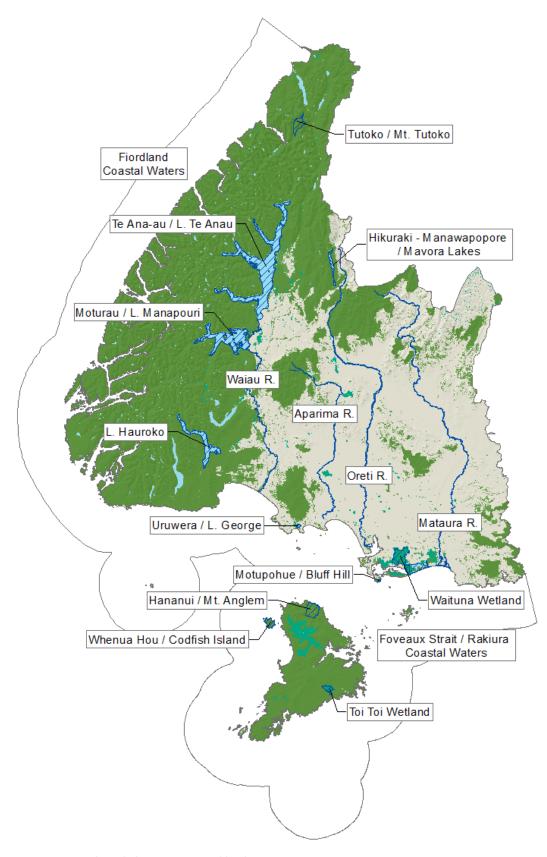


Figure 16: Statutory acknowledgements in Southland

In summary, there are a number of Statutory Acknowledgements applying to freshwater bodies within the region, and this must be reflected in the management of those areas through processes in the RMA and during limit-setting.

4.2.4 Te Tangi a Tauira (Iwi Management Plan)

As outlined in section 4,2 above, Te Runanga o Ngāi Tahu are the Murihiku (Southland) tangata whenua. Te Tangi a Tauira: The Cry of the People (2008) is the regional iwi planning document which must be taken into account in any changes to the Southland Regional Policy Statement, regional plans or for assessing resource consent applications to ensure that Ngāi Tahu ki Murihiku issues and policies are provided for. Te Tangi a Tauri also assists in determining the nature and extent of consultation required with respect to specific activities or areas of importance.

A key focus of Te Tangi a Tauria is the integrated management of the region's water. The management of resources from the Ki uta ki tai (mountains to the sea) is described within the document, with a key objective being managing our freshwater resources wisely for all of us and the generations that follow.

The document addresses freshwater management in various sections, dividing the region into the following geographical areas: Fiordland; offshore islands high country and foothills; and Southland Plains. This approach is different to the freshwater management unit boundaries, which are based on surface water catchments. Although, the boundaries of the Fiordland and Islands freshwater management unit is very similar to the combined boundary of the Fiordland and offshore islands section in Te Tangi a Tauria.

Section 3.5 of the Te Tangi a Tauira relates to the management of water in Te Rā o Takitimu (Southland Plains). A brief summary is provided below:

O Te Wai (The Water)

"Water is a taonga, or treasure of the people. It is the kaitiaki responsibility of tangata whenua to ensure that this taonga is available for future generations in as good as, if not better quality.

Water has the spiritual qualities of mauri and wairua. The continued well-being of these qualities is dependent on the physical health of the water. Water is the lifeblood of Papatūānuku, and must be protected. We need to understand that we cannot live without water and that the effects on water quality have a cumulative effect on mahinga kai and other resources.

Water is often seen as a commodity, and is thus subject to competing use demands. An understanding of the significance and value of water to Ngāi Tahu ki Murihiku and other stakeholders, is necessary to ensure that cultural and ecological values associated with water are recognised and provided for alongside consumptive uses".¹¹⁵

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¹¹⁵ Section 3.5 at page 147 of Te Tangi a Tarira (2008)

Section 3.5 contains the following information on water quality:

- protecting and enhancing the mauri, or life-supporting capacity, of freshwater resources throughout Murihiku (Policy 3.5.10.3);
- manage freshwater resources wisely for all of us and the generations that follow (Policy 3.5.10.4)
- promote the management of freshwater according to the principle of ki uta ki tai (Policy 3.5.10.5)
- striving for the highest possible standard of water quality that is characteristic of a particular place/waterway, recognising principles of achievability. This means striving for drinking water quality we once drank from, contact recreation in water we once used for bathing or swimming, water quality capable of sustaining healthy mahinga kai in waters we use for providing kai (Policy 3.5.13.2);
- avoiding impacts on water as a result of inappropriate discharge to land activities (Policy 3.5.13.6)

There are further policies relevant to the management of water within the region, but the ones above provide an overview.

In summary, all the policies will need to be considered as part of the limit-setting process to recognise and provide for cultural, spiritual and traditional values. Core to the approach in Te Tangi, is that the management of resources follows Ki uta ki tai (from the mountains to the sea), and this philosophy will need to be reflected during the limit-setting process.

4.2.5 Department of Conservation

As outlined in section 4.3 above, the Department of Conservation (DOC) is the largest land manager in the region. As such, the Department of Conservation prepares conservation management strategies and national park management plans to direct the management of public conservation lands within Southland. These documents outline DOC's land management responsibilities and direction, as well as detailing their advocacy¹¹⁶ positions with respect to RMA processes. Within Southland there are four relevant documents¹¹⁷:

- Rakiura National Park Management Plan 2011-2021;
- Stewart Island/Rakiura Conservation Management Strategy 2011-2021;
- Southland/Murihiku Conservation Management Strategy 2016;
- Fiordland National Park Management Plan 2007.

Environment Southland is required to 'have regard' to conservation management strategies and management plans when preparing or changing their regional planning documents, including through the limit-setting process.

The Southland/Murihiku Conservation Management Strategy contains a section on Freshwater Wai Māori. The section provides a framework to guide the management of public conservation lands and waters as well as advocacy direction for DOC when participating in council processes. The section

117 Department of Conservation sourced from: https://www.doc.govt.nz/about-us/our-policies-and-plans/statutory-plans/statutoryplanning-status-report/

¹¹⁶ Section 6 of the Conservation Act outlines the functions of the Department of Conservation.

contains a ten-year outcome for freshwater bodies within Southland, which was developed with the community. Direction includes:

"Unmodified freshwater ecosystems within public conservation lands and waters maintain natural flows and high water quality, providing habitats for threatened and at risk aquatic and shoreline flora and fauna.

...

Populations of indigenous freshwater fish are recovering, and threatened and at risk braided river and wetland birds have become more common.

...

Integrated management of the region's freshwater ecosystems is achieved by working closely with Ngāi Tahu and the community, including local authorities, the farming community, Southland Fish and Game Council and other stakeholders.

...

Freshwater ecosystems off public conservation lands and waters have been improving year by year and are on track to reaching the overall long-term goal of restoring them to healthy ecosystems with clean water, which can be used sustainably for recreating, drinking and production."

In summary, during the limit-setting process, regard must be had to the Rakiura National Park Management Plan, the Stewart Island/Rakiura Conservation Management Strategy, the Southland/Murihiku Conservation Management Strategy and the Fiordland National Park Management Plan 2007.

4.3 Managing the effects of climate change

The Ministry for the Environment has prepared 118 an overview of how the climate in Southland is likely to change and the implications for the region.

The information sets out that projections of climate change will depend on future greenhouse gas emissions, and that these emissions are uncertain. The information predicts projected changes for 2030-2050 (referred to as 2040) and 2081-2100 (2090) compared to the actual climate from 1986-2005 (1995).

In summary the projections outline:

- > Temperatures are likely to be 0.6 °C to 0.9 °C by 2040 and 0.6 °C to 2.8 °C warmer by 2090.
- ➤ By 2090 Southland is projected to have up to 16 extra days per where temperatures exceed 25 °C, with around 10 to 20 fewer frosts per year
- Expected to become wetter, with winter rainfall increasing by 7 to 22 percent in Invercargill by 2090.
- > Decreases in seasonal snow potential for a decrease of up to 30 days in parts of the region.
- Frequency of windy days by 2090 could increase between 2 to 7 percent.
- Changes in frequency of storms are likely.

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 $^{{\}small 118 Source: http://www.mfe.govt.nz/climate-change/how-climate-change-affects-nz/how-might-climate-change-affect-my-region/southland}$

The effects from these changes include the potential for:

- Increased risk of flooding, landslides and erosion, and that the capacity of stormwater systems may be exceeded.
- Water availability in parts of Southland where droughts already occur due to increased intensity and duration.
- ➤ Coastal hazards including risk to roads and infrastructure from coastal erosion and inundation, storminess and sea level rise.
- Biosecurity threats from warmer temperatures could increase the spread of pests and weeds
- Agriculture may have warmer temperatures meaning a longer growing season and fewer frosts which could lead to opportunities for new crops and faster growth. Alternatively, these opportunities may be limited by negative effects of climate change such as flooding and frequency of storms.

As a result of climate change, Southland will be exposed to an increased chance of natural hazards. In 2010 Environment Southland and Te Ao Marama published *Our Threats: How safe are we from floods and other extreme climate events* which reported on aspects of our fresh water environment that could harm us.

Within the report it states:

"Not all climate change will be a 'threat'; some changes will be welcome and some will present opportunities. Either way it will require adaptations and adjustments at a regional and local level." ¹¹⁹

The development of the Southland Regional Policy Statement took into account climate change and its implications for Southland. Examples include but are not limited to the Coast and Natural Hazards chapters.

The Southland Economic Project Urban and Industry Technical Report states the following:

"The effects of climate change will put essential infrastructure at risk and key impacts have been identified for transport networks, electricity generation and transmission, water (including stormwater, flood protection and wastewater), and telecommunications (e.g. NZTA, 2009; PCE, 2015; Climate Change Adaptation Technical Working group, 2017). An impact on any one of these services is expected to flow onto another because they are interconnected (MfE 2017). For wastewater and stormwater, seawater may flow into stormwater pipes, impacting on drainage capability. More intense and frequent heavy rain events will also put pressure on land drainage, stormwater schemes and flood protection. There may be overloading of wastewater networks causing increased in overflows. There is also increased potential for inundation of pump stations located in low lying areas (PCE, 2015)."

An item that went to Policy & Strategy Committee in June 2018 reported on a draft report has been released by the Productivity Commission on a Low Emission Economy. An overview from the report outlines:

¹¹⁹ Environment Southland and Te Ao Marama Incorporated 1011. *Our Threats: How safe are we from floods and other extreme climate events? Part 4 of Water 2010: Report on the State of Southland's Freshwater Environment.*

"The report has a number of points of interest for Southland, including recommendations to review the Emissions Trading Scheme and specific actions to address emissions from agriculture, whilst implicitly preserving economic advantages.

Of specific interest to Southland is that agriculture accounts for almost 50% of New Zealand's total emissions, primarily from methane released from livestock. The report settled on three key areas that must be addressed to reduce our emissions:

- 1. Changes to the structure and methods of agricultural production;
- 2. Expansion of forestry; and
- 3. Electrification of the transport sector.

The report outlines emissions sources and identifies opportunities within these three key areas. These include a number of action areas such as a review of the role of the Emissions Trading Scheme (ETS) and other market-led solutions; alterations to land use including sequestering more carbon in forests; a review of heating and industrial processes including dairy heating, powering dairy dryers and dairy factories. In addition, they specifically forecast a large growth in horticulture conversion as a means of reducing emissions from agriculture.

Other areas include recommendations to tackle transport emissions; emissions from waste management; and how we can transition to low emissions electricity generation."

In summary, it is likely that the causes and effects of climate change will need to be considered as part of limit-setting in Southland. As well as being aware of national direction and scientific information, the Regional Forum will need to be familiar with the requirements within the Southland Regional Policy Statement including (but not limited to) the Coast and Natural Hazards chapters.

4.4 Policy Context Summary

This review of the policy context is not exhaustive or constant. Information and requirements are ever changing as knowledge and understanding increases.

As the information in section 5 above has outlined, there are a number of policy documents that must be used and considered as part of the limit-setting process in Southland. Woven between these documents are core requirements that must be implemented to meet the requirements of the NPSFM. This is set within a context that is workable for Council, ensuring that the requirements of all of the other relevant legislation (listed above) is also considered.

The regional planning documents show how knowledge has evolved over time. An example is the understanding on the state of the environment through monitoring programmes. Within the Regional Water Plan for Southland, there is an objective that overall water quality would be improved within the region over the life of the plan – an objective that has not been achieved. The Proposed Southland Water and Land Plan has an updated approach and aims to address declining water quality in the region and manage land use activities that are considered to contribute a significant level of contaminants. Te Tangi provides a holistic approach to water management and follows a ki uti ki tai approach – from the mountains to the sea.

At the core of all these requirements sits the overarching purpose and principles of the RMA, as set out in section 5(1) which states that "the purpose of this Act is to promote the sustainable management" of natural and physical resources".

All of these documents must be considered alongside other important documents including the National Policy Statements, National Environmental Standards, Coastal Plan, Water Conservation Orders, Statutory Acknowledgements and Department of Conservation documents. A summary of each Statutory Document is provided within each section above, however as with any summary the risk is missing for example an objective that may apply in particular circumstances. As such, below is a summary of the relevant documents that are in scope and must be taken into account as limit-setting occurs in Southland.

Statutory Document	Relevant to Scope (refer to text for additional detail and explanation)			
Resource Management Act 1991	This is the overriding document and also describes how regional plans are to align with other planning instruments.			
National Policy Statement for Freshwater Management	The core document for limit-setting. It contains 15 objectives, 30 policies and six appendices. See detail below for the requirements.			
New Zealand Coastal Policy Statement	This document sets out seven objectives and 29 policies. Direction within the NZCPS must be given effect to during limit-setting.			
The National Policy Statement for Renewable Electricity Generation 2011.	Policy B and Policy E2 of this document are relevant when decisions are made for fresh water.			
Southland Regional Policy Statement 2017	This document identifies significant resource management issues for the region across various chapters.			
	The RPS has the highest rank of any planning document in a region. The Freshwater chapter has seven objectives, 28 policies and methods. Objective WQUAL.1 sets out the overall framework for the management of water quality in Southland.			
Regional Water Plan for Southland (2010)	This document sets out the community's values and outcomes for water quality and water quantity, and policies and methods (e.g. rules) to protect the values and achieve the objectives. It was adopted in 2010 before the NPSFM set out the national direction for freshwater management in New Zealand.			
Regional Coastal Plan for	The purpose of this document is to control activities within the coastal marine area. This Plan defines the extent of the coastal marine area ¹²¹ for the region as extending from the			

¹²⁰ S5(2) of RMA states: **sustainable management** means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—

⁽a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

⁽b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

⁽c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Southland (2013)	line of mean high water springs out to the 12-nautical mile territorial sea limit (22.2 kilometres) from Awarua Point to Brothers Point. Importantly the RCPS also defines the extent of the coastal marine area for river mouths. ¹²²			
	For the limit-setting process the coastal boundary of the Waiau, Aparima, Oreti and Mataura FMUs is at the mouths of the estuaries, while giving regard to the wider coastal environment using existing monitoring sites. 123			
Water Conservation Orders The Water Conservation (Mataura River) Order 1997 The Water Conservation (Oreti River) Order 2008	The purpose of Water Conservation Orders is to recognise outstanding amenity or intrinsic values of specific water bodies. 124 Two Water Conservation Orders apply in the region – the Water Conservation (Mataura River) Order 1997 and the Water Conservation (Oreti River) Order 2008.			
Statutory Acknowledgement Areas within Southland	A Statutory Acknowledgement is recognition by the Crown of Ngai Tahu's special relationship with identified areas. 125			
	Statutory Acknowledgements impact upon RMA processes concerning these areas. There are several areas Statutory Acknowledgement Areas within Southland, which are mapped and listed within Appendix B of the proposed Southland Water and Land Plan. A number of Statutory Acknowledgements apply to freshwater bodies within the region, for example the four main rivers.			
Te Tangi a Tauira: The Cry of the People (2008)	The regional iwi planning document which must be taken into account in any changes to the Southland Regional Policy Statement, regional plans or for assessing resource consent applications to ensure that Ngāi Tahu ki Murihiku issues and policies are provided for.			
	Section 3.5 of the Te Tangi a Tauira relates to the management of water in Te Rā o Takitimu (Southland Plains).			
Department of Conservation Rakiura National Park Management Plan 2011-2021 Fiordland National Park Management Plan 2007 Stewart Island/Rakiura Conservation Management Strategy 2011-2021	The Department of Conservation prepares conservation management strategies and national park management plans to direct the management of public conservation lands within Southland. These documents outline DOC's land management responsibilities and direction, as well as detailing their advocacy ¹²⁷ positions with respect to RMA processes.			
Southland/Murihiku				

 $^{^{121}}$ The coastal marine area is defined by Section 2 of the Resource Management Act as:

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:

¹²² The Regional Coastal Plan for Southland covers the management of activities within the CMA. The Regional Water Plan, proposed Southland Water and Land Plan, and district plans have jurisdiction above the mean high water springs line.

¹²³ The Southland Economic Project: Urban and Industry. Technical Report.

 $^{^{124}\,}Sourced\,from:\,www.mfe.govt.nz/fresh-water/water-conservation-orders/about-water-conservation-orders$

¹²⁵ Southland Regional Policy Statement 2017Appendix 1 – Page 230

 $^{^{126}}$ Section 2.2.6, Section 32 Report, Proposed Southland Water and Land Plan

¹²⁷ Section 6 of the Conservation Act outlines the functions of the Department of Conservation.

For the Southland context for limit-setting, all of these requirements outlined above define the boundaries of what limit-setting must achieve to meet the requirements of the NPSFM, in terms of legislative requirements. Further, they provide direction around what those involved in the process must consider, for example conservation management strategies, to ensure robust outcomes are achieved. If these requirements are not meet, then the obligations placed on the people making the decisions and the communities tasked with implementing the limits cannot be achieved.

5 Capacity for participation

5.1 Community participants and resources

Within Southland there is one city (Invercargill), six larger towns (Bluff, Gore, Mataura, Winton, Riverton/Aparima and Te Anau) with over 30 smaller towns and larger settlements. All of these urban areas are connected by the roading network, which consists of 777 kilometres of state highway and 6, 418 kilometres of local roads, of which approximately 59 percent are unsealed. 128

The towns and the people who live and work within the region are all unique. Many of these townships are connected to water. Each of the communities has a range of services from schools, community halls, diary, sports facilities, medical centres, vets, farming services industries.

There are also are large range of rural networks that are also involved in the water management space. These networks include (but are not limited to) Beef + Lamb New Zealand, DairyNZ, Fonterra, Federated Farmers, Horticulture New Zealand, Foundation for Arable Research, Forest and Bird, Landcare, Open Country, Forestry Groups and Fish & Game.

Other agencies that are involved in these conversations include the banking sector, large Industry such as Alliance and Meridian. There are also Rural Support networks.

What this means is that there are many community resources in terms of people and communities, as well as community buildings that could be used for meetings within Southland that can assist with advancing and delivering the NPSFM.

There are a number of key agencies within Southland that have various core functions that they must deliver. There is also a large area of land and water within the region for the population size, meaning there is less capacity for limit-setting within the community.

By way of further background for participation in the limit-setting process, Council originally proposed to undertake limit-setting by individual FMU's. However, tying in with the information outlined above, the People Water and Land project has acknowledged the size of the Southland

¹²⁸ The Southland Economic Project: Urban and Industry. Technical Report.

population, the resources available and the interconnectedness of the environment and the community, and a regional approach was deemed more appropriate.

6 Summary of report findings

This paper gives an overview of the policy context, legislative requirements and an overview of Southlands key characteristics, where appropriate categorised into the five main catchments already identified within the region, and the information can be used to assist the future Regional Forum.

Council approach to limit-setting is a regional one rather than an individual process for each of the five identified freshwater management units. The core reasons for this include the size of the Southland population, the limited resources available (for example a small ratepayer base) and the interconnectedness of the environment and the community.

The limit-setting process should acknowledge that there are specific constraints (social, environmental and legislation) along with various diverse water management issues within each freshwater management unit that must be understood to set limits in the future. Furthermore, as shown on the maps above, it is very difficult to align catchment boundaries which align with river paths with political or social structures.

For the limit-setting process to succeed understanding Southland key characteristics, and input and from the local community will be critical to understand what their values are. This information will need to be considered with the policy context set out above, including understanding what legislative requirements are relevant to some areas and not others (for example 'other national values'), or alternatively understanding what is non-negotiable in terms of meeting set legislative requirements for example achieving the purpose of the RMA, 'compulsory values' in the NPSFM and swimmability targets.

Key findings include:

Policy Context:

- 1. The management of fresh water is a matter of national significance and recognises Te Mana o te Wai;
- 2. There are numerous legislative requirements that will influence what limit-setting must achieve;
- 3. The NPSFM creates time pressure for the delivery of limits within the region.

Political and Social Context:

- 4. This report has found that the Freshwater Management Units do not align with political or social boundaries. Regional constituencies, district wards, and community boards are based on population and align with meshblocks¹²⁹, whereas the five freshwater management units are based on river paths;
- 5. There is a low ratepayer base and a large landscape where limits must be set;
- 6. The catchment groups tend to fit (broadly) within the five freshwater management unit boundaries;

¹²⁹ Source: Statistics New Zealand defines a meshblock as both a geographic unit and a classification. It is the smallest geographic unit for which statistical data is reported by Stats NZ. A meshblock is a defined geographic area, varying in size from part of a city block to large areas of rural land. Meshblocks are contiguous: each meshblock borders on another to form a network covering all of New Zealand, including coasts and inlets.

- 7. There is a lack of urban groups, forestry and mining groups set up for the purpose of freshwater management;
- 8. There are many local organisations and groups involved in freshwater management in Southland including national interest groups and agencies, how to include a wide range of views within a manageable group size will require careful consideration;

Environmental Conditions:

- 9. Within each Freshwater Management Unit there are specific constraints and water management issues that must be understood to set limits in the future;
- 10. Southland's economy is reliant on the use of natural resources and people have invested heavily in the use of these land and water resources; and
- 11. Need to understand the interconnections of Southland's water and land natural resources, combined with the rate of change and environmental thresholds.

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