

**Proposed
Water Management
Plan showing deletions from
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THE WEST COAST
REGIONAL COUNCIL

2008

CHAIRMAN'S FOREWORD

This Plan is part of an overall environmental management framework for the West Coast Region. It incorporates an integrated approach to making decisions on the use, development and protection of our water resources. It has been developed in accordance with the Resource Management Act (1991) and addresses the effects of human activities on the environment.

The plan preparation process involved two rounds of consultation with key groups. The consultative draft plan was released to interested parties in June 2003 for their comments and a revised draft of the rules was circulated in September 2003. The comments received assisted council to prepare a proposed plan, notified in March 2004.

Hearings were held on 30 November 2004 and this plan includes decisions on submissions.

The Plan demonstrates consistency, and where possible certainty, and is one for which the West Coast Regional Council is committed to working with the people of the region to achieve sustainable environmental outcomes.

A handwritten signature in blue ink, appearing to read 'J. Clayton', with a stylized flourish at the end.

John Clayton
Chairman

HOW TO USE THE WATER MANAGEMENT PLAN

~~This Plan provides objectives, policies, rules and other methods of implementation to address issues relating to environmental effects. The rules of the Plan determine the status of any particular activity and determine whether a resource consent will be required before that activity can be carried out.~~

~~Subject to Section 20A of the Resource Management Act, a resource consent is required for any activity which this Water Management Plan specifies as being:~~

- ~~(a) A discretionary activity;~~
- ~~(b) A restricted discretionary activity; or~~
- ~~(c) A controlled activity.~~

~~In some cases, the Plan specifies certain activities as being prohibited activities. These are activities which cannot occur, and are activities for which no resource consent will be issued.~~

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Chapter 1

INTRODUCTION

1.1 PURPOSE OF THE PLAN

The West Coast Regional Council has prepared this ~~Water Management Plan to assist in meeting its responsibilities under the Resource Management Act 1991. The purpose of this Plan is~~ to provide a framework for the integrated and sustainable management of the West Coast's water resources. These water resources include the region's lakes, rivers, groundwater, wetlands and geothermal water.

Many activities involving water or water bodies can only occur if they are expressly allowed by a rule in a regional plan, or by a resource consent, ~~including:~~

- ~~• The taking, use, damming or diversion of: water; heat or energy from water; or heat or energy from material surrounding any geothermal water (Section 14 (1) of the Resource Management Act); or~~
- ~~• The discharge of water and contaminants into water (Section 15 (1) (a) of the Resource Management Act).~~

~~This Plan contains provisions to avoid the need for resource consents for activities that have no more than minor adverse effects on the environment. For other activities, the rules provide a clear direction for resource users and the community.~~

~~The Plan also contains other methods for promoting the sustainable and integrated management of the West Coast's water resources.~~

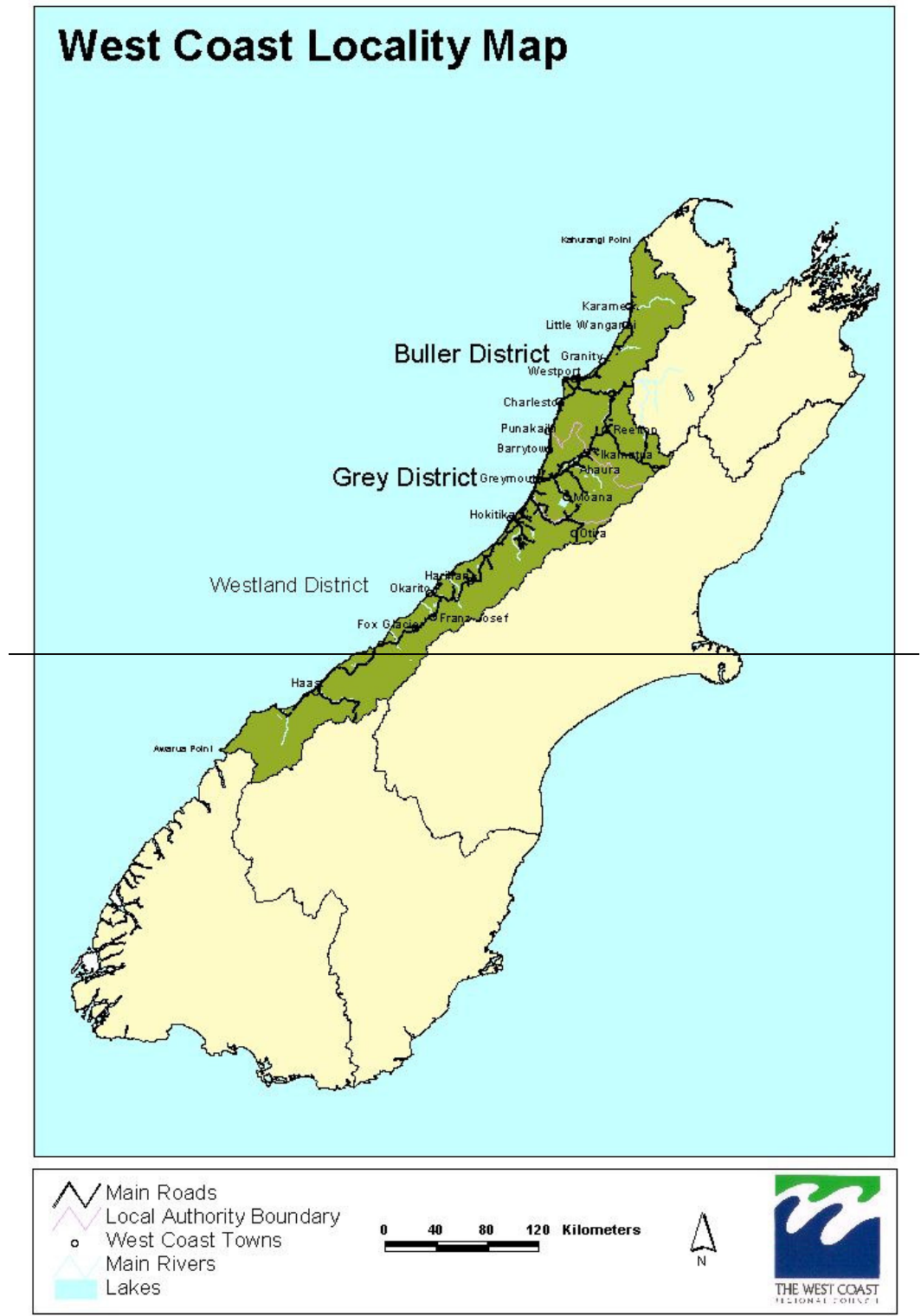
1.2 AREA COVERED BY THE PLAN

This Plan covers water resources in the West Coast region, excluding the coastal marine area. These include the region's lakes, rivers, groundwater, lagoons wetlands and geothermal water. The Plan does not cover the coastal marine area, which includes river mouth areas and some lagoons. The coastal marine area boundary is defined in the Regional Coastal Plan for the West Coast.

~~There are three territorial local authorities within the West Coast which are covered by this Plan:~~

- ~~• Westland District Council~~
- ~~• Grey District Council~~
- Buller District Council

Figure 1: Map of the West Coast



1.3 STRUCTURE OF THE PLAN

The Plan is structured as follows:

Chapters 1 to 4

These chapters introduce the Plan, describe the legislative framework relating to water, provide a brief overview of the West Coast's water resources and outline the manawhenua perspective.

Chapters 5 to 11

These chapters identify the relevant water management issues in the West Coast, and contain the objectives and policies ~~with respect to these issues~~. These provisions will guide the West Coast Regional Council, and other consent authorities, when considering resource consents. ~~Each of the chapters address a particular aspect of the West Coast's water resource:~~

- ~~• Chapter 5: Natural and Human Use Values (applies across all activities);~~
- ~~• Chapter 6: Water Quantity;~~
- ~~• Chapter 7: Water Quality;~~
- ~~• Chapter 8: Special Management Area: Lake Brunner/Kotuku-Whakaoho Catchment;~~
- ~~• Chapter 9: Groundwater;~~
- ~~• Chapter 10: Geothermal water (heat and energy).~~

Chapters 11 & 12

~~These chapters contain the rules applying to the use of water.~~ These rules determine whether a consent is required for a particular activity.

Chapter 13

~~This chapter identifies the methods other than rules that the West Coast Regional Council intends to use to achieve the Plan's objectives.~~

Chapters 14 to 17

These chapters specify the information required with any resource consent application, the circumstances where a financial contribution may be required, ~~management approach to cross boundary issues~~ and the processes for reviewing and monitoring the Plan.

1.4 INTEGRATED MANAGEMENT

~~This Water Management Plan promotes the sustainable management of the West Coast's water resources. This requires an integrated approach, taking a holistic view of resource management. For the purposes of this Plan, active integrated management includes:~~

- ~~• Integration of management responses across resource management agencies;~~
- ~~• Integration toward shared environmental outcomes;~~
- ~~• Integration of policies, action and decision-making needs to be coordinated across regional boundaries;~~
- ~~• Integration of management responses across resource systems;~~

- ~~Integration of actions across a range of time scales;~~
- ~~Integration of decision making with community participation;~~
- ~~Integration of methods to be used to implement policies;~~
- ~~Integration across individual decisions.~~

This Plan should be read in conjunction with the Regional Policy Statement, other relevant West Coast regional plans and the relevant district plan. ~~Section 2.4 of this Plan provides more detail on relationships among resource management documents.~~

Chapter 2

LEGISLATIVE AND POLICY FRAMEWORK

2.1 INTRODUCTION

The principal statute under which the natural and physical resources of the West Coast are managed is the Resource Management Act 1991. That Act also provides for specific policy statements (i.e. regional policy statements) which have an impact on the management of water and water bodies.

The Resource Management Act 1991 defines water. It:

- (a) Means water in all its physical forms whether flowing or not and whether over or under the ground;*
- (b) Includes fresh water, coastal water, and geothermal water;*
- (c) Does not include water in any form while in any pipe, tank or cistern;*

This chapter provides a brief overview of the relevant statutes and their relationship to this Water Management Plan. Some activities are also subject to the specific requirements of other statutes.

2.2 PART II OF THE RESOURCE MANAGEMENT ACT

The Resource Management Act 1991 provides the framework for the management of natural and physical resources. Part II of the Act contains a number of specific provisions, which must be taken into account in considering the use, development or protection of the West Coast's water resources and water bodies.

Purpose

Section 5 of the Resource Management Act 1991 states—

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

This Plan has been prepared to enable the West Coast Regional Council to promote the sustainable management of the natural and physical resources of the West Coast, through the management of water and water bodies.

Matters of national importance

~~Section 6 of the Resource Management Act 1991 identifies matters of national importance that the West Coast Regional Council must recognise and provide for in managing the use, development, and protection of natural and physical resources:~~

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

~~These matters have been recognised and provided for in this Plan through objectives, policies, rules and other methods.~~

Other matters

~~Section 7 of the Resource Management Act 1991 identifies a number of additional matters that the West Coast Regional Council must have particular regard to in managing the use, development, and protection of natural and physical resources:~~

- ~~(a) Kaitiakitanga:~~
 - ~~(aa) The ethic of stewardship:~~
 - ~~(b) The efficient use and development of natural and physical resources:~~
 - ~~(c) The maintenance and enhancement of amenity values:~~
 - ~~(d) Intrinsic values of ecosystems:~~
 - ~~(f) Maintenance and enhancement of the quality of the environment:~~
 - ~~(g) Any finite characteristics of natural and physical resources:~~
 - ~~(h) The protection of the habitat of trout and salmon.~~

~~The matters identified have been provided for within this Plan through objectives, policies, rules and other methods.~~

Treaty of Waitangi

~~Section 8 of the Resource Management Act 1991 requires that the West Coast Regional Council take into account the principles of the Treaty of Waitangi:~~

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

Attached to the Plan in Appendix 20.1 are the statutory acknowledgements for the West Coast region. These acknowledgements comprise a statement made by Poutini Ngäi Tahu of the particular cultural, spiritual, historic and traditional association of Poutini Ngäi Tahu with these areas. The inclusion of Appendix 20.1 is for the purpose of public information only. It does not form part of the Plan.

2.3 RESTRICTIONS RELATING TO WATER

There are two restrictions stated in the Resource Management Act 1991 that are relevant to this Plan. These are restrictions on:

- The taking, use, damming or diversion of water (Section 14 of the Resource Management Act);
- The discharge of water and contaminants into water (Section 15 of the Resource Management Act).

The rules in chapter 12 of this Plan reflect the specific restrictions contained within Sections 14 and 15 of the Resource Management Act 1991.

2.4 RELATIONSHIP TO OTHER RESOURCE MANAGEMENT DOCUMENTS

This Water Management Plan fits within a framework of national, regional and local resource management plans (see Figure 2).

National Policy Statements

At the time of preparing this Plan, there was only one national policy statement, the New Zealand Coastal Policy Statement (NZCPS). The purpose of the NZCPS is to state policies in order to achieve the purpose of this Act in relation to the coastal environment of New Zealand. This document has some relevance, for example when considering discharges to water bodies that are close to the coastal marine area.

The NZCPS is also influential on the provisions of the Water Management Plan as the Coastal Environment (as defined in the NZCPS) is 'broader' than the Coastal Marine Area (as defined in the Regional Coastal Plan for the West Coast). Management responses may differ for water resources covered by the Water Management Plan that are also in the coastal environment.

Iwi Management Plans check this with the Runanga

There are currently two iwi management plans affecting the West Coast region, being the Te Rūnanga o Ngäi Tahu Pounamu Resource Management Plan and the Te Rūnanga o Ngäi Tahu Freshwater Policy Statement. These documents have been lodged with Council and must be taken into account by the Council in water management. The Te Tai Poutini Tuna/West Coast Eel Management Plan, while not recognised as an iwi management plan, may also be considered in water management. The council understands that Papatipu Rūnanga are in the process of developing local iwi management plans at the time of notification and these document will be similarly taken into account once they have been finalised.

Water Conservation Orders

A water conservation order may be made by an Order in Council with respect to any water body. The order is made for the purpose of preserving or protecting a water body when its natural state, characteristics, amenity value, or intrinsic value are considered to be outstanding.

There are currently two orders operative within the West Coast Region. These are:

- Water Conservation (Buller River) Order 2001;
- National Water Conservation (Grey River) Order 1991.

The orders identify the 'outstanding' elements of each water body and must be taken into account when an activity is proposed for an area that is specified in either of these Water Conservation Orders. The orders are limited to the areas specified and shall not:

“...affect or restrict any resource consent granted or any lawful use established in respect of the water body before the order is made.”

In accordance with s67(2)(b) of the Resource Management Act 1991 this Water Management Plan has developed provisions that are not inconsistent with the water conservation orders that are currently in effect in the West Coast Region.

The Regional Policy Statement for the West Coast

The purpose of the Regional Policy Statement is to provide an overview of the resource management issues of the West Coast and the policies and methods for achieving integrated management of the region's natural and physical resources. It sets the general direction for future management of the West Coast's resources.

The Regional Policy Statement for the West Coast recognises water as a resource of regional significance. The objectives, policies and methods relating to water contained in that document were taken into account in the development of this Plan.

Other Regional Plans

This Water Management Plan must be consistent with other regional plans covering the West Coast. There are three operative regional plans for air, coast, and discharges to land and a proposed land and riverbed plan incorporating decisions. The provisions of this Plan are in addition to the requirements of these other plans.

Transitional Regional Plan

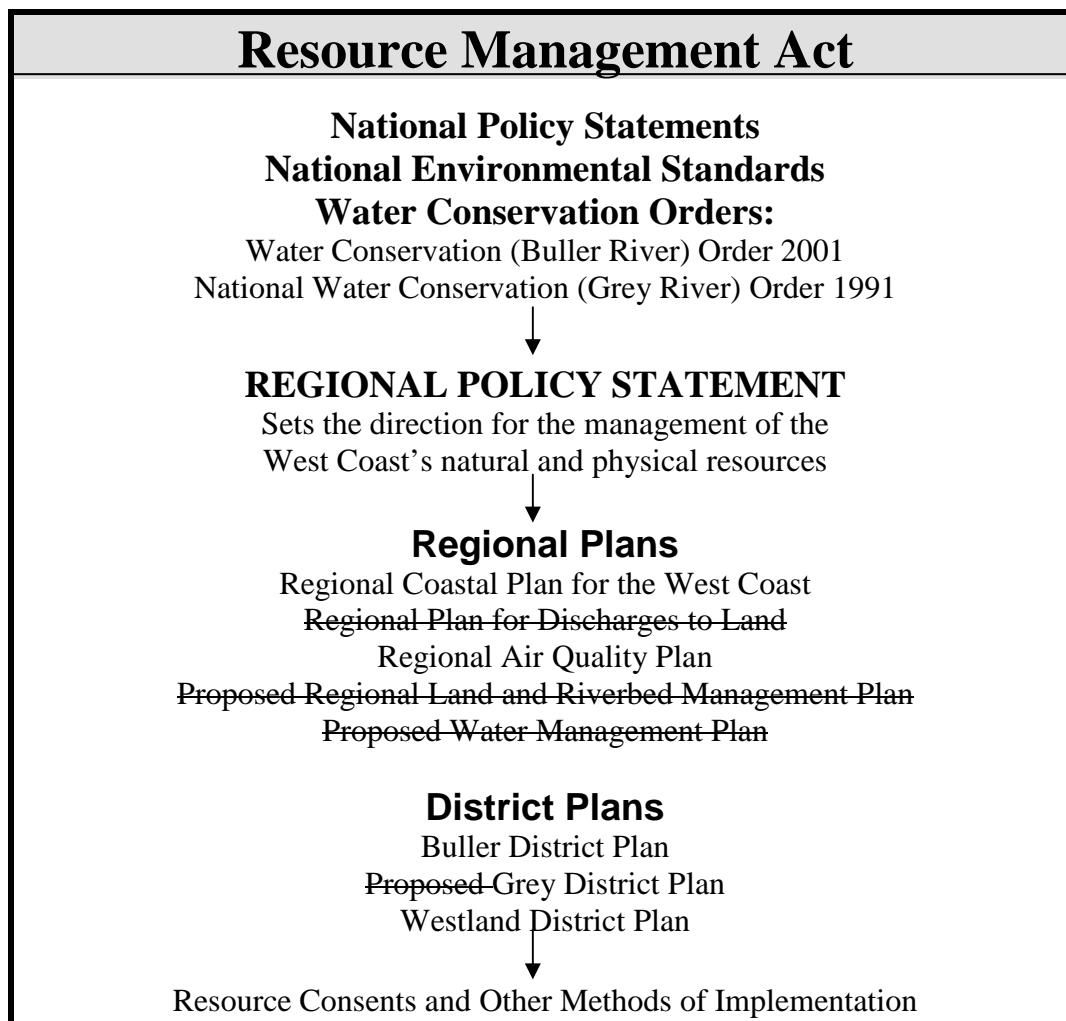
The West Coast Regional Council has a Transitional Regional Plan made up of authorisations in operation at 1 October 1991. When the relevant rules in this Water Management Plan become operative they will replace the general authorisations in the Transitional Regional Plan relating to water management. The relevant authorisations of the Transitional Regional Plan are identified in Schedule 7 of this Plan.

District Plans

District plans developed by territorial local authorities (district councils) with responsibilities for land management, may affect the water resource. District plans also cover activities on the surface of water upstream of the coastal marine area. Any

district plan within the West Coast must not be inconsistent with this Plan in regard to any matter of regional significance or for which the regional council has primary responsibility under Part IV of the Act.

Figure 2: Resource Management Framework



Chapter 3 REGIONAL DESCRIPTION

3.1 THE WATER RESOURCES OF THE WEST COAST

The West Coast is a region of mountains, rainfall, rivers and scenic beauty. These features, combined with the processes of uplift and erosion, have resulted in a landscape of unique character, two thirds of which is mountainous.

On the West Coast side of the fault, rivers and streams are steeply graded—the distance from source to sea seldom exceeding 50 km. There are a number of alluvial plains near the foothills that are, with some exceptions, composed of outwash silts and gravels. Many areas near major rivers, including the three main towns, are subject to flooding risk.

There are two river-based ports in the region, one in Westport on the Buller River and one in Greymouth on the Grey River. Unlike most ports elsewhere in NZ which are in the coastal marine area, these ports are managed by the Water Plan.

By national and international standards the region receives a generous and reliable rainfall. Near the Main Divide this exceeds 8000 mm annually (with the Cropp catchment receiving 13000mm)—declining to 2000 mm at the coast (with the mid-upper Grey Valley having the lowest rainfall in the region). At high altitudes there can be snowfalls all year round. In the region's southern parts there are glaciers that reach to within a few hundred metres above sea level.

For centuries, West Coast's people and communities have used their water to provide for their social, economic and cultural well being. This is evidenced in the wide range of heritage values associated with lakes and rivers: from the use of rivers as transport routes by Polynesian and European settlers, through to their importance in gold mining, some early remnants of which are still visible. Surface water is currently used for:

- Human and stock drinking water;
- Swimming, rafting, kayaking, waterskiing, boating;
- Eeling, whitebaiting and angling and gamebird hunting (commercial guiding and recreational);
- Navigation for cargo, fishing and tourist vessels;
- Hydroelectric generation;
- Various industrial uses; and
- Irrigation.

As discussed later in the chapter, groundwater is used for human drinking water and stock drinking for the majority of rural dwellings and dairy farms. It is also used as a drinking supply for seventeen communities of over 25 people, the largest communities being Greymouth and Reefton. Groundwater is also used for irrigation and industrial use.

Many of the region's waterbodies have a high diversity of species and habitats. There are a large number of fish, bird and plant species that have threatened status that inhabit West Coast waterbodies (see Schedule 1A for some examples). Introduced fish such as brown trout are widespread. A few rivers host rainbow trout and/or salmon.

Rivers

The region has approximately 40,400 km of rivers and streams. Rivers protected by the Water Conservation (Buller River) Order 2001 include the Buller and Maruia Rivers, while rivers protected by the National Water Conservation (Grey River) Order 1991 include the Ahaura and Blue Grey Rivers. West Coast rivers mostly rise in mountainous areas or hill land and are characterised by headwaters flanked by steep sided valleys and narrow gorges. These rivers, often fed by snow and/or the regions high rainfall, are subject to rapid flooding and this coupled with steep bed gradients is responsible for the large amount of transported material carried to, and deposited in, the vicinity of the river mouth.

The West Coast Rivers can be described as follows:

- Glacier fed — these are large rivers with very high sediment loads, making them relatively turbid and cold. They are flood prone due to the highly variable flow rates. These rivers have low flow periods in winter. Examples of these types of rivers include: Waiho, Fox, Cook, Landsborough;
- Foothill fed (mainstem) — the larger of these rivers (i.e. greater than 10m width), tend to be the large mainstems of rivers with the channel occupying the valley bottom, of relatively low gradient and wide floodplain. Generally, they have high sediment loads and may have turbid, clear or vegetation stained water. They have variable flows, and are flood prone, with low flow periods less well defined than the snow and glacier fed rivers. Examples of large foothill fed rivers are: Karamea, Mikonui, Buller, Grey, Paringa and Turnbull.
- Foothill fed (tributaries) — The medium size tributaries, (i.e. about 3 to 10 m), have intermediate channel slope with floodplain width limited by valley sides. They may have high sediment loads, with variable flow regimes. They may be clear or turbid and are flood prone. The small tributaries (i.e. about 1 to 3 m), are generally steep cobble and boulder channels, which drain steep catchments. Their width is tightly constrained by valley sides and they have variable flow regimes.
- Coastal plains fed — These are small to medium sized streams with low sediment loads and low gradients. They have clear water, which may be tannin stained. They are less prone to flooding than mountain and foothill categories. Examples of these rivers are La Fontaine and many tributaries of the other river types mentioned above;
- Lake fed — These rivers are clear, with low sediments loads, stable flow regimes and they are not prone to flooding. Examples of these rivers include Moeraki, Arnold, and Kaniere.

Lakes and Wetlands

Lakes and wetlands are an important component of West Coast's water resource. They provide an important recreation resource and are a significant scenic resource.

The lakes and wetlands have a range of values; including, hydrological, biodiversity, ecological, and socio-economic values.

Lake Brunner has particular significance as the largest lake in the region. Chapter 8 of the plan specifically addresses issues for the Lake Brunner catchment. Other lakes in the Grey district include Lakes Hochsetter, Ahaura, Haupiri, and Poerua, Lady Lake & Kangaroo Lake.

In Westland, Lakes Kaniere and Mahinapua are also popular recreational resources for local communities and for visitors. Further south, lakes Ianthe, Wahapo, Mapourika, Paringa and Moeraki are important for their scenic and ecological values.

Most wetland areas on the West Coast of significance are in the Conservation estate. Some of these provide an abundance and diversity of species and habitats. Many wetlands are also used for commercial harvesting of sphagnum moss. Some wetlands of significance occur on private land and discussions with the owners of these will occur in order to ensure land development does not compromise wetlands that are underrepresented in the conservation estate.

Groundwater

Groundwater occurs in many parts of the region and many of West Coast's people and communities have come to rely upon this water. There are a number of localities in the West Coast where groundwater is of particular significance to existing users. These include drinking water supplies for the Greymouth and Reefton communities, a number of sites used by the industrial sector and widespread use by the dairy farm community. Much of the resource accessed is shallow unconfined groundwater that is affected by rainfall variation.

With the exception of a few industries outside the areas of town water supplies, there have been few restrictions placed on the quantity of water abstracted from West Coast aquifers. The West Coast Regional Council is currently upgrading groundwater information. This includes a groundwater bore inventory and monitoring of groundwater levels and quality. Although there is not enough data to assess long term trends, monitoring to date suggests that at present all of West Coast's many aquifers have water of useable quality.

Geothermal Water

The West Coast region has a number of geothermal resources. Most occur as small hot springs scattered along the lower slopes of the western flanks of the Southern Alps. The most significant of these occurs in the upper reaches of the Maruia River, a tributary of the Buller, at Maruia Springs. Another notable spring is located in the headwaters of the Haupiri River, as well as at Welcome Flat (Copeland), Toaroha, and Harihari (Whanganui River).

Chapter 4 POUTINI NGÄI TAHU/NGÄI TAHU PERSPECTIVE

4.1 WHAKATAUKI

A whakatauki is a proverb or saying, which is intended as a general affirmation.

“He taura whiri kotahi mai ano te kopunga tai no i te pu au”

“From the source to the mouth of the sea all things are joined together as one”

4.2 TAUPARAPARA

Ko Aoraki te Mauka	<i>Mt Cook is the peak</i>
Ko Nga Tiri Tiri o Te Moana te tahuu	<i>The southern Alps are the backbone</i>
Ko Mahinapua, Mapourika, Wahapo Matahi, Paringa, Moeraki, Kaniere, me Kötuku-Whakaoho nga roto	<i>Mahinapua, Mapourika, Wahapo, Matahi, Paringa, Moeraki, Kaniere & Kötuku-Whakaoho are the lakes are the water bodies</i>
Ko Makaawhio me Arahura ngä awa	<i>Makaawhio and Arahura are the rivers</i>
Ko Poutini te taniwha	<i>Tai Poutini is the guardian taniwha</i>
Ko Poutini te tai	<i>Poutini is the tide</i>
Ko Poutini Ngäi Tahu /Ngäi Tahu te iwi	<i>Poutini Ngäi Tahu are the people</i>

4.3 TE TAI O POUTINI – THE TIDES OF THE WEST COAST

This is the name given to the seas of the West Coast of the South Island. Traditional pakiwaitara (stories) tell of how Poutini a taniwha (sea monster) captured a beautiful woman named Waitaiki from her home at Tuhua (Mayor Island) and brought her to the Arahura River where he changed her into pounamu (greenstone).

Poutini still rages up and down the seas off the Coast and today is acknowledged by Poutini Ngäi Tahu as the spiritual guardian of pounamu, the land and its people.

The tangata whenua of the West Coast identify with and take their name from this guardian taniwha. Today they are known as Poutini Ngäi Tahu.

4.4 MANAWHENUA

Ngäi Tahu Whänui is tangata whenua within the rohe of Ngäi Tahu. The iwi is made up of whänau and hapü (family groups) who hold traditional authority – manawhenua, over particular areas. Manawhenua is determined by whakapapa – genealogical ties,

and confers traditional political authority over an area. Once acquired, manawhenua is secured by ahi ka – continued occupation and resource use. The ~~West Coast Regional Council~~ recognises manawhenua through its relationship and consultation with Papatipu Rünanga and Te Rünanga o Ngäi Tahu.

Through Papatipu Rünanga, the tangata whenua who hold manawhenua over a particular area or resource will be able to determine the characteristics of Kaitiakitanga (guardianship) and how it should be given expression.

In 1998 the Ngäi Tahu Claims Settlement Act established statutory acknowledgements and nohoanga sites to recognise the special association of Ngäi Tahu with these areas. Ngäi Tahu Whänui, represented by Papatipu Rünanga and Te Rünanga o Ngäi Tahu, comprise people of Ngäi Tahu, Ngäti Mamoe and Waitaha descent, and hold customary tribal authority over an area that includes the entire Tai Poutini / West Coast region.

4.4.1 Te Rünanga o Ngäi Tahu

Te Rünanga o Ngäi Tahu represents the tribal collective of Ngäi Tahu Whänui. It was established by the Te Rünanga o Ngäi Tahu Act (1996) to give a legal identity to the tribe. This Act establishes Te Rünanga o Ngäi Tahu as the 'iwi authority' for the purposes of the Resource Management Act (1991). The two Papatipu Rünanga, Te Rünanga o Ngäti Waewae and Te Rünanga o Makaawhio as well as Te Rünanga o Ngäi Tahu will be consulted as required to manage the West Coast water resources.

4.4.2 Papatipu Rünanga in the West Coast Region

Papatipu Rünanga (Rünanga) are modern representative bodies of the whänau and hapü of traditional marae based communities. Each Rünanga has its own area or rohe, determined by natural boundaries such as mountain ranges and rivers. These areas are called takiwä or rohe and are defined in the Te Rünanga o Ngäi Tahu Act (1996). For consultation purposes arising from this plan and the Resource Management Act, initial contact should be through the Papatipu Rünanga who are the kaitiaki over the areas concerned to ensure their views and values are considered.

The Papatipu Rünanga within the West Coast region are Te Rünanga o Makaawhio and Te Rünanga o Ngäti Waewae. The exclusive takiwä of Te Rünanga o Makaawhio is centered at Makaawhio and extends from the south bank of the Poerua River to Piopiotahi (Milford Sound) and inland to the main divide Ka Tiritiri o te Moana (storm tossed sea) together with a shared interest with Te Rünanga O Ngäti Waewae in the area situated between the north bank of the Poerua River and the South bank of the Hokitika River.

The exclusive takiwä of Te Rünanga O Ngäti Waewae is centred on Arahura and Hokitika and extends from the north bank of the Hokitika River to Kahurangi Point and inland to the main divide together with a shared interest with Te Rünanga o Makaawhio in the area situated between the north bank of the Poerua River and the south bank of the Hokitika River.

4.5 POUTINI NGÄI TAHU/NGÄI TAHU WATER RESOURCE OBJECTIVE

Poutini Ngäi Tahu's objective with respect to the management of the West Coast's

water resource is to ensure consistency with the values of Poutini Ngäi Tahu whānu and to be involved in that management through:

- Participation in the planning, implementation and monitoring of the objectives, policies and methods adopted by resource managers; and
- Participation in the use, development, and protection of water resources.

Schedule 1C identifies the spiritual or cultural values or uses associated with individual water bodies, or groups of water bodies, identified by Poutini Ngäi Tahu as being significant.

4.6 KAITIAKITANGA

Kaitiaki are the interface between the physical and spiritual worlds. Observing kawa and tikanga is part of the ethic and exercise of kaitiakitanga. Poutini Ngäi Tahu consider kaitiakitanga as a much wider cultural concept than pure guardianship. To Poutini Ngäi Tahu, kaitiakitanga entails an active exercise of power in a manner beneficial to the resource. Tangata tiaki, the people who practice kaitiakitanga, do so because they hold the mana (authority) and responsibility to do so. Poutini Ngäi Tahu seek to play an active tangata tiaki role in the day to day management of natural and physical resources.

To give effect to the concept of kaitiakitanga it is important to consult with the appropriate Papatipu Rūnanga. The outcomes of kaitiakitanga are likely to include avoiding the discharge of waste, particularly human waste, to rivers and lakes, the management of natural resources in a way that maintains mahinga kai values, and ensuring that all taonga (which includes all natural resources) are available for future generations in as good, if not better, quality than they currently exist.

4.7 MAURI

For Poutini Ngäi Tahu, mauri is the life force that comes from wairua - the spirit, or source of existence and all life. Mauri is the life force in the physical world.

As a life principle mauri implies health and spirit. In the environment, mauri can be used to describe the intrinsic values of all resources and of the total ecosystem. In the community, mauri is of paramount importance to the wellbeing of the people. Mauri can be harmed by the actions of humans but is unaffected by natural processes such as natural disasters.

The preservation of the mauri of all natural resources is paramount to Poutini Ngäi Tahu to ensure that natural and physical resources may be used sustainably by present and future generations. Traditionally, rules were established to govern the use of natural and physical resources and ensure that the mauri was protected from human actions. These rules form part of kawa and tikanga (Māori protocol). The transfer of water from one headwater to another is an issue for tangata whenua.

At times, rāhui were used to safeguard the wellbeing of people and for the purposes of conservation, to restrict use, and ensure the sustainability of a resource. This ensured that the needs of present generations were met while protecting the overall health and availability of the resource to meet the needs of future generations.

The overall purpose of resource management for Poutini Ngäi Tahu is the maintenance of the mauri of natural and physical resources, and to enhance mauri where it has been degraded.

There are indicators within the environment, both physical and spiritual, that Poutini Ngäi Tahu use to measure mauri. These include the presence of healthy mahinga kai and healthy flora and fauna, the presence of resources fit for cultural use, and the aesthetic qualities of resources such as the visibility of important landmarks. Spiritual indicators are those from the Atua (gods), which can take many forms and are recalled in the kōrero pūrākau (stories) of whānau and hapū.

4.8 CULTURAL IMPORTANCE

Water is central to all Māori life and is a taonga of huge importance. Poutini Ngäi Tahu considers that its relationship with the waters of its rohe has been eroded over the last 150 years. Water plays a unique role in the traditional economies and culture of Poutini Ngäi Tahu. Without water no living thing, plant, fish or animal can survive. Taking, using and discharges of water can affect the environment and Poutini Ngäi Tahu values.

Water also has an important place in ceremonial occasions and is particularly recognised where the cultural components of tapu and noa are at work. Water symbolises the spiritual link between the present and the past, the never-ending source of life, for generations that have gone before and those to follow.

Poutini Ngäi Tahu's priority is to maintain the properties of water that are necessary to ensure the sustainability of customary uses. Customary uses range from the use of water for ceremonial purposes to the maintenance of the quality and quantity of water to sustain Mahinga kai populations and habitats.

4.9 MAHINGA KAI

Mahinga kai refers to Poutini Ngäi Tahu interests in traditional food and other natural resources and the sites where these resources are gathered. The term mahinga kai refers to the whole resource chain, from mountaintop to the ocean floor. It encompasses social and educational elements as well as the process of food gathering. It includes the way it is gathered, the place where it is gathered from, and the actual resource itself. There are a number of mahinga kai related elements in the Ngäi Tahu Claims Settlement Act; these include nohoanga (temporary campsites), taonga species and customary fisheries management. There are many other traditional mahinga kai sites not included in the legislation, which also need to be considered through consultation with Papatipu Rūnanga.

The mahinga kai custom of producing or procuring food resources from a range of resources throughout the region on a seasonal basis is a fundamental basis of the traditional economy. Maintenance of the custom and knowledge associated with the natural resource is governed by lore. Transfer from one generation to the next of the cumulative knowledge is tied to practical use and management of the mahinga kai resource. The water resources of the West Coast region provide mahinga kai directly,

provide ecosystem support for mahinga kai species, and support other significant mahinga kai environments, for example forest and coastal areas. The waterborne mahinga kai resource represents a remnant of a once significant resource that has potential for rejuvenation.

4.10 MANAGEMENT OF WATERS

Poutini Ngäi Tahu have a vision that will see a positive transition from the grievance mode that has pervaded their culture for over 150 years, caused through the substantial loss and degradation of their resources and suppression of the rangatira authority traditionally exercised over their taoka (treasured values). This works in practice through the re-validation of the Manawhenua role through consultation and development of partnership models.

The involvement of Poutini Ngäi Tahu in consent and plan processes, and in water monitoring programmes is important. In some cases Poutini Ngäi Tahu may seek full control of some resources through a transfer of powers under Section 33 of the Resource Management Act 1991. That section enables the transfer of powers, providing the body to which power is to be transferred meets a number of criteria including having the technical or special capability or expertise. A special consultative process, pursuant to Section 83 of the Local Government Act 2002, must be undertaken before any transfer of power can proceed.

4.11 IDENTIFYING POUTINI NGÄI TÄHU'S CULTURAL AND SPIRITUAL VALUES AND USES

The identification of Poutini Ngäi Tahu cultural and spiritual values and uses supported by the region's water bodies is an important means by which Poutini Ngäi Tahu resource use priorities can be provided for in the planning and implementation stages. The process requires detailed and current information on the values for each water body, and identification of activities and community expectations for the use and management of the region's water bodies. A clear direction for the management, use and enhancement of individual water bodies must give effect to the interests of Poutini Ngäi Tahu. A number of Ngäi Tahu management guidelines for water management are articulated in the Te Rünanga o Ngäi Tahu Freshwater policy.

4.12 ISSUES OF CONCERN TO POUTINI NGÄI TÄHU

The issues below describe the significant concerns of Poutini Ngäi Tahu, as expressed by Poutini Ngäi Tahu.

~~4.12.1 Traditional environmental management systems and values, which include mauri, tapu and rähui, are not adequately recognised by planning and resource consent processes.~~

Explanation

~~The practical implementation of Mäori values including mauri, rähui and tapu in the management of the region's water resources would give recognition and effect to the place and role of indigenous values.~~

~~4.12.2 Effects on traditional Mahinga kai resource and its supporting habitat, or loss of access to it, has occurred and could continue to occur.~~

Explanation

~~The water based Mahinga kai resource was a significant part of traditional food. It was also a means for the transfer of knowledge from one generation to another, of the customs relating to the Mahinga kai resource, habitat, places, place names, seasons, rights to the resource, trails, tribal history and tradition relating to the area. Loss of the Mahinga kai resource and habitat, or of access to the resource therefore constitutes a greater loss than the loss of the resource by itself.~~

~~4.12.3 Discharge of human waste and other contaminants to the West Coast's water bodies from point sources is an affront to Poutini Ngäi Tahu.~~

Explanation

~~The discharge of untreated and treated human waste and other contaminants to water bodies is particularly offensive to Poutini Ngäi Tahu, since water is of both spiritual and practical importance to Mäori. Degradation of any water body undermines the enduring cultural relationship iwi have traditionally enjoyed and seek to retain with their waters. In addition, the custom of gathering food (Mahinga kai) from water bodies is jeopardised, since the practice of consuming food gathered from resources contaminated by, in particular, human wastes is abhorrent to iwi. Severance of the spiritual relationship with, and of the customary use of, a water body strikes at the very identity and well being of the indigenous culture. This causes a failure as kaitiaki to protect and pass on to the next generation an intact Mahinga kai custom.~~

~~4.12.4 Restoration and enhancement may be required for water bodies that have suffered degradation due to developmental pressure.~~

Explanation

~~The quality of some of the West Coast's water bodies has declined over the years due to use of natural and physical resources in ways that impact detrimentally on the environment. This has resulted in a net loss of cultural and spiritual values and uses for Poutini Ngäi Tahu.~~

~~Restoration of the ecological and cultural values of degraded waters is a fundamental principle of Mäori environmental management. Restorative actions are priorities for water bodies of particular significance to Poutini Ngäi Tahu.~~

~~4.12.5 The traditional relationship of Poutini Ngäi Tahu and their associated values with the water resource can be overlooked in the monitoring of the region's water resources.~~

Explanation

~~Monitoring of the state of water resources, monitoring compliance with resource consents and other information gathering processes have not necessarily produced the information Poutini Ngäi Tahu require to measure changes in cultural and spiritual values and uses associated with water bodies.~~

~~4.12.6 The transfer of water from one headwater to another can affect Mauri~~

Explanation

~~Taking the entire flow of a river and transferring it to another river affects the Mauri of both rivers. Mauri is discussed in section 4.7 above.~~

4.13 POUTINI NGÄI TÄHU PLACE NAMES

Poutini Ngäi Tahu use the following Mäori place names:

Alpine Lake – Ata Puai	Island Hill - Tumuaki
Browning Pass- Noti Raureka	Jackson Bay (Bay only) – Okahu
Buller River - Kawhatiri	Mahinapua Creek – Tuwharewhare
Cave Creek – Kotohotiho	Mount Harman – Kaniere
Cook River – Weheka	Mount Upright – Te Taumata o Uekanuku
Fox Glacier – Te Moeka o Tuawe	New River – Kaimata
Franz Josef Glacier – Ka Roimata o Hine Hukatere	Nine Mile Creek – Kotorepi
Franz Josef (Township) – Waiiau	Refuge Island – Takataka
Gillespies Point – Köhaihai	Rocky Point – Tauotikirangi
Greenstone River or Big Hohonu River – Hokonui	Seven Mile Creek – Waimatuku
Grey River – Mawheranui	Ten Mile Creek – Waianiwaniwa
Haast–Awarua	The Doughboy – Koiraki
Lake Browning – Whakarewa	West Coast - Tai Poutini
Lake Brunner – Kötuku Whakaoho	Westland National Park – Tai Poutini National Park
Lake Ianthe – Matahi	

Chapter 5

NATURAL AND HUMAN USE VALUES

5.1 INTRODUCTION

~~Water resources have played a critical role in the development of the West Coast. There is a history of traditional uses of water and, following European settlement, mining, irrigation, recreation, fishing, hydro-electric power generation, and navigation for cargo, fishing and tourist vessels.~~

~~This Plan seeks to enable people and communities to provide for their social, economic and cultural well being through appropriate use, development and protection of water. The Plan recognises the dependence of people and communities on water and the need for continued use, development and protection. However, in enabling continued use, development and protection, it is important that adverse effects on the existing natural and human use values supported by water bodies are avoided, remedied or mitigated.~~

~~This chapter provides protection for the natural and human use values supported by the West Coast's water bodies.~~

~~Schedule 1 identifies particular natural and human use values supported by the West Coast's lakes and rivers. These are:~~

- ~~(a) Habitat of threatened species (Schedule 1A);~~
- ~~(b) Water supply values (Schedule 1B);~~
- ~~(c) Spiritual and cultural values and uses of significance to Poutini Ngäi Tahu (Schedule 1C).~~

~~In addition to the natural and human use values identified in Schedule 1, West Coast water bodies can have other natural and human use values which are protected by the Plan, including natural character, outstanding natural features and landscapes, significant indigenous vegetation and significant habitat of indigenous fauna, existing public access to and along lakes and rivers, historic heritage, and existing lawful uses.~~

~~Schedule 1 does not specifically identify all elements of natural character. This is because every lake and river contains some element of natural character that can only be identified and assessed on a case by case basis when a consent is applied for.~~

~~This chapter contains issues, objectives and policies that apply to all activities that may adversely affect natural and human use values in water bodies.~~

5.2 ISSUE

~~**5.2.1 The inappropriate use and development of the West Coast's water bodies has the potential to adversely affect natural and human use values, and to cause or exacerbate flooding, erosion, land instability, sedimentation or property damage, associated with the region's water bodies.**~~

Explanation

~~The West Coast's water bodies support considerable natural values, and are also valued by the region's people and communities. Use and development can also cause or exacerbate adverse effects from hazards. Any reduction in the ability of water bodies to support natural and human use values, which is caused by these activities, is of concern due to the importance of the values to the West Coast's ecosystems and to the region's present and future generations.~~

5.3 OBJECTIVES**5.3.1 To provide for the sustainable use and development of water resources.****Explanation**

This objective recognises that traditionally people have made extensive use of water resources and the ability to continue to sustainably use and develop these resources is important.

Principal reasons for adopting

~~This objective is adopted to ensure continued access to water resources for a range of existing and new uses. This recognises the need for people and communities to provide for their economic, social and cultural well being.~~

5.3.2 To protect water bodies from inappropriate use and development by maintaining and where appropriate enhancing their natural and amenity values including natural character and the life supporting capacity of aquatic ecosystems.**Explanation**

Many West Coast water bodies contain significant values some of which are identified for specific water bodies in Schedules 1A and 1B of this Plan. These schedules are not exhaustive. Schedule 1A provides some examples of habitats of threatened species and Schedule 1B identifies those community water supply takes known at the time of drafting this Plan. This objective not only seeks to avoid the loss or degradation of such values, but also provides for their enhancement.

Principal reasons for adopting

~~This objective is adopted to ensure that activities are managed so that the natural and human use values supported by the West Coast's water bodies can continue to exist.~~

5.3.3 To maintain or where appropriate enhance the spiritual and cultural values and uses of significance to Poutini Ngäi Tahu.**Explanation**

Chapter 4 of this Plan identifies the issues of concern to Poutini Ngäi Tahu. The issues reflect the strong relationship Poutini Ngäi Tahu have with the West Coast's water bodies through their spiritual and cultural values and uses associated with water. These values and uses are identified for specific water bodies in Schedule 1C of this Plan. This objective seeks to avoid their loss or degradation and, where practicable

enhance them. These schedules are not exhaustive, but reflect the level of knowledge of individual water bodies gained during the Plan-making process.

Principal reasons for adopting

~~This objective is adopted to protect the relationship Poutini Ngäi Tahu have with the West Coast's water resources.~~

5.3.4 To avoid the exacerbation of any natural hazard or the creation of a hazard associated with the West Coast's water bodies.

Explanation

People and communities rely on existing standards of protection from natural hazards, such as flooding, to be maintained or enhanced. Any activity that results in a higher risk of hazard such as flooding, erosion, land instability or sedimentation, or in property damage, could adversely affect infrastructure such as transport routes, the health and safety, and the social, economic, and cultural wellbeing of people and communities.

Principal reasons for adopting

~~This objective is adopted to ensure that the use or development of water bodies does not result in new hazards, or increase the existing risk of hazards.~~

5.4 POLICIES PROTECTING VALUES

5.4.1 In the management of any activity involving water to give priority to avoiding, in preference to remedying or mitigating:

- (1) Adverse effects on:
 - (a) The habitats of threatened species identified in Schedule 1A;
 - (b) Water supply values identified in Schedule 1B;
 - (c) Spiritual and cultural values and uses of significance to Poutini Ngäi Tahu identified in Schedule 1C;
 - (d) The significant natural character of wetlands, and lakes and rivers and their margins;
 - (e) Outstanding natural features and landscapes;
 - (f) Significant indigenous vegetation and significant habitat of indigenous fauna assessed in accordance with Policy 9.2 of the West Coast Regional Policy Statement;
 - (g) Existing public access to and along lakes and rivers;
 - (h) Significant historic heritage.
- (2) Adverse effects which cause or exacerbate flooding, erosion, land instability, sedimentation or property damage.
- (3) Adverse effects on existing lawful uses

Explanation

The above values of the West Coast's water bodies are matters of national importance under section 6 of the Resource Management Act 1991, plus community water supply values and existing lawful uses. These values can be adversely affected by the following activities:

- (a) The taking, damming and diversion of surface water;
- (b) The taking and use of groundwater (which can affect surface water);

(c) Discharges to water.

Some activities can cause or exacerbate hazards and lessen the ability of people and communities to prevent, or protect themselves from the hazard.

When considering these activities, priority must be given to avoiding adverse effects, in preference to remedying or mitigating them. The avoidance of adverse effects on the identified values will be sought in the first instance.

Where adverse effects are considered to be unavoidable, a resource consent may be declined or, if granted, may be subject to conditions requiring unavoidable adverse effects to be remedied, mitigated, or, in the case of diversion, reclamation or damming, to be appropriately compensated for.

When reading 5.4.1(d) and 5.4.1(h) it is important to remember that the degree of natural character, or the value of historic heritage, varies along a continuum (for natural character this will be assessed having regard to the matters in Policy 5.4.4). Where a water body contains significant natural character, or the activity will affect significant historic heritage, preference will be given to avoiding adverse effects of development on that respective value. Giving priority to avoiding adverse effects on the value is more important the higher the significance of the natural character or historic heritage value.

The criteria in Policy 9.2 of the Regional Policy Statement will be used to determine 'significance' in relation to Policy 5.4.1(f). In doing so, it should be recognised that not all of the criteria will be relevant in assessing and determining significance in relation to aquatic ecosystems.

Principal reasons for adopting

~~This policy is adopted to ensure that the values of the West Coast's water bodies are maintained or enhanced and that the health and safety of the West Coast's people and communities are not adversely affected through causing or exacerbating a hazard.~~

5.4.1B To take into account the benefits from the use and development of renewable energy, including the social and economic benefits.

Explanation

This Policy recognises that renewable energy developments can provide significant community benefits, both locally and nationally as recognised in section 7(j). Where renewable energy developments provide significant community benefits (locally and nationally), it may be sufficient to mitigate or remedy unavoidable effects.

5.4.1C In the management of any activity involving water, to avoid, remedy, or mitigate adverse effects on:

- (a) **water quality;**
- (b) **amenity values;**
- (c) **indigenous biological diversity;**
- (d) **intrinsic values of ecosystems;**

- (e) **the natural character of wetlands, and lakes and rivers and their margins, not described in 5.4.1(1)(d);**
- (f) **historic heritage not described in 5.4.1(1)(h).**

5.4.2 To recognise Poutini Ngäi Tahu's interests in the West Coast's waterbodies by promoting opportunities for their involvement in resource consent processing.

Explanation

Poutini Ngäi Tahu are provided with information on all non notified consents. Poutini Ngäi Tahu will be treated as an affected party with regards to some of these non notified consents, and be notified of any notified resource consent application. This will allow Poutini Ngäi Tahu to assess the implications of each resource consent application on their spiritual and cultural values and uses. Poutini Ngäi Tahu's values and uses, as they relate to water bodies, are identified in Schedule 1C of this Plan.

Principal reasons for adopting

~~This policy is adopted to ensure that Poutini Ngäi Tahu have the opportunity to be involved in the management of activities that may adversely affect their spiritual and cultural values and uses.~~

5.4.3 To recognise and provide for the National Water Conservation (Grey River) Order 1991 and the Water Conservation (Buller River) Order 2001.

Explanation

The management of the waters protected under national water conservation orders must also be recognised and provided for under this Plan. The Plan and any consents granted under it cannot be inconsistent with the water conservation orders.

The two water conservation orders are reproduced in Schedules 5 and 6 of this Plan.

Principal reasons for adopting

~~This policy is adopted to recognise and provide for the Grey River and Buller River Water Conservation Orders.~~

5.4.4 To recognise and provide for the following features of water bodies when considering adverse effects on their natural character:

- (a) **The topography, including the setting and bed form;**
- (b) **The natural flow characteristics;**
- (c) **The natural water level and its fluctuation;**
- (d) **The natural water colour and clarity;**
- (e) **The ecology; and**
- (f) **The extent of use or development within the catchment, including the extent to which that use and development has influenced (a) to (e).**

Explanation

The features of water bodies that can contribute to their natural character are identified above. These features need to be taken into account when considering applications for resource consents. New activities will affect water bodies with a high degree of natural character more significantly than they affect highly modified water bodies.

Principal reasons for adopting

~~This policy is adopted to ensure that all elements contributing to the natural character of the West Coast's water bodies are recognised.~~

5.4.5 To have particular regard to the following qualities or characteristics of water bodies when considering adverse effects on amenity values:

- (a) Aesthetic values associated with the water body;**
- (b) Recreational opportunities provided by the water body;**
- (c) Sports fish habitats, as outlined in Appendix 20.2; and**
- (d) The extent of use or development within the catchment, including the extent to which that use and development has influenced (a) to (c).**

Explanation

The qualities and characteristics listed above contribute to a water body's amenity values. The nature of amenity values can change over time. The recreational opportunities provided by the West Coast's water bodies can include angling, hunting and a range of other active and passive recreation. These qualities and characteristics must be taken into account when preparing plans under the Resource Management Act and when considering applications for resource consents.

Principal reasons for adopting

~~This policy is adopted to ensure those elements that contribute to the amenity values of the West Coast's water bodies are recognised.~~

5.4.6 To provide for activities that have no more than minor adverse effects on water bodies without the need for a resource consent.**Explanation**

The rules chapter of this Plan identifies a number of permitted activities that may occur without the need for a resource consent. Providing the permitted activity criteria are met, the activity will have no more than a minor adverse effect.

Principal reasons for adopting

~~This policy is adopted to avoid unnecessary regulation of activities involving water that are unlikely to result in significant adverse effects on the natural and human use values of the West Coast's water bodies or the needs of other users.~~

~~5.5 ANTICIPATED ENVIRONMENTAL RESULTS~~**~~5.5.1 Section 6 values are protected from inappropriate use and development and the life supporting capacity of water resources including aquatic ecosystems is sustained.~~**

~~5.5.2 The natural character and amenity values of the West Coast's water bodies are protected from inappropriate use and development of water resources.~~

~~5.5.3 Activities avoid causing or exacerbating flooding, erosion, land instability, sedimentation, property damage, or adverse effects on existing lawful uses.~~

~~5.5.4 Public access to and along the West Coast's lakes and rivers is maintained or enhanced.~~

~~Monitoring of the achievement of these anticipated environmental results will be carried out as outlined in Chapter 17.~~

Chapter 6

SURFACE WATER QUANTITY

6.1 INTRODUCTION

This chapter deals with resource use conflicts related to the quantity of water in surface water bodies. Out-of-stream uses involving the taking, damming and diversion of water can change the quantity of water in these water bodies, impacting on flow regimes and water levels. This can affect the people and communities who are reliant on this water, its life supporting capacity, water quality and instream values.

The West Coast generally receives frequent and plentiful rainfall. Annual rainfall increases as one moves south down the West Coast due to the influence of the Southern Alps. The upper Grey River valley and Reefton areas are noted as receiving the least rainfall during Summer, and have a number of catchments where groundwater contributes little to the base flows during Summer. Seasonally, for the northern half of the region, rainfall and river flows are highest during Spring and lowest during Summer. Conversely for South Westland, rainfall and river flows are highest during Summer and lowest during Winter. The high and intense rainfall produces frequent flash floods in the regions rivers which usually contain relatively high base flows. Flows that are affected by large lakes or are mainly spring fed are more stable, and generally have smaller floods.

Note: The provisions in this chapter are in addition to those in Chapter 5, which seek to maintain or enhance the natural and human use values supported by lakes and rivers.

6.2 ISSUES

~~6.2.1 The taking and use of water can result in adverse effects on instream values and natural character in the West Coast's water bodies.~~

Explanation

~~As water is taken wetland and lake levels and river flows may drop, which can adversely affect instream values and natural character. Effects can include reduction in water depth, decreased velocity, which can reduce habitat and allow the accumulation of sediment and algae, increased water temperature and a reduced waste dilution capacity and loss of habitat values. This may reduce diversity and numbers of fish and invertebrates. Reduced flows can also affect the amenity values of the water body or any connected water body.~~

~~6.2.2 Inefficient water use practices can constrain opportunities for others to use the water resource.~~

Explanation

~~Potential uses of water can be constrained by inefficient water use practices. This can result in the waste of water, particularly through the following:~~

- ~~(a) Water being lost through leakage from distribution systems;~~
- ~~(b) Not utilising the most efficient means of taking or using the water; and~~

~~(e) Taking and using more water than is required to conduct an activity.~~

~~**6.2.3 The rate at which water is taken can create conflict between competing uses.**~~

~~**Explanation**~~

~~The rate at which water is taken by particular users can compromise other users. Where the ability of existing users to access water is compromised by new takes of water, potential for conflict among these users is created.~~

~~**6.2.4 The inter-catchment or inter-stream transfer of water can lead to adverse effects in the source water body due to reduced water quantity, and in the receiving waterbody, due to the mixing of water.**~~

~~**Explanation**~~

~~The transfer of water from one stream or catchment to another can result in the introduction of species or contaminants to areas where they are not currently present, as well as reducing flows in the source water body.~~

~~**6.2.5 The control of flows through dams, and via diversion and flow augmentation can result in adverse effects downstream and on any other connected water body.**~~

~~**Explanation**~~

~~The control of water flows via damming, diversion and flow augmentation can have positive effects for the community and instream values (in particular amenity values). However, the activity can modify natural flow regimes, affect competing uses, and affect fish passage.~~

~~Variation to these natural flow regimes can cause adverse effects on the environment. Where flows are being managed by artificial control they can also affect lake levels upstream and this is addressed in Policy 6.2.6.~~

~~**6.2.6 Inappropriate management of lake levels can result in adverse effects on the environment.**~~

~~**Explanation**~~

~~The management of lake levels, brought about by artificial control, can change:~~

- ~~(a) Natural character and the stability of the shore and bed of a lake;~~
- ~~(b) The water quality of the lake where natural flushing processes are reduced if water is retained to maintain high water levels;~~
- ~~(c) Lakeside access;~~
- ~~(d) Riparian habitat.~~

~~The environment surrounding lakes has developed as a consequence of, or has adjusted to, the previously occurring hydrological conditions. Changes to these conditions through the control of levels may upset the existing balance between lake, lake shore and surrounding environment.~~

~~6.2.7 Diversions and reinstatement of river flows can result in loss of surface flows in streams.~~

~~Explanation~~

~~Where bed disturbance loosens the armouring layer and subsurface layers of riverbed, a loss of flow can occur when the river is re-diverted back to its original course. There have been some significant effects on West Coast rivers in the past due to alluvial gold mining.~~

6.3 OBJECTIVES

6.3.1 To retain flows and water levels in water bodies sufficient to maintain their instream values, natural character, and life supporting capacity.

Explanation

This objective seeks to maintain sufficient flows and water levels in rivers and other water bodies to provide for instream values, natural character and life supporting capacity.

Principal reasons for adopting

~~This objective is adopted in recognition of the importance of sustaining the instream values, natural character and life supporting capacity of the West Coast's rivers.~~

6.3.2 To provide for the water needs of the West Coast's industries, network utility operators and community water supplies.

Explanation

The economic, social and cultural wellbeing of the West Coast's people and communities rely on their access to securing suitable quantities of water. Network utility operators also require access to water to ensure the continued maintenance and operation of infrastructural networks thereby providing for the economic, social and cultural wellbeing of the West Coast's people and communities. The present and reasonably foreseeable needs for water will need to be met, provided any adverse effects are sustainably managed. This includes existing users who rely on current takes of water, as well as future users.

Principal reasons for adopting

~~This objective is adopted to ensure continued access for the taking of water. This recognises the importance of water in maintaining the West Coast's communities and their industries.~~

6.3.3 To promote the efficient use of water.

Explanation

Efficient use of water occurs when the volume of water taken is sufficient to meet the needs of the use, with the least possible wastage, or overestimation of need.

Principal reasons for adopting

~~This objective is adopted to maximise access to the water resource and recognises the need to avoid wastage of these resources.~~

6.3.4 To avoid, remedy or mitigate adverse effects on the quality of source and receiving water, including its ecology and mauri, where such water is subject to any inter-stream or inter-catchment transfer.

Explanation

New transfers may result in changes to receiving and source water quality, or the introduction of species to areas where they are not already present and the loss of values associated with the source water body.

Principal reasons for adopting

~~This objective is adopted to limit the adverse effect caused by new transfers of water between catchments.~~

6.3.5 To avoid, remedy or mitigate any adverse effects of managed flows in rivers.

Explanation

~~The control of water flows from activities including damming, diversion from rivers, and flow augmentation has contributed to the social and economic wellbeing of the West Coast's people.~~ Modified flows from such activities, however, can cause adverse effects where the flows or variations in flows may not provide for the requirements of natural and human use values, existing lawful uses, or may adversely affect bed or bank stability. The management of flows may be required to ensure that any adverse effect of the controlled flow is avoided, remedied or mitigated.

Principal reasons for adopting

~~This objective is adopted to ensure that the control of flows is managed to address the likely adverse effects of that control.~~

6.3.6 To avoid, remedy or mitigate the adverse effects from fluctuating levels of controlled lakes.

Explanation

Levels in controlled lakes are subject to fluctuations due to the active management of the lake. Lake levels are altered through a control structure such as a dam. The management of controlled lake levels is required to ensure that any adverse effect of fluctuating lake levels is avoided, remedied or mitigated.

Principal reasons for adopting

~~This objective is adopted to ensure that the control of lake levels is managed to address the likely adverse effects of lake level fluctuation.~~

6.4 POLICIES APPLYING TO THE TAKING OF WATER

6.4.1 Takes from rivers where the total volume of water allocated is less than 20% of the river's mean annual low flow will require no minimum flow.

Explanation

Water in a river may already be allocated to a number of uses including lawfully established takes, takes that are permitted under the rules of this Plan, and takes provided for under section 14 of the RMA. When only a small proportion of the available water in a river is taken, there is little need for a consent condition restricting use at low flows because of the low risk of adverse effects due to the taking. The costs of administering minimum flows are high, and it is not cost effective to set minimum flows on takes that have a low risk of causing effects.

The need for gaugings to determine MALF will be at the discretion of Council staff. MALF is determined at the point of take, but needs to take account of the cumulative water takes at other points in the catchment. Once calculated, the MALF for a river will be fixed for the duration of the plan. For smaller streams with high instream values the location and rate of take and the seasonal timing of the take can be controlled by conditions on the consent.

Principal reasons for adopting

To enable resource use where adverse effects are unlikely.

Note: General Policies for the management of flows are outlined in Policies 6.4, while specific Policies for the management of flows associated with run of the river dams are outlined in Policies 6.5. For other dam schemes, Policies 6.4 may apply as well.

6.4.2 Where Policy 6.4.1 does not apply, a minimum flow based on 75% of the mean annual low flow will be applied as a consent condition.

Explanation

Where more than 20% of any stream has been allocated, a minimum flow will be applied to any new consent for taking water. In the absence of detailed hydrological information, minimum flow assessments can be based on a percentage of the mean annual low flow (MALF). A minimum flow of 75% of MALF will provide for the natural character, and life supporting capacity of the aquatic ecosystem. In small streams (less than 250l/s MALF) with documented significant trout spawning values, Fish & Game New Zealand may be considered an affected party. Where multiple takes occur, rationing may need to occur before minimum flow is reached.

Principal reasons for adopting

~~This policy is adopted to enable the taking of water while providing for the maintenance of life supporting capacity and natural character, and recognises that the habitats of smaller rivers are more sensitive to taking water at low flows in comparison to larger rivers.~~

6.4.3 To consider granting an application for a resource consent to take water from a river, subject to a minimum flow lower than that specified in Policy 6.4.2, on a case-by-case basis, provided:

- a) Any adverse effects on instream values or natural character of the source water body or any other connected water body are avoided, remedied or mitigated; and
- b) Any adverse effects on lawfully existing takes of water are no more than minor;
- c) The application if granted, together with the cumulative effect of other existing lawful takes, avoids, remedies or mitigates adverse effects on the life supporting capacity of any waterbody.

Explanation

This policy provides criteria for the granting of consents to take water as an exception to the requirements of Policy 6.4.2. This will generally require the applicant to undertake assessment methods on a site specific basis to determine a flow regime that provides for all instream values including ecological and human use values. Scientific assessments are the most accurate method of determining low flow habitat requirements. However, it is recognised that scientific assessments will not always be appropriate or practical. The cumulative effects of multiple takes will also be considered. This policy is reflected in the rules in chapter 12.

Where adverse effects are considered to be unavoidable, a resource consent may be declined or, if granted, may be subject to conditions requiring unavoidable adverse effects to be remedied, mitigated or to be appropriately compensated for.

Principal reasons for adopting

This policy is adopted to enable consideration of applications for the taking of water as an exception to the requirements of Policy 6.4.2 where such a take will have no more than a minor effect.

6.4.4 Minimum flows required by Policies 6.4.2 or 6.4.3 will not apply to existing community water supply takes identified in Schedule 1B.

Explanation

Under low flow conditions, priority is given to protecting takes for existing community water supply. This policy exempts scheduled existing community water supplies from restriction in terms of the minimum flow requirements applied to other takes. New community takes and any increase in the current level of take will be considered under policies 6.4.1 to 6.4.3.

Principal reasons for adopting

This policy is adopted to enable continued operation of Schedule 1B existing community water supplies. Human health and safety are dependent on a reasonable supply of water and imposing minimum flows on existing takes may compromise human health and safety unnecessarily.

6.4.5 To suspend the taking of water when minimum flows have been reached.

Explanation

When the flow in any river is at or below that minimum flow, all takes that are subject to that minimum flow will be suspended. Conditions relating to minimum flows and suspension will be placed on resource consents for water takes. Permitted activity takes are not restricted by any minimum flows.

Principal reasons for adopting

~~This policy is adopted to indicate when resource consents for the taking of water will be suspended in order to provide for the maintenance of instream values under low flow conditions in the West Coast's rivers.~~

6.4.6 To promote the efficient use of water and to consider the need to cap the overall allocation from any water body.

Explanation

The efficient use of water will be assessed on a case by case basis as it is not possible to establish a definition of efficiency that is appropriate or applicable for all potential water. For irrigation applications rate of take should be determined based on area to be irrigated, soil type and vegetation.

In the future, demand for water may necessitate a cap on further allocation. If this is deemed necessary, the Council will formally resolve that no further permits to take water will be granted in that catchment.

Principal reasons for adopting

~~This policy recognises the need to avoid wastage of water resources and provides for possible future limiting of allocation to avoid adverse effects occurring.~~

6.4.7 To monitor the taking and use of water, including requiring the volume and rate of take to be measured as or where appropriate.

Explanation

Monitoring water use enables better management of the resource. For significant takes, Council may require the instantaneous rate and weekly volume to be monitored. Monitoring is unlikely to be useful for short term or non-consumptive takes.

Principal reasons for adopting

~~This policy is adopted to provide for monitoring the amount of water taken under resource consents. The West Coast Regional Council will use the data to evaluate the effectiveness of this Plan in sustaining the values and uses supported by water bodies.~~

6.5 POLICIES FOR LAKE LEVELS, DAMMING, DIVERSION AND AUGMENTATION

6.5.1 Where lake levels are already controlled, to recognise and provide for the purpose of that control if limits are to be placed on operating levels.

Explanation

Some of the West Coast's lakes are controlled through the use of dams for specific purposes. The purposes of existing controls are to be recognised and provided for when considering resource consents that affect lake levels. Limits on operating levels may be imposed, where necessary, in accordance with Policy 6.5.2.

Principal reasons for adopting

This policy is adopted to ensure that the purpose of controlling any lake where such control already exists is not unduly compromised. Given the investment in dams and associated structures, it would be inappropriate to prevent the use of the dammed water for the purpose for which it was dammed.

6.5.2 To limit the operating levels of any controlled lake, where appropriate, to avoid or mitigate adverse effects on:

- (a) The matters referred to in Policy 5.4.1, 5.4.1B and 5.4.1C;
- (b) Riparian values;
- (c) Lakeshores and public access;
- (d) Bed stability; and
- (e) The needs of the West Coast's people and communities.

Explanation

Changes in the levels of lakes and the rate of change can adversely affect the matters identified in (a) to (e) of the policy. It is important to consider new proposals to manage lake levels and new consents for existing dams, in order that appropriate conditions can be set to avoid or mitigate these adverse effects. These conditions will address extremes in lake levels, and the rates of change of such levels.

Principal reasons for adopting

~~This policy is adopted to provide for the protection of the matters (a) to (e) above, which can be adversely affected by inappropriate lake levels and their rates of change.~~

6.5.3 In regulating the management of controlled flows, other than in association with a small dam or any dam designed to contain contaminants, to have regard to:

- (a) The matters identified in Policy 5.4.1, 5.4.1B and 5.4.1C;
- (b) The periodic release of water at appropriate flow rates, where necessary to remove excess algal growth or accumulated sediment; and
- (c) The existing needs of consumptive users of water;
- (d) The extent to which the water body has been modified by resource use and development.

Explanation

This policy identifies the measures that may be required in managing controlled flows, to avoid or mitigate adverse effects. Dams designed to contain contaminants and small

dams permitted by this plan are excluded. Where the controlled flow conditions could lead to the river's natural and human use values identified in chapter 5, or uses of that water, being compromised, discharge flows can be modified to avoid or mitigate those effects. This may be achieved through setting maximum and minimum levels of flow, and through control of the range or rate of change of flows. The natural and human use values downstream of any existing dam not designed to pass water will be maintained by continuing the existing operating regime. The measures identified in the policy would be introduced upon conditions on the relevant resource consents.

Principal reasons for adopting

~~This policy is adopted to ensure that the natural and human use values supported by water bodies are sustained. The measures identified will provide for adequate water and appropriate flow variation for the existing values and uses.~~

6.5.4 To require, where necessary, desirable and practicable, provision for fish migration.

Explanation

Where the West Coast Regional Council requires a resource consent for damming or diversion of water, it will consider requiring the person to provide means for the upstream and downstream passage of fish including eels. There are situations where passage may not be necessary, if fish are not present; or desirable, if a dam is preventing upstream migration of predatory trout into a threatened native fish habitat, for example. These need to be assessed on a case-by-case basis. In cases where retrofitting a fish pass to a dam is impracticable, alternative remedial measures that enable migration will be considered.

Principal reasons for adopting

~~This policy is adopted to provide for the unimpeded migration of fish. Because some fish species require different aquatic habitats at different life stages, unimpeded access is essential to their survival.~~

6.5.5 In considering resource consents for flow augmentation proposals involving any transfer of water between streams or catchments, regard will be had to avoiding, remedying or mitigating effects on:

- (a) Flora or fauna, including the introduction of new species,
 - (b) Water quantity and quality, and
 - (c) Tangata whenua cultural values,
- in the source and receiving waters.**

Explanation

Augmentation of surface water flows for the purposes of this policy occurs where water is brought into a catchment or stream for subsequent release. When considering any relevant resource consents required for new augmentation schemes, regard must be had to avoiding the adverse effects identified in this policy. In relation to pest species preference will be given to avoiding their introduction.

Principal reasons for adopting

~~This policy is adopted to ensure that new proposals for the augmentation of water resources do not lead to adverse effects.~~

- 6.5.6 When considering diversions associated with disturbance of riverbeds, priority will be given to avoiding, in preference to remedying or mitigating, adverse effects on surface flows.**

Explanation

When considering diversion associated with riverbed disturbance, priority must be given to avoiding adverse effects, in preference to remedying or mitigating them. The avoidance of adverse effects on the quantity of surface flows will be sought in the first instance.

Where adverse effects are considered to be unavoidable, a resource consent may be declined or, if granted, may be subject to conditions requiring unavoidable adverse effects to be remedied, mitigated, or appropriate financial contribution made.

Principal reasons for adopting

~~This policy is adopted to ensure that adverse effects on quantity of surface flows arising from diversion and/or reinstatement associated with disturbance of riverbeds are avoided, remedied or mitigated.~~

- 6.5.7 Financial contributions, works or services may be required to offset, remedy or mitigate any unavoidable adverse effect of the taking, damming or diversion of water.**

Explanation

The taking, damming or diversion of water can result in unavoidable adverse effects on the natural and human use values supported by a water body. Where such effects occur, financial contributions, works or services may be required as a condition of a resource consent to offset, remedy or mitigate the effects. ~~The amount and type of financial contribution, or the type of work or service, will depend on the nature of the activity and will relate to the adverse effects on the natural and human use values. Financial contributions are detailed in Chapter 15 of this Plan.~~

Principal reasons for adopting

~~This policy is adopted to ensure provision is made to either offset, remedy or mitigate any unavoidable adverse effect of the damming or diversion of water.~~

6.6 ANTICIPATED ENVIRONMENTAL RESULTS

- 6.6.1 ~~Adverse effects on instream values, cultural values natural character, life supporting capacity and water quality of water bodies are avoided, remedied or mitigated.~~**

- 6.6.2 ~~People and communities have access to suitable supplies of water for their present and reasonably foreseeable needs.~~**

- ~~6.6.3 Adverse effects from the inter-catchment or inter-stream transfers of water are avoided, remedied or mitigated.~~
- ~~6.6.4 Levels of controlled lakes and flows downstream of dam structures (other than dam structures designed to store contaminants) and other diversions provide for the requirements of instream values, other users of water, and any natural and human use values.~~
- ~~6.6.5 Water efficiency principles are adhered to and conflict among those taking water is minimised.~~

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Chapter 7

SURFACE WATER QUALITY

7.1 INTRODUCTION

~~The West Coast generally enjoys high quality water, which provides opportunities for varied community use, including recreation, domestic and public water supply and irrigation. It also sustains indigenous flora and fauna, trout and salmon, contributes to the amenity values and natural character of the West Coast's lakes, rivers and wetlands and assimilates waste.~~

Water quality can be adversely affected by discharges of contaminants resulting from human activities. There are two main types of discharge that can affect water quality, namely “point source”, those that occur at a definable place, often through a pipe or drain, and “non-point source”, those that enter a water body from a diffuse source, such as land runoff or infiltration.

This chapter addresses point source discharges to surface water only. In the region many discharges are directly to water, including treated dairy effluent, municipal sewage discharges, and industrial effluent (mining, ports, and dairy companies). ~~Non point source discharges are managed by the Regional Plan for Discharges to Land. Chapter 9 of this Plan addresses groundwater quality.~~

Where water quality is adversely affected by these discharges, this reduces the ability of lakes and rivers to support the needs of people and communities, and aquatic life. There is a particular concern in relation to discharges of human sewage to water, which Poutini Ngäi Tahu find culturally offensive.

Sometimes water quality can be affected by a large water take, where that take reduces the assimilative capacity of the water body. Adverse effects due to a contaminant discharge should be mitigated in the first instance by reducing the level of contaminant being discharged, rather than by managing takes to alter the assimilative capacity of the water body.

Note: The provisions in this chapter are in addition to those in Chapter 5, which seek to maintain or enhance the natural and human use values supported by surface water bodies.

7.2 ISSUES

~~7.2.1 Inappropriately sized mixing zones for the discharge of contaminants can compromise the natural and human use values supported by water bodies for considerable distances downstream.~~

Explanation

~~Discharges of contaminants authorised under resource consents must meet any specified water quality standard set in respect of receiving waters after reasonable mixing. Reasonable mixing occurs in a mixing zone, which can be regarded as an accepted area of non-compliance. Beyond the mixing zone, there should be no adverse effects on the natural and human use values supported by the water body.~~

~~Where the size of mixing zones is inappropriate, the effect of the contaminant extends over a wider area of the water body. The treatment of contaminants prior to discharge can enable a reduction in the extent of a mixing zone. What is acceptable as a mixing zone in one water body may not be acceptable in others, due to differences in the sensitivity of supported values, the physical nature of the natural processes, and the nature of the discharge. All of these factors need to be considered in the determination of reasonable mixing.~~

~~7.2.2 Stormwater discharges are unavoidable, but may contain contaminants that have the potential to degrade water quality.~~

Explanation

~~Stormwater is the water that runs off any impervious surface. In urban or industrial areas, stormwater is commonly collected, reticulated and discharged to water. The water can pick up contaminants prior to collection, as it runs over land. These contaminants may be derived from a number of sources, including:~~

- ~~(a) Oil residues and other contaminants from roads and car parks;~~
- ~~(b) Accidental spills;~~
- ~~(c) Contaminated land; and~~
- ~~(d) Litter.~~

~~Once stormwater reaches a reticulation system, it can become contaminated through:~~

- ~~(a) Sewerage and stormwater systems not being effectively separated; or~~
- ~~(b) Inappropriate disposal of material to the system.~~

~~There are a number of techniques used to improve the condition of stormwater prior to its discharge.~~

~~7.2.3 Contaminants are not always discharged to the most appropriate receiving environment.~~

Explanation

~~Receiving environments need to be able to assimilate, treat, or absorb the contaminants discharged to them. In the past, water has been used as the most common medium for the disposal of contaminants, although soil is increasingly being seen as an alternative receiving environment. There is a risk of contamination where the discharge exceeds~~

~~the capacity of the water or land to contain it. Where soil's capacity to assimilate the contaminants is exceeded, subsequent contamination of water may occur through runoff and infiltration.~~

~~**7.2.4—Water can be contaminated where contaminated land:**~~

- ~~(a) Is flooded by an impoundment of water; or
(b) Has water diverted over or through it.~~

~~**Explanation**~~

~~There is the potential for adverse effects on surface and groundwater quality where land, contaminated by a hazardous substance, is in contact with water. Damming or diverting water can lead to such direct contact.~~

~~**7.2.5—Water can be contaminated as a result of land disturbance that results in acid rock drainage.**~~

~~**Explanation**~~

~~This issue is specific to areas of land that are disturbed and that contain soft sedimentary Brunner coal measures. When rainwater or other sources of water interface with the disturbed measures, a chemical reaction occurs which produces acid. The acidic water can then enter water bodies and contaminate them.~~

7.3 OBJECTIVES

7.3.1 To maintain or enhance the quality of West Coast's water.

~~**Principal reasons for adopting**~~

~~To promote the sustainable management of all the region's surface water bodies with regard to water quality. This includes maintaining the quality and safety of the water source so that it can continue to be used for human consumption and will maintain life supporting capacity.~~

7.4 POLICIES

7.4.1 The West Coast Regional Council will manage the swimming areas identified in Schedule 4 for contact recreation purposes (Class CR) and all other surface water bodies in the region for aquatic ecosystem purposes (Class AE).

Explanation

Aquatic ecosystem and contact recreation standards are set in the third schedule of the Resource Management Act 1991 (see below). Contact recreation water bodies are identified in Schedule 4, and all other water bodies will be managed for aquatic ecosystem purposes. AE and CR classes do not exclude other water quality classes being applied if identified as appropriate through the resource consent process.

- Class AE Water (being water managed for aquatic ecosystem purposes)
 - (1) The natural temperature of the water shall not be changed by more than 3° Celcius.
 - (2) The following shall not be allowed if they have an adverse effect on aquatic life:
 - (a) Any pH change:

- (b) Any increase in the deposition of matter on the bed of the water body or coastal water;
 - (c) Any discharge of a contaminant into the water.
 - (3) The concentration of dissolved oxygen shall exceed 80% of saturation concentration
 - (4) There shall be no undesirable biological growths as a result of any discharge of a contaminant into the water
- Class CR Water (being water managed for contact recreation purposes)
 - (1) The visual clarity of the water shall not be so low as to be unsuitable for bathing.
 - (2) The water shall not be rendered unsuitable for bathing by the presence of contaminants.
 - (3) There shall be no biological growths as a result of any discharges of a contaminant into the water.

In some streams on the West Coast the AE standards are unable to be met due to high acidity (both naturally occurring and caused by historic mining activities). This is reflected in Policy 7.4.2.

Principal reasons for adopting

~~This policy provides a clear management target for all water bodies.~~

7.4.2 Rivers which have acid drainage issues, ~~particularly those identified in Figure 3,~~ will be managed as follows:

- (a) **Activities that reduce pH of receiving waters must avoid, remedy or mitigate acidity effects and should achieve the natural pH level of the affected river wherever practicable; and**
- (b) **Activities that increase dissolved iron concentrations or the concentration of any other metal or non-metal in the receiving water must avoid, remedy or mitigate adverse effects and the natural metal/non-metal concentration of the receiving water should be achieved wherever practicable.**

Explanation

Acid drainage issues will be identified when a resource consent is applied for. Mining activities can cause or exacerbate acid drainage from certain rock types. Some rivers have naturally high acidity and elevated heavy metal levels due to geology. In addition to the requirements of policies 7.4.3 to 7.4.7 and chapter 5 policies (and instead of Policy 7.4.1), this policy identifies specific parameters that need particular attention if objective 7.3.1 is to be met. In addition to acidity, contaminants such as iron and manganese; and acid soluble aluminium, zinc, arsenic, nickel, cadmium, chromium, copper, and lead; and sulphate, calcium, and magnesium can lead to serious and long term effects on the aquatic ecosystem. Where natural contaminant levels are high the aim is to require that mining activities avoid, remedy or mitigate effects to maintain water quality as close as practicable to natural conditions. The relevant guideline levels for metals is a developing science and ANZECC guidelines are not necessarily relevant if better localised information is available.

Principal reasons for adopting

~~To provide a management framework for activities involving land use disturbance that results in discharges to water that is both enabling and addresses water quality issues. The provision of clear management framework will reduce costs to industry and enhance environmental outcomes.~~

7.4.3 To encourage the remediation of orphan sites as a method to enhance existing water quality and offset adverse effects from new mining developments.

Explanation

This policy provides a management framework for ‘orphan’ areas that have existing acid rock drainage issues.

Principal reasons for adopting

~~To enhance the water quality in areas that are degraded by acid rock drainage and promote sustainable management of water resources in these areas.~~

7.4.4 When considering applications for new resource consents for existing discharges of contaminants to water, to have regard to opportunities to enhance the existing water quality of the receiving water body at any location for which the existing water quality can be considered degraded in terms of its capacity to support its natural and human use values.

Explanation

There is the opportunity, with new resource consents for existing discharges, to achieve an enhancement in water quality. This can occur when the consent holder re-examines the discharge activity and makes use of technological advances in the reduction, reuse, recycling, or treatment of contaminants. The ~~West Coast Regional~~ Council will have regard to these opportunities when considering resource consents to discharge contaminants to water.

This policy applies to any location for which the existing water quality can be considered degraded in terms of its capacity to support its natural and human use values.

Principal reasons for adopting

~~This policy is adopted to ensure that opportunities are taken to achieve improved water quality in the West Coast’s lakes and rivers where water quality is degraded. The policy reflects the importance of enhancing water quality to the region’s people and communities.~~

7.4.5 When considering applications for resource consents to discharge contaminants to water to have regard to:

- (a) **The nature of the discharge and the sensitivity of the receiving environment to adverse effects;**
- (b) **The Financial implications, and the effects on the environment of the proposed method of discharge when compared with other options;**
- (c) **The current environmental mitigation technology and the likelihood that the proposed method can be successfully applied; and**
- (d) **The cumulative effects of discharges of contaminants and the assimilative capacity of the water body and actual or potential effects in the coastal marine area.**

Explanation

When considering the avoidance, remedy or mitigation of the adverse effects of the discharge of contaminants to land or water under a resource consent, the West Coast Regional Council will consider matters identified in (a) to (d) in the policy. This ensures the recognition of any environmental mitigation technology constraint upon the adoption of alternative treatment or discharge methods, and the best practicable option, cumulative effects and assimilative capacity, and downstream effects on the coastal marine area.

Principal reasons for adopting

~~This policy is adopted to ensure that consideration is given to appropriate means for avoiding, remedying or mitigating the adverse effects of contaminants on water or land, to enable the most environmentally sound means to be adopted.~~

- 7.4.6 Mixing zones will be required for the discharge of contaminants to water. These will be limited to the extent necessary to take account of:**
- (a) Water quality classes;**
 - (b) The size and sensitivity of the receiving environment;**
 - (c) The matters identified in Policy 5.4.1;**
 - (d) The physical processes acting on the area of discharge; and**
 - (e) The particular discharge, including contaminant type, concentration, and volume.**

Explanation

Discharges of contaminants authorised under resource consents must meet any water quality standard set in respect of receiving waters after “reasonable mixing”. Reasonable mixing occurs in a mixing zone, an accepted area of non-compliance. Matters (a) to (e) of the policy will be considered in the determination of the size of any mixing zone. In some cases devices may need to be installed to accelerate mixing.

Principal reasons for adopting

~~This policy is adopted to provide guidance to the establishment of mixing zones such that their impact on natural and human use values is as small as possible.~~

- 7.4.7 The duration of any new resource consent for an existing discharge of contaminants will take account of the water quality class after reasonable mixing, and any anticipated adverse effects of the discharge on an affected water body, and:**
- (a) Will be up to 35 years where the discharge will meet the water quality class for the duration of the resource consent;**
 - (b) Will be no more than 15 years where the discharge does not meet the water quality class but will progressively meet that standard within the duration of the resource consent;**
 - (c) Will be no more than 5 years where the discharge does not meet the water quality class; and**
 - (d) No resource consent, subsequent to one issued under (c), will be issued if the discharge still does not meet the water quality class.**

Explanation

Resource consents to discharge contaminants may be issued for up to 35 years under the Resource Management Act. The duration of new resource consents for existing discharges under this Plan will be set having regard to the effect of the matters listed in this Policy.

~~The maximum duration of any resource consent will be 35 years. Where the discharge will not meet the water quality class, the duration will be less. This encourages the resource consent holder to investigate alternatives that will improve the discharge, in order to meet the requirements of the Policy.~~

In recognition of any environmental mitigation technology constraints on those proposing to undertake the discharge, a short duration resource consent, which does not exceed 5 years, may be granted in accordance with (c), in which time they must comply with the water quality class. Discharges that do not comply by the time the resource consent has expired will not be granted a further resource consent for the discharge. ~~Another option is to make~~ a commitment to meet the water quality class progressively within the duration of the resource consent. The duration of such resource consents would not exceed 15 years, in accordance with (b).

Principal reasons for adopting

~~This policy is adopted to give guidance for determining the appropriate duration of any resource consent to continue discharging contaminants. It will enable proper consideration of changes over time in the receiving environment, and will encourage, within technical and financial constraints, a reduction in the adverse effects of point source discharges.~~

- 7.4.8 With respect to discharges from any new stormwater reticulation system, or any extension to an existing stormwater reticulation system, to require:**
- (a) The separation of sewage and stormwater;**
 - (b) The prevention of contamination by industrial or trade waste; and**
 - (c) The use of techniques to trap debris, sediments and nutrients present in runoff.**

Explanation

In terms of the Plan's rules for permitted and discretionary activities for new discharges, or extensions to the catchment area of existing discharges from reticulated stormwater systems, the requirements of (a) to (c) will apply, as required.

Principal reasons for adopting

~~This policy is intended to mitigate the impact on the water quality of receiving water bodies in urbanised areas or other areas served by a stormwater reticulation system.~~

- 7.4.9 To promote and enable the progressive upgrading of the quality of water discharged from existing stormwater reticulation systems where appropriate.**

Explanation

The ~~West Coast Regional~~ Council will encourage the operator of any existing stormwater reticulation system to improve the quality of stormwater discharged from the system where appropriate. Measures that can be taken to achieve this improvement include:

- (a) The separation of sewage and stormwater;
- (b) The prevention of contamination by industrial or trade waste; and
- (c) The use of techniques to trap debris, sediments and nutrients present in runoff.

Priority will be given to improving discharges to those water bodies where water quality classes cannot be met and natural and human use values are adversely affected. Such measures may not be necessary where an existing discharge meets water quality classes or is having no more than a minor adverse effect on any natural or human use value supported by an affected water body. Resource consents for stormwater may be issued that allow time for water quality classes to be met. This recognises financial and technical constraints associated with these types of discharges.

Principal reasons for adopting

~~This policy is adopted to reduce the level of contaminants present in existing stormwater discharges. This is intended to mitigate the impact on the water quality of receiving water bodies in urbanised areas or other areas served by a stormwater reticulation system.~~

7.4.10 To avoid the damming or diversion of water over contaminated land where it would result in contamination of water or, where avoidance is not practicable, to require the removal or treatment of the contaminated land.

Explanation

There is the potential for adverse effects on water quality where land contaminated by hazardous substances comes into contact with water. Such effects may occur:

- (a) Within a reservoir created by the damming of a water body;
- (b) Within diverted water where the water passes over contaminated land; or
- (c) Downstream of that reservoir or diverted water.

When considering any resource consent for new proposals for damming or diversion of water, the ~~West Coast Regional~~ Council must be satisfied that the activity would not result in water being contaminated by its coming into contact with contaminated land. The Council maintains a register of contaminated sites on the West Coast. Policy 7.4.10 does not apply to dams designed for the storage of contaminants.

Principal reasons for adopting

~~This policy is adopted to prevent degradation of water quality caused by contaminated land coming into contact with water as a result of the damming or diversion of water.~~

7.4.11 To require the holder of any consent for a dam constructed for the purposes of storage of contaminants to completely remedy any adverse effect of the failure or overtopping of the dam structure, either during or after its construction.

Explanation

Where a resource consent is required for damming of water for the purpose of storing contaminants, the consent authority will require the person erecting the dam to plan for and provide measures, including bonds under Section 108 of the Resource Management Act, for the complete remediation of any loss or damage caused by the uncontrolled release of contaminants. There is a risk of such releases where the dam constructed to store the contaminants fails or is overtopped, either during or after its construction. Construction of dams is covered by the Proposed Regional Land and Riverbed Management Plan.

Principal reasons for adopting

~~This policy is adopted to provide for the complete remediation of adverse effects arising from the failure or overtopping of a dam structure.~~

~~**7.5 ANTICIPATED ENVIRONMENTAL RESULTS**~~

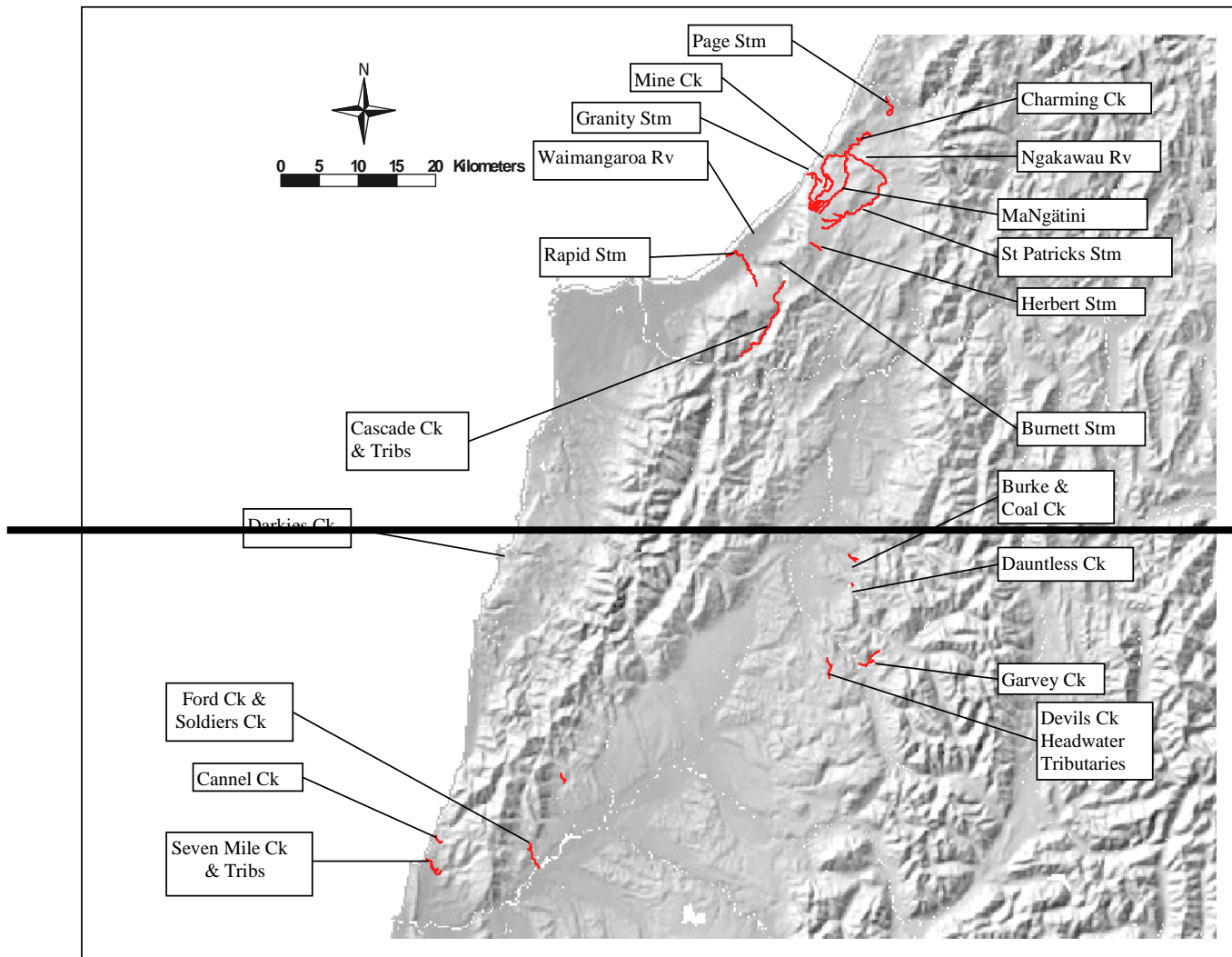
~~**7.5.1 Where they apply, contact recreation and aquatic ecosystem classes are met, after reasonable mixing.**~~

~~**7.5.2 Existing water quality is maintained or enhanced.**~~

~~**7.5.3 People and communities have access to suitable supplies of water for their present and reasonably foreseeable needs.**~~

~~**7.5.4 The life-supporting capacity of the West Coast's waterbodies is safeguarded.**~~

Figure 3: Map of known acid rock drainage streams in the West Coast Region



Chapter 8

SPECIAL MANAGEMENT AREA: LAKE BRUNNER/KOTUKU-WHAKAOHO CATCHMENT

8.1 INTRODUCTION

Lake Brunner/Kötuku Whakaoho is the largest lake in the West Coast region, at 36.1 km². The Lake Brunner/Kötuku-Whakaoh o catchment is a special management area as it has values associated with fishery and tourism, is an important recreational resource, is prized highly by tangata whenua and is an important area ecologically. Swimming, fishing and boating are popular recreational activities on the lake in the summer months.

The catchment provides feeding, roosting and breeding habitat for a diverse range of waterfowl and wading birds. Land-locked populations of koaro, banded and giant kokopu, common bully, upland bully and dwarf galaxiid are present. Poutini Ngäi Tahu value many of the native bird and plant species as taonga.

Lake Brunner/ Kötuku-Whakaoho is considered the most vulnerable lake on the West Coast due to high development pressure and high recreational use. Land use in the catchment includes farming (20-25% of the catchment), forestry, recreational use, and residential and tourism development.

~~Moana is the biggest town in the catchment, where housing development has one of the fastest rates of growth in New Zealand. In summer the population trebles. Recent subdivision has also occurred in Iveagh Bay, and the site for disposal of treated waste from this development is Crooked River.~~

Lake Brunner/Kötuku- Whakaoho is of immense significance to Poutini Ngäi Tahu as recognised by its inclusion as a statutory acknowledgement area in the Ngäi Tahu Claims Settlement Act. Kötuku-Whakaoho holds an important place in Poutini_Ngäi Tahu history as the site of the tribe's battle with Ngäti Wairaki. Victory in this battle saw Poutini Ngäi Tahu gain manawhenua in the area. Besides being a famous battleground, Kötuku-Whakaoho was important as the site of a permanent settlement, acting as a focal point for food-gathering parties. Kötuku-Whakaoho is also recognised as being a major mahinga kai and a key stopover point for early travelers.

When managing the catchment consideration must be given to the whole Plan, including other objectives and policies and methods as appropriate.

8.2 ISSUES

~~8.2.1 The natural and human use values in the Lake Brunner catchment may be adversely affected by a decline in water quality.~~

Explanation

~~The Lake Brunner catchment's water bodies support a high number of natural and human use values. Land use and further development in the catchment can adversely~~

~~affect those values, through potentially contributing to a gradual decline in water quality as the lakes' assimilative capacity is reached.~~

~~8.2.2 More detailed information is needed on the effects of land use and development in the Lake Brunner catchment.~~

Explanation

~~Water quality measured between 1992 and 1996 showed good water quality, well within the accepted national standards for contact recreation. However there was also a downward trend in water clarity and nutrient concentrations over that time.~~

~~Despite the detailed monitoring already undertaken, further information is needed to further assess trends in water quality over time, in order to measure the effectiveness of management actions. One method for gaining this information involves the use of nutrient budgets, which measure nutrient inputs and outputs in order to assist in determining the assimilative capacity of water bodies.~~

8.3 OBJECTIVES

~~8.3.1 To maintain, and where practicable enhance, the quality of water in the Lake Brunner catchment.~~

Explanation

The Lake Brunner catchment water bodies support a range of natural and human use values. Water quality in the lake and its tributaries ~~appears to be declining~~. The Council wishes to reverse this decline and achieve water quality enhancement, provided this can be practicably achieved. At the minimum, maintenance of existing water quality is required.

Principal reasons for adopting

~~This objective is adopted in recognition of the importance of water quality in sustaining the natural and human use values of Lake Brunner catchment's water bodies.~~

8.3.2 To avoid, remedy or mitigate adverse effects on aquatic ecosystems, cultural values and contact recreation in the Lake Brunner/Kōtuku-Whakaoho catchment.

Explanation

Aquatic ecosystems and contact recreation are highly valued in the catchment and any effects on these values need to be appropriately managed.

Principal reasons for adopting

~~This objective is adopted in recognition of the natural and human use values of the catchment's water bodies.~~

8.4 POLICIES

Note: Chapter 5 and Chapter 7 Policies, as relevant, apply to discharges in this catchment in addition to the Chapter 8 Policies.

8.4.1 The West Coast Regional Council will manage Schedule 4 swimming areas in the Lake Brunner catchment for contact recreation purposes (Class CR) and all other surface water in the catchment for aquatic ecosystem purposes (Class AE).

Explanation

The water quality standards for aquatic ecosystems and contact recreation are set out in the third schedule of the Resource Management Act. The aquatic ecosystem standard will be used across the catchment while the contact recreation standard will be used for particular areas identified in Schedule 4.

Principal reasons for adopting

~~This policy is adopted to set a clear management goal, by setting water quality standards for specific parts of water bodies in the catchment.~~

8.4.2 To have regard to the cumulative effects of discharges of contaminants and the assimilative capacity of Lake Brunner/Kotuku-Whakaoho.

Explanation

Discharges in the Lake Brunner catchment can exceed the capacity of the sensitive lake ecosystem to assimilate the combined nutrient input from all tributaries. When considering applications for resource consents, the cumulative effect of all other nutrient inputs into the catchment will be considered. The Council is currently undertaking studies to establish the likely assimilative capacity of the lake.

Principal reasons for adopting

~~This policy is adopted to ensure that the cumulative effects of all nutrient inputs into the lake will be considered and managed appropriately.~~

8.5 METHODS

In order to give effect to the policies relating to the Lake Brunner catchment, the West Coast Regional Council will use the following methods in addition to other methods in this and other plans:

8.5.1 To encourage the development and implementation of codes of practice and environmental management systems.

~~The West Coast Regional Council will encourage and assist community, recreational and industry groups in the Lake Brunner catchment to prepare codes of practice and environmental management systems for land and water use activities, in order to avoid, remedy or mitigate adverse effects on water. This may involve:~~

- (i) ~~Working with landholders and relevant industry and community groups to identify how land use activities can be carried out in ways which minimise non-point source contamination; and~~
- (ii) ~~Encouraging industry and landholders to implement, where appropriate, existing codes of practice or management guidelines within the Lake Brunner catchment to achieve the objectives and policies of this Plan.~~

8.5.2 To promote and encourage the rehabilitation of river and lake edges in reaches where water quality may be enhanced as a result.

~~The West Coast Regional Council will identify those parts of wetlands, lakes and rivers in the Lake Brunner catchment where water quality has degraded by land use activities. Whilst this Plan does not regulate land use activities, this method is designed to promote integrated management of non point source discharges from land use activities. Identifying degraded areas will enable the appropriate management response to occur.~~

8.5.3 To promote and encourage land use practices that maintain and/or enhance water quality.

~~Land use significantly influences the water quality in the catchment, and hence the catchment needs to be managed in an integrated way. This includes management of land use through the Grey District Plan and other Regional Plans.~~

8.5.4 To place a priority on taking enforcement action in the Lake Brunner catchment, and particularly in relation to any activities that do not comply with this plan or resource consent conditions.

~~Principal reasons for adopting~~

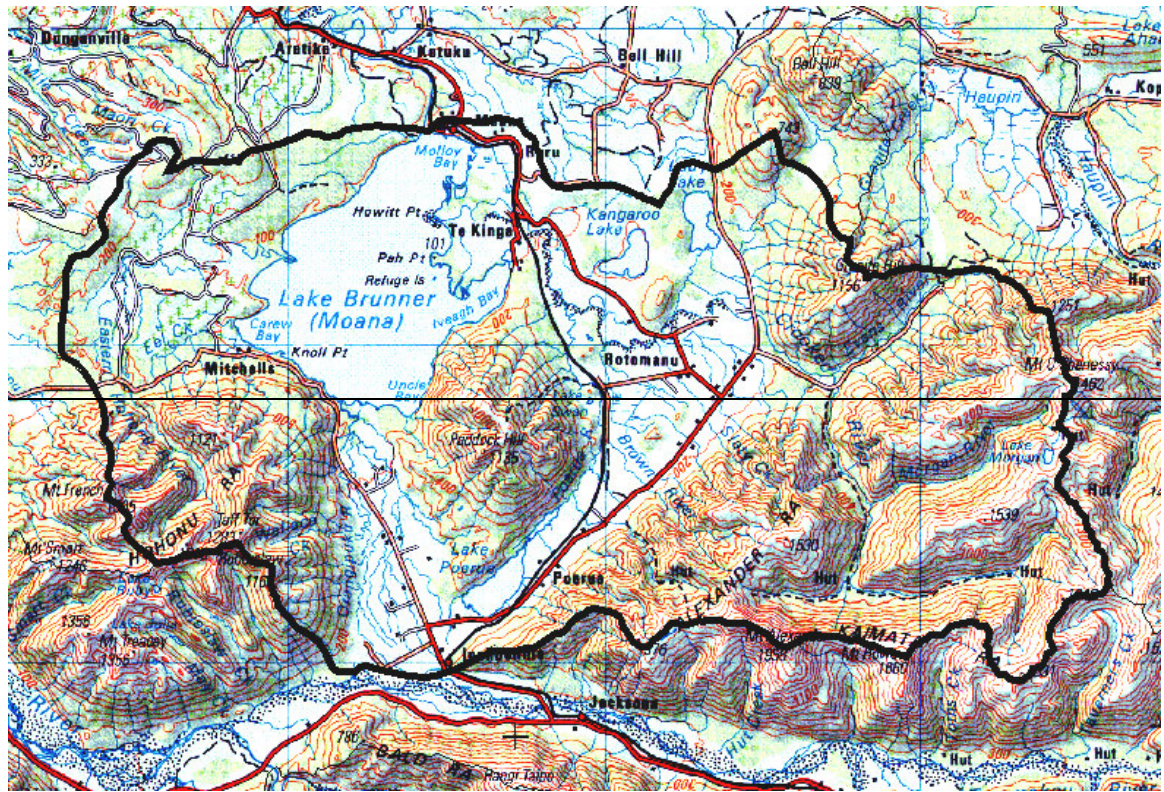
~~These methods are adopted to achieve the objective for the Lake Brunner catchment, together with other methods and rules in this and other Council plans.~~

~~8.6 ANTICIPATED ENVIRONMENTAL RESULTS~~

~~8.6.1 The water quality of the Lake Brunner catchment meets aquatic ecosystem and contact recreation standards.~~

~~8.6.2 There is no loss of water quality in the Lake Brunner catchment, and improvements are recorded in key areas.~~

Figure 4: Map of Lake Brunner Catchment



Chapter 9 GROUNDWATER

9.1 INTRODUCTION

Groundwater is water that occupies or moves through cavities and geological formations and permeable layers or porous material beneath the ground surface. It is an important resource to many West Coast communities, where it serves a number of recognised uses. These uses include domestic and public water supply, stock drinking water, irrigation and industrial uses. This water is largely accessed from shallow aquifers. High rainfall on the West Coast assists recharge of these aquifers. The region also has groundwater in cave and karst systems, which have recreational, cultural, ecological and aesthetic values.

There is often a hydrological connection between surface water and groundwater. Where the connection is significant, there needs to be recognition of the fact that the use of surface water can affect groundwater, and vice versa.

The effects of inappropriate land, water use and development on groundwater quantity and quality are often long term, and in some cases may be permanent. It is therefore important that particular consideration be given to the protection of aquifers for the continued benefit of present and future generations.

9.2 ISSUES

~~9.2.1 The taking of groundwater can lower the water level in neighbouring bores and hydraulically linked surface water bodies.~~

Explanation

Takes of groundwater can adversely affect other existing groundwater takes through bore interference, and impact on hydraulically linked surface water. Bore interference relates to groundwater takes that lower water levels in a neighbouring bore so that they may be unable to take the water they require, or their pumping costs may increase. Shallow bores that are adjacent to surface water bodies may share water through freely draining gravels. This connection means that lower groundwater levels prevents surface water users from taking their authorised amount of water, or damages the ecological values of the water body. The potential for interference between bores, or between a bore and a surface water body is related to the proximity of the bore to neighbouring bores or a surface water body, the transmissivity within the aquifer and the rate at which water is taken.

~~9.2.2 Groundwater resources can become contaminated as a result of:~~

- ~~(a) Point source discharge of contaminants;~~
- ~~(b) Infiltration of contaminated surface water.~~
- ~~(c) Excessive extraction.~~
- ~~(d) Poor bore or well head management.~~

Explanation

~~Items (a) to (d) above can cause contamination of aquifers which can take a long time to remedy, and may foreclose water supply options for future generations. The Regional~~

~~Plan for Discharges to Land addresses non-point source discharges and Chapter 7 of the Water Management Plan addresses point source discharges.~~

9.3 OBJECTIVES

9.3.1 To sustain existing uses of the West Coast's groundwater, by protecting water quantity and quality and avoiding depleting surface water flows.

Explanation

Groundwater is an important resource in certain areas of the West Coast as it provides water for domestic and public water supply, stock drinking water, industry and irrigation. This objective seeks to sustain these consumptive uses for the continued benefit of present and future generations.

Principal reasons for adopting

~~This objective is adopted to ensure that present and future generations can continue to benefit from the West Coast's significant groundwater resources.~~

9.3.2 To minimise conflict between competing uses of groundwater.

Explanation

The taking of water through one bore can reduce the amount of water available at other nearby bores through reductions in groundwater levels. This creates the potential for conflict among users of groundwater bores. This objective seeks to avoid such conflict by minimising the potential for bore interference.

Principal reasons for adopting

~~This objective is adopted in recognition of the investment that the West Coast's communities have made in resources to take and use groundwater. By minimising the potential for bore interference, continued access to the resource will be enabled.~~

9.3.3 To avoid, remedy or mitigate adverse effects on surface water bodies associated with groundwater takes.

Explanation

Hydraulically linked surface water bodies can be adversely affected by the taking of groundwater. Effects include contamination and the lowering of water levels. When considering groundwater takes, regard must be had to avoiding, remedying or mitigating adverse effects.

Principal reasons for adopting

~~This objective is adopted to ensure that groundwater takes are managed so that the natural and human use values supported by the West Coast's water bodies can continue to exist.~~

9.4 POLICIES

9.4.1 In managing any activity involving the taking of groundwater to ensure that adverse effects are avoided, remedied or mitigated.

Explanation

Groundwater and surface water can be adversely affected by the taking of groundwater. This requires consideration of connectivity and transmissivity between water bodies. When considering these activities, regard must be had to avoiding, remedying or mitigating adverse effects.

~~Principal reasons for adopting~~

~~It is important to retain the ability of the groundwater to meet the present and future needs of groundwater users.~~

9.4.2 In managing the taking of water from any groundwater aquifer, priority will be given to the avoidance of:

- (a) The total take from all bores exceeding the annual renewable yield of the aquifer; and
- (b) Depletion of any surface water resource.

Explanation

The taking of groundwater can have adverse effects on both groundwater and surface water resources. When considering the taking of water from any groundwater aquifer, priority will be given to avoiding the adverse effects identified above. If the adverse effects of the taking are considered to be unavoidable, they must be remedied or mitigated. The way in which takes of groundwater affect surface water resources is influenced by the degree to which an aquifer allows water to pass through it (its transmissivity) and the degree to which it is connected to surface water.

~~Principal reasons for adopting~~

~~This policy is adopted to ensure that the quantity of groundwater, and any connected surface water, is maintained in order to provide for the needs of the West Coast's present and future generations, and instream values.~~

9.4.3 In managing the taking of groundwater:

- (a) To have regard to avoiding adverse effects on existing groundwater takes, unless the approval of affected persons has been obtained; and
- (b) To give priority to avoiding adverse effects on community water takes listed in Schedule 3.

Explanation

This policy recognises that the taking of groundwater can result in the lowering of water levels in a neighbouring bore. Conditions on a resource consent to take groundwater may limit the instantaneous take of groundwater in order to maintain existing access to water in neighbouring bores. This access includes groundwater takes for community supply outlined in Schedule 3.

Principal reasons for adopting

~~This policy is adopted to maintain, as far as possible, the availability of groundwater at existing bores. This will assist to avoid the potential for conflict among those taking groundwater.~~

9.4.4 To ensure that the quantity of water granted, under a resource consent for the taking of water, is no more than that required for the intended use of that water having regard to the local conditions.

Explanation

When considering applications for resource consents to take water, the actual quantity required for the intended use of the water taken must be reflected in any consent granted, to avoid over allocating the resource which can prevent future access, and promote the efficient use of water.

Principal reasons for adopting

~~This policy is adopted to ensure that the water allocated to any take under a new resource consent is no more than the actual requirements of the user. Reducing inefficient use of water will enable more people to benefit from water available for consumptive use, and provide for the sustainable management of the resource.~~

9.4.5 To manage the taking of water from any bore such that groundwater contamination by sea water intrusion is avoided.

Explanation

Where pumping from a bore near the coast reduces the water level in an aquifer so that sea water enters the aquifer, contamination occurs. This policy envisages setting minimum water levels when considering resource consent applications to take groundwater from bores near the coast.

Principal reasons for adopting

~~This policy is adopted to prevent sea water intrusion into aquifers near the coast.~~

9.4.6 In granting resource consents to take water from any aquifer, to require the volume and rate of take to be accurately measured and groundwater quality to be monitored as or where appropriate.

Explanation

Monitoring groundwater use enables management of the resource for existing and potential users. Requiring the rate, weekly volume and quality of groundwater taken from any bore to be monitored will provide data to determine changes in water quantity or quality in each aquifer.

Principal reasons for adopting

~~This policy is adopted to provide for monitoring of groundwater quantity and quality. The West Coast Regional Council will use the data to evaluate the effectiveness of this Plan in sustaining the existing and potential uses supported by groundwater.~~

~~9.5 ANTICIPATED ENVIRONMENTAL RESULTS~~

~~9.5.1 Aquifer yield is maintained so that the West Coast's people and communities have access to groundwater for their present and reasonably foreseeable needs.~~

~~9.5.2 Groundwater is protected from long term contamination caused by the leaching or direct entry of contaminants.~~

~~9.5.3 Bore interference is minimised.~~

~~9.5.4 Instream values are maintained in hydraulically linked surface water bodies.~~

Chapter 10 GEOTHERMAL WATER

10.1 INTRODUCTION

The West Coast Region contains geothermal resources that provide opportunities for geothermal heat and energy use. The geothermal springs of the West Coast are low temperature geothermal systems derived from tectonic activity along the Alpine and Hope Faults. They are very different to the fluids of volcanic geothermal systems found in the central North Island, which are generally much hotter and of a different chemical composition.

Current geothermal resource use in the region is from surface discharges. There are a number of small hot springs in the region, located on the lower slopes of the western flanks of the Southern Alps. Many of these geothermal springs are located within public conservation land and require a Concession from the Department of Conservation before they can be utilised commercially. These include springs within public conservation land in the Wanganui Valley, as well as a spring in the headwaters of the Haupiri River. This spring was the site of a commercial spa developed by the Crown about the turn of last century which has since fallen into disuse.

The major commercial use of geothermal resources occurs at the Maruia Springs, located in the upper reaches of the Maruia River. The surface discharge is tapped and developed as a commercial spa. Some West Coast geothermal water resources, the 'waiwera' of Te Tai Poutini, are used by Poutini Ngäi Tahu for customary cultural purposes.

~~The West Coast Regional Policy Statement requires the avoidance, remediation or mitigation of adverse effects of discharges of geothermal water (Policy 8.3.2), and that a number of matters be considered when making decisions over geothermal water levels or flows, or allocating geothermal water (Policy 8.3.1). This chapter applies the direction given by the Regional Policy Statement to the management of activities affecting geothermal water, to achieve the above outcomes.~~

The taking, using, damming or diversion of heat or energy from water or from the material surrounding geothermal water requires consent from the West Coast Regional Council unless it is provided for by Section 14 of the Act. Activities that do not require consent include:

- Taking and use for: an individual's reasonable domestic needs, or the reasonable needs of an individual's animals for drinking water, where neither activity has or is likely to have an adverse effect on the environment; or
- The heat or energy is taken or used in accordance with tikanga Māori for the community benefit of the tangata whenua of the area and does not have an adverse effect on the environment.

Bearing this in mind the following objectives and policies are only likely to apply in circumstances relating to commercial or recreational operations.

10.2 ISSUE

~~10.2.1 Inappropriate taking, use, damming, diversion or discharge of geothermal water in the West Coast can lead to adverse effects.~~

Explanation

~~Adverse effects may include degradation of thermal features, and effects on waterways and living organisms, and contamination of groundwater from surface disposal of waste liquid.~~

10.3 OBJECTIVE

10.3.1 To manage the use of West Coast's geothermal resources by avoiding, remedying or mitigating adverse effects on the environment associated with that use.

Explanation

Any taking, use, damming, diversion or discharge of geothermal water must be carefully managed to minimise any adverse effect.

Principal reasons for adopting

~~This objective is adopted to avoid, remedy or mitigate adverse effects arising from geothermal water use.~~

10.4 POLICIES

10.4.1 To manage effects of the use of geothermal water for heat and energy using the following principles and standards:

- **Preserve geothermal surface features and ecosystems;**
- **Recognise that geothermal takes can result in effects on spring flows;**
- **Allocate available resources according to the level of understanding of system dynamics;**
- **Require efficient use by individual geothermal extractions by ensuring the amount allocated in terms of energy or thermal equivalents does not exceed an amount adequate to service the use sought.**

Explanation

The principles above are adopted to avoid, remedy or mitigate adverse effects arising from geothermal water use.

10.4.2 To enable the discharge of geothermal water to water already influenced by geothermal inputs, and to enable re-injection of geothermal fluid provided it is returned into the same geothermal system from which it was taken at a location or depth where the temperature is similar to that of the discharge.

Explanation

Discharge of geothermal water is generally appropriate into water bodies influenced by geothermal inputs as effects are likely to be minor. Policies in Chapter 7 will also apply. Although it would not generally be used for use of spring water emerging at the

surface, re-injection of fluids may be appropriate should a bore be put to take the geothermal water from depth at a higher temperature and pressure.

10.4.3 In granting resource consents to take geothermal water, to require the volume and rate of take to be accurately measured and quality of water body receiving wastewater to be monitored as or where appropriate.

Explanation

Monitoring water use enables better management of the resource. For significant takes, Council may require the instantaneous rate and weekly volume to be monitored. Monitoring the effects of discharges enables unforeseen adverse effects to be detected.

Principal reasons for adopting

~~The policies above are adopted to avoid, remedy or mitigate adverse effects arising from geothermal water use.~~

~~**10.5 ANTICIPATED ENVIRONMENTAL RESULTS**~~

~~**10.5.1 The management of the region's geothermal water resources in a manner that avoids, remedies or mitigates any adverse environmental and cultural effects and provides for efficient use of the resource.**~~

Chapter 11 INTRODUCTION TO THE RULES

11.1 CONTENT, RATIONALE AND GUIDE TO USE

Chapter 12 contains rules regulating the use of the West Coast's water resources in order to achieve the objectives of this Plan. The rules determine whether a resource consent is required before an activity can be carried out and may specify whether the resource consent application needs to be notified.

~~The following activities can only occur if they are expressly allowed by a rule in a regional plan, or in any relevant proposed regional plan, or by a resource consent (Sections 14 and 15 of the Resource Management Act 1991):~~

- ~~• The taking, damming and diversion of water, heat or energy from water, or heat or energy from the material surrounding any geothermal water (Section 14(1)(a-e));~~
- ~~• Discharges of contaminants or water into water (Section 15(1)(a)).~~

It is possible a proposed activity will need to comply with more than one rule in this Plan, or may need to comply with a rule in a different plan. It is essential all relevant rules are examined. Table 1 in this chapter should be used as a guide to find the relevant rules for any particular activity.

11.2 STATUS OF ACTIVITIES

Each rule specifies whether a particular activity is **permitted**, **controlled**, **restricted discretionary**, **discretionary** or **prohibited**. These classes of activity are described below. ~~Figure 5 can be used to determine the status of the proposed activity.~~

11.2.1 Permitted activity: No resource consent required

Activities which are specified as permitted activities can occur without the need to obtain a resource consent provided they are able to comply with the conditions set in the rule.

11.2.2 Controlled activity: Resource consent required but always granted

Activities which are specified as controlled activities require a resource consent from the West Coast Regional Council, but the Council must grant consent. The conditions Council sets on the resource consent will be limited to the matters stated in the rule.

11.2.3 Restricted discretionary activity: Resource consent required

These activities require a resource consent, and the Council has discretion to grant or decline consent. Council has limited the range of matters it considers to those listed in the rule and may only set conditions (if consent is granted) on those matters. The consent often does not need to be notified.

11.2.4 Discretionary activity: Resource consent required

This is an activity for which the West Coast Regional Council retains full discretion as to whether it will grant a resource consent and full discretion as to the matters it considers and the conditions it may place on the consent, if granted. There is no assumption that any given activity is or is not 'generally appropriate' at any given locality in the region.

11.2.5 Prohibited activity: No resource consent will be granted

Activities which are specified as prohibited activities within the rules of this Plan may not occur in the West Coast and no resource consent will be granted for the activity.

11.3 OTHER LEGISLATION

Other legislation may have implications for the management of the West Coast's water resources. This Plan does not replace or override that legislation, and nothing in these rules removes obligations under any other legislation.

11.4 NOTIFICATION OF RESOURCE CONSENTS

Any resource consent application received by the West Coast Regional Council must be **publicly notified** under Section 93 of the Resource Management Act, unless it is a controlled activity or the Council is satisfied that the adverse effects of the activity on the environment will be minor. Some controlled and restricted discretionary rules in this Plan expressly permit consideration of a resource consent application **without public notification or limited notification** in accordance with Section 94D.

Those rules also expressly allow an application to be considered by the Council without service on persons who may be adversely affected if consent is granted and without the written approvals of such persons.

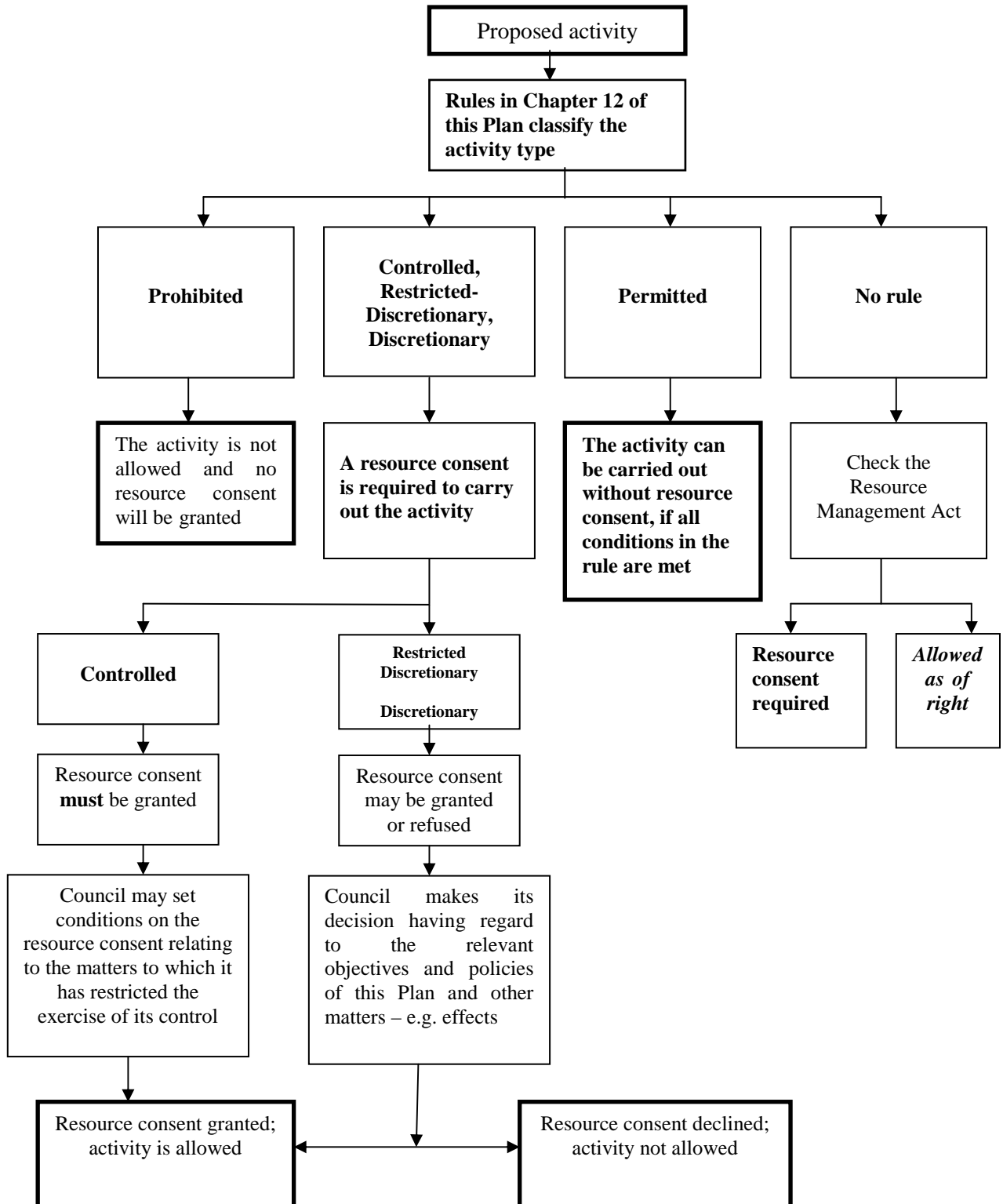
11.5 RESOURCE CONSENT CONDITIONS

~~In granting a resource consent, the West Coast Regional Council may include conditions on the consent in accordance with Section 108 of the Resource Management Act. Conditions can be used to ensure that any actual or potential effects of the activity on the environment are avoided, remedied or mitigated.~~

Table 1: Index to Water Management Plan rules

If your proposal involves any of the following:	See the following rules of this Plan
Taking of surface water	12.1.1 to 12.1.7
Taking of groundwater	12.2.1 to 12.2.5
Taking or use of Geothermal Water	12.3.1
Damming or diversion of water	12.4.1 to 12.4.7
Discharge of stormwater or drainage water to water	12.5.1 & 12.5.2
Discharge of cooling water, swimming pool water, temporary discharges associated with maintaining structures & other discharges of water to water	12.5.3 to 12.5.5
Discharges of herbicides and pesticides	12.5.6 to 12.5.8
Any other discharge to water (including dairy effluent discharges to water)	12.5.10
Damming and associated taking, use, discharge and diversion for hydro-electricity generation purposes	12.6.1 or 12.6.2

Figure 5: Key steps to determine status



Chapter 12 RULES

12.1 The Taking and Use of Surface Water

Note: The Riverbed Rules in the Land and Riverbed Plan also apply to bed disturbance and erecting or altering any structure in a lakebed or riverbed.

12.1.1 The taking and use of surface water from the main stem of the:

- Karamea River;
- Buller River downstream of Te Kuha (K29:020295);
- Grey River downstream of the Clarke River confluence;
- Ahaura River downstream of Jims flat (K31:055632);
- Taramakau River downstream of the Otira River confluence;
- Hokitika River;
- Whataroa River;
- Haast River;
- Arawhata River;
- Mikonui River;
- Waitaha River;
- Wanganui River;
- Waiho River;
- Karangarua River; or
- Paringa River

is a **permitted activity** if all the following conditions are met:

- (a) The total take per landholding including both consented and permitted takes does not exceed 50 litres per second, up to a maximum volume of 1,500,000 litres per day;
- (b) The water is used on the land holding except where the purpose is for a community water supply;
- (c) The intake is protected by a fish screen which ensures as far as is practicable, that eels, fish and fry are prevented from passing through the intake and from being trapped against the fish screen; and
- (d) The council is informed in writing of the location, expected rate and frequency of the take prior to the take occurring and contact details of the person taking.

Advisory notes:

Where the cumulative volume allocated from a river for permitted and/or consented takes reaches or exceeds 15% of MALF the Council will review the application of Rule 12.1.1 to the affected river, and a plan change may be required to address the issue.

For the purpose of informing condition (c) a guideline is set out in Appendix 20.3.

The Council will from time to time monitor and verify the location, frequency, and rate of take as appropriate.

- 12.1.2** Where not permitted by rule 12.1.1, the taking and use of surface water is a **permitted activity** if all the following conditions are met:
- (a) The total take per landholding does not exceed 2 litres per second, up to a maximum volume of 25,000 litres per day;
 - (b) No other lawful take of water is adversely affected as a result of the take;
 - (c) The intake is protected by a fish screen which ensures as far as is practicable, that eels, fish and fry are prevented from passing through the intake and from being trapped against the fish screen; and
 - (d) The council is informed in writing of the location, expected rate and frequency of the take prior to the take occurring and contact details of the person taking.

Advisory Note:

In addition to the permitted activity above, the RMA (S14) permits the taking and use of water for an individual's reasonable domestic needs, or for the reasonable needs of an individual's animals for drinking water; provided the taking does not, or is not likely to have an adverse effect on the environment.

Where the cumulative volume allocated from a river for permitted and/or consented takes reaches or exceeds 15% of MALF the Council will review the application of Rule 12.1.2 to the affected river, and a plan change may be required to address the issue.

For the purpose of informing condition (c) a guideline is set out in Appendix 20.3.

The Council will from time to time monitor and verify the location, frequency and rate of take as appropriate.

- 12.1.3** Any take and use of surface water for no more than 10 days in any one month and for no more than six consecutive months, is a **permitted activity**, providing:
- (a) The rate of take is no greater than 10 litres per second, up to a maximum volume of 150,000 litres per day;
 - (b) No other lawful take of water is adversely affected by the take;
 - (c) No more than one take per person occurs from any surface water body;
 - (d) The intake is protected by a fish screen which ensures as far as is practicable, that eels, fish and fry are prevented from passing through the intake and from being trapped against the fish screen; and
 - (e) The total volume of water taken does not exceed 20% of the instantaneous flow.

Advisory Note:

Where the cumulative volume allocated from a river for permitted and/or consented takes reaches or exceeds 15% of MALF the Council will review the application of rule 12.1.3 to the affected river, and a plan change may be required to address the issue.

For the purpose of informing condition (d) a guideline is set out in Appendix 20.3.

- 12.1.4** The taking and use of surface water for community water supply by any take identified in Schedule 1B, up to the volume and rate authorised as at 31 March 2004, is a **controlled activity**.

In granting any resource consent for the taking of surface water in terms of this rule, the council will restrict the exercise of its control to the following:

- (a) Any need for a residual flow at the point of take;
- (b) The intake is protected by a fish screen which ensures as far as it is practicable, that eels, fish and fry are prevented from passing through the intake and from being trapped against the fish screen;
- (c) The means and timing of the take, and the rate of take;
- (d) The quantity of water required to meet the needs of the community;
- (e) The duration of the resource consent;
- (f) The information and monitoring requirements;
- (g) Any bond; and
- (h) The review of conditions of the resource consent.

An application for resource consent under this rule does not need to be notified.

12.1.5 Unless permitted by rules 12.1.1, 12.1.2, or 12.1.3, or controlled by rule 12.1.4 or 12.5.1, the taking and use of surface water where:

- (i) The total volume of water allocated from the river is less than 20% of the mean annual low flow of the river; or
- (ii) The applicant accepts a minimum flow based on 75% of the mean annual low flow of the river is a **restricted discretionary** activity.

In considering any resource consent under this rule the council will restrict the exercise of its discretion to the following:

- (a) The amount of water to be taken;
- (b) The flow available in the source water body;
- (c) The current allocation from the source water body;
- (d) The minimum flow to be applied to the take, if required;
- (e) Any adverse effect on any existing lawful take of water, if consent is granted;
- (f) The instream values supported by the source water body and related waterbodies, and any potential adverse effect of the taking on those values, if consent is granted;
- (g) Any need to prevent fish and eel entering the intake;
- (h) The means and timing of the take, and the rate of take;
- (i) The quantity of water required for the intended use;
- (j) The duration of the resource consent;
- (k) The information and monitoring requirements; and
- (l) The review of conditions of the resource consent.

An application for resource consent under this rule does not need to be notified.

Advisory Note:

For the purposes of the above rule, the total volume of water allocated includes lawfully established takes, takes that are permitted under the rules of this Plan, and takes provided for under section 14 of the RMA. The Council holds records of allocation levels and has limited river flow information that will be made available where required

For smaller streams with high instream values the location and rate of take and the seasonal timing of the take can be controlled by conditions on the consent as set out in the explanation to policy 6.4.1.

12.1.6 In accordance with s136(2)(b)(i) of the RMA, the transfer of a water permit for the taking of surface water is a permitted activity, provided:

- (a) The transfer is within the same river to any point downstream (excluding downstream tributaries) of the location to which the permit currently applies, and
- (b) Written notice signed by the transferor and transferee is given within 14 days to the Council, specifying:
 - (i) Full names and addresses of transferor and transferee;
 - (ii) The current permit number;
 - (iii) The location of new take site (show on map or give NZMS 260 map reference);
 - (iv) The proposed daily volume and rate of take at new site;
 - (v) The date of transfer;
 - (vi) A description of the purpose for which water is to be used.

12.1.7 Unless provided for by rules 12.1.1, 12.1.2, 12.1.3, 12.1.4, 12.1.5 or 12.1.6 the taking and use of surface water is a discretionary activity.

Principal Reasons for Adopting

Rules 12.1.1 and 12.1.2 provide for takes that have no more than a minor effect as a permitted activity, to avoid the need for these activities to apply for a resource consent. Rule 12.1.3 allows for short duration takes at a higher rate than 12.1.2. Rule 12.1.4 ensures security of community water supplies while allowing environmental effects to be addressed. Rule 12.1.5 minimises transaction costs for those who are prepared to accept minimum flows required under this Plan, while Rule 12.1.7 retains the discretion to address any adverse effects for those wanting a lower minimum flow than is set by the policies in the plan. 12.1.6 reduces administration costs for transfers to downstream locations on the same water body.

12.2 The Taking and Use of Groundwater

In addition to these permitted activities, the RMA (S14) permits the taking and use of water for an individual's reasonable domestic needs, or for the reasonable needs of an individual's animals for drinking water; provided the taking does not, or is not likely to have an adverse effect on the environment.

12.2.1 The taking and use of groundwater is a **permitted activity** if all the following conditions are met:

- (a) The total take does not exceed 2 litres per second, up to a maximum volume of 50,000 litres per day;
- (b) Any well shall be located not less than 20 metres from any adjacent well or the Coastal Marine Area and from any septic tank disposal field or effluent treatment ponds or silage storage areas;
- (c) Any bore shall be located not less than 200 metres from any adjacent bore;
- (d) No existing lawful take of water is adversely affected as a result of the taking; and
- (e) The council is informed in writing of the location, expected rate and frequency of the take prior to the take occurring and contact details of the person taking; and

- (f) The bore or well casing and headworks prevent:
 - (i) The infiltration of contaminants;
 - (ii) The uncontrolled discharge or leakage of water to the surface and between aquifers.

Advisory notes:

For the purposes of Rule 12.2.1 a well is defined as being less than 20 metres deep as measured from ground level, while a bore is defined as being greater than 20 metres deep as measured from ground level.

The Council has best practice information available on the materials and construction of wells and bores to prevent contamination.

The Council will from time to time monitor and verify the location, frequency and rate of take as appropriate.

- 12.2.2** The taking and use of groundwater for bore development and pumping tests is a permitted activity if all the following conditions are met:
- (a) Any well shall be located not less than 20 metres from any adjacent well or the Coastal Marine Area or from any septic tank disposal field or effluent treatment ponds or silage storage areas;
 - (b) Any bore shall be located not less than 200 metres from any adjacent bore;
 - (c) No existing lawful take of water is adversely affected as a result of the taking.
- 12.2.3** The taking or diversion of groundwater for the purpose of slope dewatering associated with road or railway maintenance or construction is a permitted activity, provided it does not affect a natural wetland.
- 12.2.4** The taking and use of groundwater for community water supply by any take identified in Schedule 1B, up to the volume and rate authorised as at 31 March 2004, is a **controlled activity**.

In granting any resource consent for the taking of ground water in terms of this rule, the council will restrict the exercise of its control to the following:

- (a) Any adverse effect on any existing lawful take of water;
- (b) Any adverse effect on any connected surface water body;
- (c) The means and timing of the take, and the rate of take;
- (d) The quantity of water required to meet the needs of the community;
- (e) The duration of the resource consent;
- (f) The information and monitoring requirements; and
- (g) The review of conditions of the resource consent.

An application for resource consent under this rule does not need to be notified.

- 12.2.5** Unless permitted by rules 12.2.1, 12.2.2 or 12.2.3, or controlled by rule 12.2.4, the taking and use of groundwater is a **restricted discretionary** activity.

In considering any resource consent under this rule the council will restrict the exercise of its discretion to the following:

- (a) The amount of water to be taken;
- (b) The current allocation from the aquifer and the estimated annual yield;

- (c) Any adverse effect on any existing lawful take of water;
- (d) Whether a minimum water level needs to be applied to the take;
- (e) Any adverse effect on any connected surface water body;
- (f) Any adverse effect on the existing quality of groundwater in the aquifer;
- (g) The means and timing of the take, and the rate of take;
- (h) The quantity of water required for the intended use;
- (i) The duration of the resource consent;
- (j) The information and monitoring requirements; and
- (k) The review of conditions of the resource consent.

Principal Reasons for Adopting

~~Rules 12.2.1 to 12.2.3 provide for small groundwater takes where effects will be no more than minor to avoid the need for a resource consent. Rule 12.2.4 ensures security of community water supplies while allowing environmental effects to be addressed. Rule 12.2.5 ensures any other groundwater take is considered as a restricted discretionary activity so that any adverse effects can be addressed appropriately.~~

12.3 The Taking and Use of Geothermal Water

12.3.1 The taking and use of geothermal water is a discretionary activity.

12.4 The Damming or Diversion of Water

Note: The Riverbed Rules in the Land and Riverbed Plan also apply to any activity that involves bed disturbance and erecting or altering any structure in a lakebed or riverbed. The Land and Riverbed Plan also contains Earthworks Rules that control land drainage activities.

12.4.1 The temporary diversion of water for the purpose of the:

- (i) Maintenance or repair of any lawfully existing structure (excluding any whitebait stand); or
- (ii) Erection or placement, extension or alteration, maintenance, repair or reconstruction, or removal or demolition of any structure in accordance with Rules 6.2.1.2, 6.2.1.3, 6.2.1.4 or 6.2.1.5 or 6.2.2.1 of the Land and Riverbed Management Plan.

is a **permitted activity** if all the following conditions are met:

- (a) The diverted river flow remains within the river bed;
- (b) The duration of the diversion does not exceed two weeks;
- (c) No lawful take of water is adversely affected as a result of the diversion;
- (d) Fish passage through the diversion area is maintained and any fish stranded during the works are transferred to the flowing part of the river;
- (e) The diversion does not cause or exacerbate flooding of another person's property, erosion, land instability, or property damage;
- (f) At least 7 days prior to the diversion occurring the Council is provided with a plan showing the proposed works in relation to the river flow and bed form, and a photo of the area of river to be diverted taken from a fixed reference point, and within 7 days of the completion of the works a second

photo is provided to the Council taken from the same fixed reference point;
and

- (g) Upon completion of the work, the river is returned as far as is practicable to its previous course, with similar bed form.

Advice note:

Rule 12.4.1 does not apply to damming of water.

12.4.2 The permanent diversion of water from an existing lawful structure (excluding any whitebait stand) or from a new structure erected or placed in accordance with Rule 6.2.1.2, 6.2.1.3, 6.2.1.4 or 6.2.1.5 of the Regional Land and Riverbed Management Plan is a **permitted activity** if all the following conditions are met:

- (a) The diverted river flow remains within the river bed;
- (b) The diversion does not cause or exacerbate flooding of another person's property, erosion, land instability, sedimentation or property damage.

Advice note:

This Rule relates to existing authorised structures in rivers that cause water to divert off their surfaces (e.g. rock protection works).

12.4.3 The diversion and/or taking of water in a drain, provided the drain is formed in accordance with rule 6.1.3.2 (j) of the Land and Riverbed Plan, is a permitted activity.

12.4.4 The damming of water is a permitted activity if all the following conditions are met:

- (a) The size of the catchment upstream of the dam does not exceed 50 hectares;
- (b) For sites where fish are present, effective fish passage is provided for;
- (c) The water depth is no more than 3 metres at the dam face and the total water volume stored by the dam does not exceed 20,000 cubic metres;
- (d) A spillway is constructed, designed to pass the probable maximum flood;
- (e) No lawful take of water is affected by the damming;
- (f) The damming does not cause or exacerbate flooding of another person's property, erosion, land instability, sedimentation or property damage;
- (g) Council is informed in writing of the location of the dam and the method of construction proposed, at least two weeks prior to commencing the erection or placement of the dam;
- (h) The dam is not located less than 20 metres above mean sea level;
- (i) If constructed in permanently flowing streams, the dam allows a residual flow of 75% of MALF or the instantaneous flow whichever is the lesser; and
- (j) There shall be no inundation of a natural wetland.

Advisory note:

Council will check the sites where a dam is to be constructed and undertake fish surveys to ensure that the person undertaking this activity has complied with condition (b). Council staff may also be available to assist with fish surveys prior to the dam's construction, if requested.

The Council will review Rule 12.4.4 when Variation 1 to the Land & Riverbed Plan has been fully resolved.

12.4.5 The diversion (whether in pipes, constructed channels or otherwise) of natural runoff that is not contaminated, or of runoff that is contaminated to a water treatment system, is a **permitted activity** provided:

- (a) For the non-contaminated water:
 - (i) The diversion does not cause or exacerbate: flooding or ponding of water on another person's property, erosion, land instability, sedimentation or property damage; and
 - (ii) The diversion does not affect any natural wetland;
 - (iii) The diversion is incidental to permitted or consented earthworks; and
 - (iv) The diversion does not relate to the diversion of runoff from an area greater than 20ha.
- (b) For contaminated water:
 - (i) The water is diverted to a water treatment system or plant; and
 - (ii) The diversion is incidental to permitted or consented earthworks.

12.4.6 Unless permitted by rules 12.4.1, 12.4.2, 12.4.5, or controlled by rule 12.6.1, the diversion of water is a discretionary activity.

12.4.7 The damming of water, unless permitted by rule 12.4.4, controlled by rule 12.6.1, or prohibited by rule 12.4.5, is a discretionary activity.

Principal Reasons for Adopting

~~Rules 12.4.1, 12.4.2, 12.4.3, and 12.4.4 provide for activities that will result in no more than minor effects and avoid the need for a resource consent. Rule 12.4.5 reflects the requirements of the Grey River Water Conservation Order. Rules 12.4.6 and 12.4.7 ensure any other diversion is considered as a restricted discretionary activity and any other damming is considered as a discretionary activity, including the waters covered by the Buller Conservation Order, so that any adverse effects can be addressed appropriately.~~

12.4.8 The damming of the Ahaura Gorge is a **prohibited activity** for which no consent will be granted.

12.5 Discharges to Water

12.5.1 The discharge of stormwater from any reticulated stormwater system to water is a **permitted activity** if all the following conditions are met:

- (a) For any stormwater system installed after 31 March 2004, provision is made for the interception and removal of any contaminant which would give rise to the effects identified in condition (e);

- (b) The discharge does not originate from industrial or trade premises where hazardous substances are stored or used unless:
 - (i) hazardous substances cannot enter the stormwater system; or
 - (ii) there is an interceptor in place to collect all stormwater that contains hazardous substances and these hazardous substances must be contained on-site until removed to an approved disposal facility for the type of hazardous substance concerned;
- (c) The discharge does not contain any human sewage or agricultural effluent;
- (d) The discharge does not cause or exacerbate flooding of another person's property, erosion, land instability, sedimentation or property damage; and
- (e) Beyond a mixing zone of 12 times the width of the receiving water body, or 200 metres, whichever is the lesser, the discharge does not give rise to the following effects:
 - (i) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - (ii) Any conspicuous change in the colour or visual clarity;
 - (iii) Any emission of objectionable odour;
 - (iv) The rendering of fresh water unsuitable for consumption by farm animals;
 - (v) Any significant adverse effects on aquatic life; or
 - (vi) Adverse effects on any take of water for human consumption.

Advice note:

A reticulated stormwater system is any system that collects water from impervious surfaces such as roofs, buildings and other structures. A drain is a collection and delivery system that collects water from generally unsealed surfaces (eg. on farm or rural roadside drains) but also includes water collected from sealed surfaces with no associated reticulated stormwater system such as roadside swales and concrete dish swales. The hollows of humped and hollowed land are considered drains.

12.5.2 The discharge from any drain to a water body is a **permitted activity** if all the following conditions are met:

- (a) The discharge does not cause or exacerbate flooding of another person's property, erosion, land instability, sedimentation or property damage; and
- (b) Beyond a mixing zone of 12 times the width of the receiving water body, or 200 metres, whichever is the lesser, the discharge does not give rise to the following effects:
 - (i) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - (ii) Any conspicuous change in the colour or visual clarity;
 - (iii) Any emission of objectionable odour;
 - (iv) The rendering of fresh water unsuitable for consumption by farm animals; or
 - (v) Any significant adverse effects on aquatic life; or
 - (vi) Adverse effects on any take of water for human consumption.
- (c) Any discharge to the Rahu River, Station Creek, Wooley River or Buller River upstream of Te Kuha must meet the requirements of Clause 11 of the Buller River Conservation Order (see Schedule 4).

Advice note:

Permitted activity rule 6.1.1.1 in the Land and Riverbed Plan must also be met for humping and hollowing.

12.5.3 The discharge of cooling water, swimming pool water or water from a drinking water supply pipeline or reservoir into water is a **permitted activity** if all the following conditions are met:

- (a) The discharge contains no:
 - (i) Disinfectant, antiseptic, or pesticide;
 - (ii) Residual flocculant, except aluminium at acid-soluble aluminium concentrations less than 0.1 g/m³;
 - (iii) Free or residual chlorine at concentrations greater than 0.1 g/m³; or
 - (iv) Any other hazardous substance;
- (b) Beyond a mixing zone of 12 times the width of the receiving water body, or 200 metres, whichever is the lesser, the discharge does not:
 - (i) Change the pH of the receiving water by more than 0.5 pH units; or
 - (ii) Raise the temperature in the receiving water by more than 3 degrees Celcius, or cause the temperature to rise above 25 degrees Celcius; and
- (c) The discharge does not cause or exacerbate flooding of another person's property, erosion, land instability, sedimentation or property damage.

12.5.4 The incidental discharge of contaminants to water resulting from temporary activities associated with maintenance of structures is a permitted activity if all the following conditions are met:

- (a) The incidental discharge shall be for no more than 10 working days.
- (b) Beyond a mixing zone of 12 times the width of the receiving water body, or 200 metres, whichever is the lesser, the discharge does not give rise to the following effects:
 - (i) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - (ii) Any conspicuous change in the colour or visual clarity
 - (iii) Any emission of objectionable odour;
 - (iv) The rendering of fresh water unsuitable for consumption by farm animals;
 - (v) Any significant adverse effects on aquatic life; or
 - (vi) Adverse effects on any take of water for human consumption.
- (c) Any discharge to the Rahu River, Station Creek, Wooley River or Buller River upstream of Te Kuha must meet the requirements of Clause 11 of the Buller River Conservation Order (see Schedule 5).

12.5.5 Excluding the activities permitted by Rules 12.5.1, 12.5.2, 12.5.3, or 12.5.4 any discharge of water to water is a **permitted activity** if all the following conditions are met:

- (a) The discharge contains no contaminants beyond trace concentrations, or hazardous substances;
- (b) Beyond a mixing zone of 12 times the width of the receiving water body, or 200 metres, whichever is the lesser, the discharge does not:
 - (i) Change the pH of the receiving water by more than 0.5 pH units where the pH is above 8 or below 6.5; or
 - (ii) Raise the temperature in the receiving water by more than 3 degrees Celcius, or cause the temperature to rise above 25 degrees Celcius; and
- (c) The discharge does not cause flooding of another person's property, erosion, land instability, sedimentation or property damage.

- 12.5.6** The discharge of aquatic herbicide in gel form to water for the purpose of controlling aquatic plants is a **permitted activity** if all the following conditions are met:
- (a) The herbicide and any additive are authorised for aquatic use in New Zealand, and is applied in accordance with that authorisation and any directions issued by the herbicide manufacturer;
 - (b) The applicator holds a Growsafe© Registered Chemical Applicator Certificate of Qualification or is working under the direct supervision of someone who does and a copy of that certificate is produced to an officer of the Council, on request;
 - (c) No lawful take of water is adversely affected as a result of the discharge; and
 - (d) The applicator notifies all persons taking water within 1 km downstream of the discharge, at least one week prior to the discharge occurring, advising of the time the discharge is to occur.
- 12.5.7** The discharge of herbicide to water incidental to its application to emergent aquatic plants or plants adjacent to a water body is a **permitted activity** if all the following conditions are met:
- (a) The herbicide and any additive are authorised for use in or over water, in New Zealand, and is applied in accordance with that authorisation and any directions issued by the herbicide manufacturer;
 - (b) All reasonable measures are taken to minimise the quantity of incidental discharge into water;
 - (c) No lawful take of water is adversely affected as a result of the discharge; and
 - (d) The applicator notifies all persons taking water within 1 km downstream of the discharge, at least one week prior to the discharge occurring, advising of the time the discharge is to occur.
- 12.5.8** The aerial discharge of sodium monofluoroacetate to water, incidental to its application to adjacent land, is a **permitted activity** if all the following conditions are met:
- (a) The baits shall not contain more than 0.15% weight/weight of sodium monofluoroacetate (1080 poison) and the application rate of baits containing sodium monofluoroacetate shall not exceed 5 kilograms per hectare.
 - (b) The applicator holds a Growsafe© Agrichemical Pilots Rating Certificate, or another appropriate chemical and agricultural rating as required under Civil Aviation regulations to undertake aerial application of sodium monofluoroacetate, and a copy of that certificate is produced to an officer of the Council, on request.
- 12.5.9** The discharge of sediment that occurs when carrying out an activity permitted by rules 6.1.1.1, 6.1.2.2, 6.1.3.1, 6.1.3.2, 6.1.3.3, 6.1.3.4, and 6.1.3.5 of the Land and Riverbed Plan is permitted activity.

- 12.5.10** Unless permitted by rules 12.5.1, 12.5.2, 12.5.3, 12.5.4, 12.5.5, 12.5.6, 12.5.7, 12.5.8 or 12.5.9 the discharge of any contaminant or water to water is a **discretionary** activity

Principal Reasons for Adopting

~~Rules 12.5.1 to 12.5.9 provide for certain discharges where, provided the conditions are met, no resulting effect will be more than minor. This enables appropriate resource use without the unnecessary cost of a resource consent. Rule 12.5.10 ensures any other discharges are considered as a discretionary activity so that any adverse effects can be addressed appropriately.~~

12.6 Damming and associated Taking, Use, Discharging and Diversion for Hydro-Electricity Generation purposes

- 12.6.1** For the Hydro-Electricity operations identified in Schedule 7 of this Plan:
- (a) The damming of water for hydroelectric power generation purposes
 - (b) The taking of water for hydroelectric power generation purposes
 - (c) The use of water for hydroelectric power generation purposes
 - (d) The discharge of water and trace contaminants to water for hydroelectric power generation purposes
 - (e) The diversion of water for hydroelectric power generation purposes

is a **controlled** activity.

In considering any resource consent for the damming, taking, use, discharge or diversion of water in terms of this rule, the Council will restrict the exercise of its control to the following matters:

- (a) Any adverse effect of continuing or discontinuing the damming, taking, use, discharge or diversion of water on:
 - (i) Any natural or human use value identified in Policy 5.4.1, 5.4.1B & 5.4.1C of any affected water body, including the impoundment itself;
 - (ii) The water quality of the lake or river;
 - (iii) The amenity values of the lake or river;
 - (iv) Fish passage;
 - (v) Any existing lawfully established take, use, dam, discharge or diversion of water;
 - (vi) Public access to and along any lake or river, and present and future access to the water resource for the purpose of taking or using water or discharging contaminants or water to water; and
- (b) Any maximum or minimum level or flow of water, and the range, or rate of change, levels or flows of water; and
- (c) Any potential flooding, erosion, land instability, sedimentation or property damage resulting from the damming, diversion, taking, use, or discharging of water or from the discontinuation of the damming, diversion, taking, use or discharging of water; and
- (d) The management of the lake or river shores; and
- (e) Invasion by or proliferation of aquatic plants; and

- (f) Any restoration of exposed lake bed resulting from any reduction in authorised lake levels; and
- (g) The purpose of the existing dam or lake level control; and
- (h) The duration of the resource consent; and
- (i) The information and monitoring requirements; and
- (j) Any financial contribution; and
- (k) Any bond; and
- (l) Review of the conditions of the resource consent.

An application for resource consent under this rule does not need to be notified and does not need to be served on persons who may be adversely affected by the activity, provided that Council will serve the application on the Director General of Conservation if it considers the Director General may be adversely affected by the activity.

Explanation

The Department of Conservation has particular functions involving the preservation and protection of freshwater fisheries and freshwater fish habitat. Furthermore, many of the existing hydro schemes listed in Schedule 7 are located on (in full or in part) or connected to, areas administered by the Department.

12.6.2 Except as provided by Rule 12.6.1, each of the following activities is a **discretionary activity** and will be considered under the following rules:

- (a) The damming of water for hydroelectric power generation purposes
– Rule 12.4.7
- (b) The taking and use of water for hydroelectric power generation purposes
– Rule 12.1.7
- (c) The discharge of water and trace contaminants to water for hydroelectric power generation purposes – Rule 12.5.10

Principal Reasons for Adopting

~~These rules recognise that certain dams identified in Schedule 8 have been lawfully established and operated responsibly for a number of years and the range of issues which require consideration by the Council is not as wide as for a new dam. It is not expected within the lifetime of this Plan that a new consent for these existing dams would be declined, therefore a controlled activity status is appropriate and it provides certainty for the applicant. New dams require full consideration to be given to all effects and therefore are full discretionary activities.~~

Chapter 13

METHODS OTHER THAN RULES

13.1 INTRODUCTION

~~This chapter of the Plan establishes the methods other than rules which will be used to achieve the Plan's objectives.~~

13.2 LIAISON

13.2.1 Promoting the treatment of stormwater

The West Coast Regional Council will encourage operators of existing stormwater reticulation systems to utilise techniques that will assist to reduce the level of contaminants discharged from the systems.

13.2.2 Septic tank use

The West Coast Regional Council will encourage district councils, communities and property owners to install reticulated systems for sewerage, where it is appropriate and feasible, in any site where the conditions are such that on-site waste treatment could result in an adverse effect on water bodies, particularly those specifically identified in this Plan.

~~13.2.3 Advocacy to district councils about land use controls~~

~~The West Coast Regional Council will seek the inclusion of appropriate provisions within district plans, and appropriate conditions on land use consents, that will assist to further the objectives and policies contained in this Plan.~~

13.2.4 Advocacy to district councils about water management from new subdivision developments.

The Council will seek to ensure that the effects of stormwater and drainage from new subdivisions is considered at the planning stage, at the same time as waste disposal, water supply and natural hazards.

~~Principal reasons for adopting~~

~~These methods are adopted to provide a non regulatory approach to resource management that complements the regulatory approach that occurs through consents and compliance.~~

13.3 INFORMATION CHANNELS

~~13.3.1 Provision of information relating to the results of monitoring water bodies~~

~~Information gained by the West Coast Regional Council from monitoring of water and water bodies will be made available as necessary and appropriate.~~

13.3.2 Provision of information relating to flood risk

The West Coast Regional Council will provide advice about the likely susceptibility of the location of any proposed structure to flooding, either when a resource consent applicant, or other individual, requests the information, or when a district council requires the information in preparing district plans.

13.3.3 Identification and provision of information relating to wetlands

The Council is undertaking a process of identifying significant wetlands on private land and intends notifying a variation to the Regional Land and Riverbed Management Plan once consultation with affected landowners is completed. The West Coast Regional Council also intends merging the Water Management Plan, the Regional Land and Riverbed Management Plan and the Regional Plan for Discharges to Land once the individual plan processes are completed.

Principal reasons for adopting

These methods reflect the role that regional councils have played in providing information for a variety of purposes. The Council considers that providing information is often the most efficient method of achieving objectives.

13.4 PROMOTION AND EDUCATION**13.4.1 Advocacy and promotion to landholders, government agencies and industry groups**

The West Coast Regional Council will use promotion and education to encourage land management which:

- (a) Minimises the amount of nutrients, sediment or other contaminants present in runoff;
- (b) Benefits the natural character, amenity or habitat values, of wetlands, lakes or rivers;
- (c) Ensures the retention of appropriate existing riparian vegetation.

Principal reasons for adopting

This method is adopted to promote activities of benefit to water bodies and their values, and to avoid activities that could adversely affect them.

13.5 MONITORING**13.5.1 Monitoring strategy**

The West Coast Regional Council will monitor water quality and water use in the Region in order to achieve the objectives in the Plan.

Where the cumulative volume allocated from a river for permitted and/or consented takes reaches or exceeds 15% of MALF the Council will review the application of Rules 12.1.1, 12.1.2, and 12.1.3 to the affected river, and a plan change may be required to address the issue.

Principal reasons for adopting

Subject to the funding available in its Annual Plan, the West Coast Regional Council will monitor the elements of the West Coast's water resources, and the effects of their

~~use and development on the environment, as necessary to assess the efficiency and effectiveness of the objectives and policies within this Plan.~~

~~13.6 CODES OF PRACTICE AND ENVIRONMENTAL MANAGEMENT SYSTEMS~~

~~13.6.1 Development and implementation of codes of practice~~

~~The West Coast Regional Council will promote and encourage recreational and industry groups to prepare codes of practice and environmental management systems that reduce the risk of adverse effects on water.~~

~~Principal reasons for adopting~~

~~Codes of practice can influence land use practices that can affect water. Because a code of practice and environmental management system may be developed for use throughout an industry, it is an efficient way to promote better practice across the region.~~

Chapter 14 INFORMATION REQUIREMENTS

14.1 INTRODUCTION

The Resource Management Act requires that applications for a resource consent be made in accordance with Section 88. The Resource Management Act further requires that, where an assessment of the effects of the proposed activity is required, this assessment be prepared in accordance with the Fourth Schedule of the Act.

In general, applications for resource consent for activities affecting the West Coast's water resources or water bodies will be required to demonstrate that:

- (a) The effects of the proposed activity comply with the relevant objectives, policies and rules of this Plan;
- (b) Information has been included, in accordance with the Fourth Schedule of the Resource Management Act, to enable the consent authority to make an assessment of the effects of the proposed activity; and
- (c) Where practicable, consultation has occurred with parties likely to be affected by the proposed activity.

Without limiting the requirements of Section 88 of the Resource Management Act, or of the Fourth Schedule to the Act, any application for any activity which this Water Management Plan specifies as being:

- Controlled;
- Restricted discretionary; or
- Discretionary;

will be required to include information, as specified in this chapter.

Applications will also be assessed in terms of policies in the Regional Policy Statement for the West Coast. There may be additional information requirements once regard has been had to the Regional Policy Statement.

~~Pursuant to Section 88(2) of the Resource Management Act, no application shall be made for an activity that this Plan specifies as a prohibited activity once the time for making or lodging submissions or appeals against the proposed rule has expired and:~~

- ~~(a) No such appeals or submissions have been lodged; or~~
- ~~(b) All such submissions or appeals have been withdrawn or dismissed.~~

~~Applications for resource consents shall be made in the prescribed form. The detail of the environmental impact assessment should be in context with the scale of the proposed activity.~~

14.2 GENERAL INFORMATION REQUIRED

The following information must be supplied with all resource consent applications:

1. The name and address of the applicant.
2. A description of the activity, its nature, purpose and duration.
3. The location of the activity together with a site plan, legal description, and relevant map

references.

4. A description of possible alternative locations or methods and the reasons for making the proposed choice.
5. The scale of the activity, including the size of the area required for the activity, in hectares or square metres.
6. An assessment of any actual or potential effects of the activity on the environment.
7. A description of the measures to be undertaken to avoid, remedy or mitigate any adverse effect on the environment, and the extent to which environmental compensation, if any, has already been provided with respect to the activity.
8. A list of names and addresses of landholders likely to be directly affected by the activity.
9. An identification of those persons interested in or affected by the activity, any consultation undertaken, and any response to the views of those consulted. Depending on the type of activity proposed, or its scale or location, these people may include:
 - (a) Neighbouring landholders,
 - (b) Poutini Ngäi Tahu /Ngäi Tahu
 - (c) Department of Conservation,
 - (d) District councils,
 - (e) Fish & Game New Zealand,
 - (f) Navigation safety authorities,
 - (g) The New Zealand Historic Places Trust,
 - (h) Crown Public Health,
 - (i) Land Information New Zealand,
 - (j) Commercial user groups,
 - (k) Network utility operators,
 - (l) Conservation groups,
 - (m) Recreational user groups, or
 - (n) The community in general.
10. A statement of whether any other resource consent is required from any other consent authority to undertake the activity and whether any such consent has been applied for, or obtained.

14.3 SPECIFIC INFORMATION REQUIREMENTS

In addition to the general information required by Section 14.2 above, where the proposed activity involves the following activities, the information listed will be required.

14.3.1 The taking of surface water or groundwater

1. A description of the quantity, rate and timing, including the 7-day take, of the proposed take and an assessment of the need for the take.
2. A statement of the intended use for which the water is to be taken.
3. A description of the means of the take, delivery, storage (if any) and application to be used.
4. With respect to an application for a new take, an assessment of the effect of the take on other users of the source water body.
5. In the case of the taking of groundwater, a description of the bore used or to be used and bore head management.
6. In the case of the taking of groundwater, a description of the likely adverse effect on the aquifer or any connected surface water body.

7. In the case of the taking of groundwater for irrigation purposes, a description of the quality of the groundwater where there is likely to be any adverse effect on soils.
8. In the case of any resource consent application for the taking of water under policy 6.4.3, an assessment of the effects of the activity on:
 - (a) The values identified in Schedules 1A, 1B, and 1C for any affected water body; and
 - (b) Significant indigenous vegetation and significant habitats of indigenous fauna;
 - (c) Instream values; and
 - (d) The natural character of any affected water body; and
 - (e) The amenity values supported by any affected water body.

14.3.2 The taking of geothermal water

1. A description of the volume and of the proposed take and an assessment of the need for the take.
2. A statement of the intended use for which the water is to be taken.
3. A description of the means of the take, delivery, storage (if any) and application to be used.
4. With respect to an application for a new take, an assessment of the effect of the take on other users of the geothermal system and the geothermal system itself.
5. In the case of the taking of geothermal water, a description of the likely adverse effect on spring flows and the quality of waterbodies receiving wastewater.

14.3.3 The damming or diversion of water

1. An assessment of the effects of the activity on:
 - (a) The values set out in Schedules 1A, 1B, and 1C for any affected water body; and
 - (b) Significant indigenous vegetation and significant habitats of indigenous fauna; and
 - (c) The natural character of any affected water body; and
 - (d) The amenity values supported by any affected water body; and
 - (e) Other users of any water or water body affected by the activity; and
 - (f) The movement of water and sediment; and
 - (g) Any defence against water;
 - (h) Adjacent land;
 - (i) Fish passage.
2. An assessment of the effect on upstream and downstream users of any affected water bodies, land or water, including any likely effect should a dam fail or be overtopped either during or after construction.
3. A description of the anticipated effect of the activity on public access to or along the water body including a description of:
 - (a) The extent to which members of the public would be excluded or restricted from the area; and
 - (b) Where existing public access would be excluded or restricted as a result of the activity, a description of the methods, if any, proposed to bring about enhanced access in the area or elsewhere.
4. An assessment of the effect of the activity on any natural hazard, and the extent to which it is likely to create or exacerbate a natural hazard.

5. An assessment of the effects of the activity on heritage values in any district plan, any archaeological site, or any place with interim historic place registration including interim registration.
6. A description of the provisions made for the remediation of any adverse effect of the failure or overtopping of the dam.
7. In the case of a dam, the intended timing and duration of the filling of any reservoir and the proposed discharges from the dam.
8. A description of the flow regime intended to be maintained in the water body downstream of the dam or diversion.
9. In the case of a diversion, the total quantity or proportion of the flow that is intended to be diverted.
10. An assessment of any known contaminated land, for example a recognised “contaminated site”, that may be flooded or inundated by the damming or diversion.
11. In the case of a flood detention dam, a description of the mechanism for releasing water.
12. An assessment of the effects on Cultural values.

14.3.4 The discharge of water or contaminants

1. A description of the nature, method, volume, contents, rate and frequency of the proposed discharge.
2. A description of the treatment, if any, of the water or contaminant prior to the proposed discharge.
3. A description of any measures that may be in place to contain an emergency spill or discharge, should any occur.
4. An assessment of the ability of the receiving water to assimilate the discharge, in terms of both quantity and quality.
5. An assessment of the effects of the activity on:
 - (a) The values set out in Schedule 1A, 1B, and 1C for any affected water body; and
 - (b) Significant indigenous vegetation and significant habitats of indigenous fauna; and
 - (c) The natural character of any affected water body; and
 - (d) The amenity values supported by any affected water body.
6. An assessment of the likely effect of the discharge on groundwater quality.
7. An assessment of the effect of the activity on any natural hazard, and the extent to which it is likely to create or exacerbate a natural hazard.
8. An assessment of the effects of the activity on heritage values, including those identified in any district plan, any archaeological site, or any place with interim historic place registration.
9. In the case of stormwater or drainage water discharge:
 - (a) A description of the nature of activities served by the system; and
 - (b) Details of the design of the system, in particular its capacity, its specifications and its maintenance regime.
10. In the case of human sewage or animal waste discharge, details of the design of the system, in particular its capacity, its specifications and its maintenance regime.
11. In the case of pesticide or fertiliser discharge, details of any manufacturer’s directions for handling or application.

12. An assessment of the effects on Cultural values.

14.3.5 Acid mine drainage

1. A detailed description of the geology and geochemistry of the proposed area to be mined including the percentage and type of sulphitic minerals in various lithologies that will be affected by mining.
2. A detailed description of the geology and geochemistry of the proposed area to be mined;
3. A description of the testing regime undertaken to identify acid producing potential;
4. An assessment of the likely contaminants (including heavy metals) in any leachate; and
5. A description of the mitigation measures that will be employed to manage or prevent acid drainage.

14.4 PROVISION OF FURTHER INFORMATION

~~Pursuant to Section 92 of the Resource Management Act, the West Coast Regional Council may at any reasonable time before the hearing of a resource consent application, by written notice to an applicant, require further information. The variable nature and site specific aspects of activities within the West Coast's water bodies make it difficult to define all of the required information without closer investigation of each application. Accordingly, the applicant may be required to supply further information where it is necessary to enable the West Coast Regional Council to better understand the nature of the proposed activity, the effect it will have on the environment, or how the adverse effects may be avoided, remedied or mitigated.~~

Chapter 15

FINANCIAL CONTRIBUTIONS

15.1 INTRODUCTION

~~Where the West Coast Regional Council grants a resource consent under the rules in this Plan for taking, damming or diverting water, it may impose a condition requiring a financial contribution, for the purposes specified in this chapter of the Plan.~~

The term “financial contribution” is defined in Section 108(9) of the Resource Management Act as a contribution of:

- (a) *Money; or*
- (b) *Land, including an esplanade reserve or esplanade strip (other than in relation to a subdivision consent), but excluding Māori land within the meaning of the Māori Land Act 1993 unless that Act provides otherwise; or*
- (c) *A combination of money and land.*

~~Works and services apply to remediation or mitigation activities, while financial contributions may apply to the offsetting of adverse effects that cannot be fully avoided or completely remedied or, in the Council’s opinion, adequately mitigated.~~

This chapter specifies the assessment criteria to which the Council will have regard when deciding whether to impose a financial contribution, the type and amount of any such contribution, and the general provisions that would apply.

In deciding on any financial contribution, the West Coast Regional Council will take into account that requiring a contribution may not be appropriate in every case, even where there are adverse effects. Every resource consent application needs to be considered on a case by case basis as to the nature and extent of any contribution that may be required. The actual amount of particular contributions will vary depending upon the circumstances.

15.2 CIRCUMSTANCES, PURPOSE AND METHOD OF DETERMINING CONTRIBUTION AMOUNT

~~A financial contribution condition may be imposed on any resource consent in the circumstances and for the purposes set out below. Contributions may be in the form of land or money or a combination of these. Contributions of money to the Council must be used for the purpose for which such contributions were taken.~~

~~The following provisions set out circumstances and purposes for which financial contributions may be imposed and used, and the method of determining the level of the contribution in each case.~~

15.2.1 To enable legal public access to and along any lake or river.

Circumstances: Where legal public access to or along any lake or river will be restricted by the activity for which a resource consent is granted, and the effects cannot be avoided or sufficiently remedied or mitigated.

Purposes: To offset such effects by providing money, land, or a combination of both for alternative legal public access.

Method of determining contribution amount: The amount of the contribution will be determined having regard to the criteria set out in 15.3, but will reflect the actual cost of providing legal public access sufficient to offset adverse effects on such access.

15.2.2 To enhance amenity values of lakes and rivers.

Circumstances: Where the activity, for which a resource consent is granted, occupies or adversely affects any part of a lake or river or adjoining shoreline which contains facilities or space used by the public, and the effects cannot be avoided or sufficiently remedied or mitigated.

Purposes: To offset such effects by providing money, land, or a combination of both for public open space or public facilities at an alternative location directly within the affected area or as close as possible to where the adverse effect is occurring or serving the same general community (including a contribution to any public reserves).

Method of determining contribution amount: The amount of the contribution will be determined having regard to the criteria set out in 15.3, but will reflect the actual cost of providing land to provide public open space or public facilities of a reasonably equivalent standard or extent to those which are adversely affected by the granting of the resource consent.

15.2.3 To maintain or enhance riparian vegetation or riparian habitat.

Circumstances: Where the activity for which a resource consent is granted will, or is likely to, result in destruction or damage to riparian vegetation or habitats, and the effects cannot be avoided or sufficiently remedied or mitigated.

Purposes: To offset the loss of vegetation by providing money, land, or a combination of both to plant, transplant or maintain, new or existing vegetation directly within the affected area or as close as possible to where the adverse effect is occurring.

Method of determining contribution amount: The amount of the contribution will be determined having regard to the criteria set out in 15.3, but will reflect the actual costs of the works and of providing land to provide for planting, transplanting or maintaining new or existing vegetation.

15.2.4 To enable landscaping or planting.

Circumstances: Where the activity for which a resource consent is granted is likely to cause or contribute to adverse effects on the natural character of the lake or river, or the amenity values supported by it, and the effects cannot be avoided or sufficiently remedied or mitigated.

Purposes: To offset the adverse effects of land clearance, land disturbance and structures in a lake or river or its marginal area by providing money, land, or a combination of both for the purposes of landscaping or planting directly within the affected area or as close as possible to where the adverse effect is occurring.

Method of determining contribution amount: The amount of the contribution will be determined having regard to the criteria set out in 15.3, but will reflect the actual costs of carrying out such works and of providing land sufficient to offset the adverse effects of the activity.

15.2.5 To protect aquatic ecosystems or their habitat, including wetlands.

Circumstances: Where the activity for which a resource consent is granted is likely to cause or contribute to adverse effects on any ecosystem values, particularly those identified in Schedule 1A of this Plan, and the effects cannot be avoided or sufficiently remedied or mitigated.

Purposes: To offset the adverse effects of the activity by providing money, land, or a combination of both to protect ecosystem values or habitats directly within the affected area where the adverse effect is occurring, or where this cannot occur beyond the area occupied by, or immediately affected by, the activity.

Method of determining contribution amount: The amount of the contribution will be determined having regard to the criteria set out in 15.3, but will reflect the actual costs of works and of providing land sufficient to offset such effects.

15.3 FINANCIAL CONTRIBUTION ASSESSMENT CRITERIA

15.3.1 In deciding the actual value of the financial contribution required, the West Coast Regional Council will have particular regard to:

1. The significance of the effects attributable to the activity;
2. Where such effects are contributed to by other activities, the extent to which those effects can be reasonably attributed to the activity for which consent is granted; and
3. The extent to which any positive effects of the activity offset any adverse effects.
4. Whether a contribution for the same purpose has been required by another regulatory agency.

15.3.2 In imposing a financial contribution the following general provisions will apply:

1. All financial contributions shall be GST inclusive.

2. Where the financial contribution is, or includes, a payment of money, the Council may specify in the condition:
 - (a) The amount to be paid by the consent holder or the methods by which the amount of the payment shall be determined;
 - (b) How payment is to be made, including whether payment may be made by instalments;
 - (c) When payment shall be made;
 - (d) Whether the amount of the payment is to bear interest and, if so, the rate of interest;
 - (e) If the amount of the payment is to be adjusted to take account of inflation and, if so, how the amount is to be adjusted;
 - (f) Whether any penalty is to be imposed for default in payment and, if so, the amount of the penalty or formula by which the penalty is to be calculated.
3. Where the financial contribution is, or includes, land, the value of the land shall be determined by the Council. In granting a consent the Council shall give reasons in its decision for its assessment of the value of the land.
4. Where the financial contribution is, or includes, land the Council may specify:
 - (a) The location and the area of the land;
 - (b) When and how the land is to be transferred to, or vested in, the Council.

Chapter 16

CROSS BOUNDARY ISSUES

16.1 INTRODUCTION

Where the adverse effects of an activity occur in an area under the management of another agency, administrative processes are required to ensure that the cross boundary nature of the effect is considered, and where necessary taken into account by the agency responsible for the management of that resource. Establishing processes between local authorities in order to deal with those cross boundary issues is required.

16.2 METHODS

In order to deal with cross boundary issues as they arise, the West Coast Regional Council will use the following methods:

16.2.1

~~To liaise with adjacent regional councils over issues of concern related to the management of the water resource.~~

16.2.2

~~To promote and encourage the development of protocols with adjacent territorial local authorities and regional councils for resolving cross boundary issues.~~

16.2.3

~~To consult with all statutory agencies having responsibilities for the sustainable management of aspects of the West Coast's environment.~~

16.2.4

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

16.2.5

~~To combine with appropriate territorial local authorities and regional councils in jointly processing resource consent applications that cross administrative boundaries.~~

Explanation and principal reasons for adopting

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

Chapter 17 MONITORING AND REVIEW

17.1 INTRODUCTION

~~The Resource Management Act 1991 requires the West Coast Regional Council to gather information and to undertake or commission such research as is necessary to carry out effectively their functions under the Resource Management Act (Section 35(1)). Section 35(2) of the Resource Management Act also requires that the West Coast Regional Council monitor:~~

- ~~(a) The state of the regional environment to the extent that is appropriate to enable the Council to effectively carry out its functions (baseline monitoring or environmental monitoring);~~
- ~~(b) The efficiency and effectiveness of any policy statement or plan, or proposed policy statement or plan for the region, and the exercise of any functions, powers or duties delegated or transferred by it (process monitoring); and~~
- ~~(c) Compliance of resource consents (compliance monitoring).~~

~~Section 67(1)(i) of the Resource Management Act also requires that the West Coast Regional Council include within this Plan, the procedures to be used to review the matters contained within it, and to monitor the effectiveness of the Plan as a means of achieving its objectives and policies.~~

17.2 ELEMENTS TO BE MONITORED

~~Subject to the funding available in its Annual Plan, the West Coast Regional Council will monitor the elements of the West Coast's water resources, and the effects of their use and development on the environment, as necessary to assess the efficiency and effectiveness of the objectives and policies within this Plan. In considering the elements requiring monitoring, the West Coast Regional Council will have particular regard to the anticipated environmental results identified in Chapters 5 to 10 of this Plan.~~

17.3 MONITORING TECHNIQUES

~~Monitoring techniques will be used to determine the efficiency and effectiveness of the objectives and policies within this Plan, including:~~

- ~~1. Analysis of feedback, compliments, complaints received and responses to complaints.~~
- ~~2. Water levels and flows, and water use surveys, pertaining to the West Coast's surface and groundwater resources.~~
- ~~3. Water quality surveys, incorporating both chemical and biological monitoring methods.~~
- ~~4. Requiring self-monitoring of consents, where necessary, and the provision of the collected information to the West Coast Regional Council for audit.~~
- ~~5. Compliance audit monitoring, at appropriate intervals, to ensure the conditions on resource consents are being adhered to.~~
- ~~6. Maintaining a database of resource consents issued.~~

7. Commission research, as necessary, to provide additional information on the environment of water bodies.
8. Where appropriate, develop and implement joint initiatives with other local authorities, government departments, Poutini Ngäi Tahu, water user groups, land care groups and other agencies to monitor key aspects of the West Coast's water body environment.
9. Make available data held by the West Coast Regional Council and seek the transfer between agencies and territorial local authorities of information on the West Coast's water resources.

17.4 REVIEW

This Plan, once approved, could be in force for a period no longer than 10 years, unless reviewed earlier. Any such review will be carried out in accordance with the First Schedule of the Resource Management Act. In considering the need to review this Plan, the West Coast Regional Council will have regard to the extent to which any of the following matters affect the framework established by, and the contents of the Plan:

1. Changes in legislation dealing with any aspect of the management of water and water bodies.
2. Improved knowledge and understanding of the West Coast's water resources.
3. Issues identified by the monitoring of the efficiency and effectiveness of the objectives and policies within this Plan.
4. The development, implementation and review of the Regional Policy Statement and other regional plans by the West Coast Regional Council.
5. The development, implementation and review of district plans by the West Coast's territorial local authorities.
6. Requests for a plan change or review made by any person in accordance with Part II of the First Schedule of the Resource Management Act.

Schedule 1A

HABITATS OF THREATENED SPECIES

Schedule 1 identifies the significant natural and human use values of West Coast's lakes and rivers. The identification of natural and human use values in Schedules 1A, 1B and 1C enables these values to be given appropriate protection in managing activities (see policy 5.4.1). The scheduled values reflect information available to date and for some lakes or rivers there is little information available.

Natural and human use values are not limited to those characteristics identified in this schedule, however. The natural character, outstanding natural features and landscapes and historic heritage values of lakes and rivers are also important natural and human use values and are also protected through Policy 5.4.1 and in the case of natural character, Policy 5.4.5.

Identification of a particular value for a river does not necessarily mean that value occurs at every point throughout that river. Identification does, however, provide a starting point, in identifying what values are expected to occur.



Schedule 1A: Habitats of threatened species

The following schedule identifies some areas where threatened species are known to be present in the listed lakes and rivers. This list is not exhaustive. The threatened species listed may not necessarily be present throughout the main stem, or all tributaries, of particular rivers listed. For activities that require resource consent, and that affect other values associated with these lakes and rivers, or other lakes and rivers, further information, including an assessment of significance in accordance with policy 5.4.1(1)(f) may be required. Lakes and rivers have been listed in the Schedule in order of north to south.

When interpreting Policy 5.4.1(a), it is important to remember that the degree of threat varies along a continuum and is influenced by qualifiers¹ that provide additional information about why a species is classified as threatened. Where a water body is the habitat of a threatened species, preference will be given to avoiding adverse effects of use and development on that habitat. Giving priority to avoiding adverse effects on the habitat is more important, the more threatened the species.

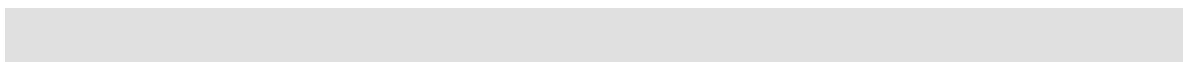
The number (in brackets) refers to DoC's 'level of threat classification', where: 1=nationally critical, 2=nationally endangered, 3=nationally vulnerable, 4=serious decline, 5=gradual decline, 6= sparse, 7=range restricted and 8=data deficient.

Lake or River	Threatened species and threat classification
Heaphy River	Giant kokopu (5), blue duck (2), longfin eel (5)
Karamea River	Shortjaw kokopu (6), lamprey (6), blue duck (2), longfin eel (5)
Mokihinui River	Shortjaw kokopu (6), blue duck (2), longfin eel (5)
Birchfield Lagoon	Brown mudfish (5), giant kokopu (5), significant inanga spawning habitat
German Terrace Creeks	Brown mudfish (5), fernbird (6), bittern (2)
Lost Lagoon	Inanga habitat, marsh crake (6), Crassula ruamahanga (6)
Buller River Mouth	Brown mudfish (5), giant kokopu (5), bittern (2), white heron (1), significant inanga spawning habitat, longfin eel (5)
Fairdown Creek Lagoon	Bittern (2), white heron (1), caspian tern (3), black shag (6), little black shag (7)
Gillows Dam	Fernbird (6)
Virgin Terrace creeks	Brown mudfish (5), fernbird (6)
Charleston Dams	Fernbird (6), brown mudfish (5), longfin eel (5)
Okari Lagoon	White heron (1), bittern (2), caspian tern (3), black (2)/white(5)-fronted terns, fernbird, banded dotterel (5); black shag (6), little black shag (7), shortjaw kokopu (6); significant inanga spawning habitat
Okari River	Shortjaw kokopu (6), lamprey (6), longfin eel (5)
Totara River	Shortjaw kokopu (6)
Little Totara River	Shortjaw kokopu (6)
Barrytown Dredge Ponds	Giant kokopu (5)
Maruia River	Upland Longjaw galaxias (5), dwarf galaxias (5), blue duck (2)
O'Malley Dredge Ponds	Little black shag (7), marsh crake (6)
Lake Christabel	blue duck population (2), longfin eel (5)

¹ R. Hitchmough et al 2007 New Zealand Threat Classification System lists published by the Department of Conservation.

Lake or River	Threatened species and threat classification
Taramakau River	Banded dotterel (5), blue duck (2)
Ahaura River	Giant kokopu (5), longfin eel (5)
Lake Hochstetter	Crested grebe (2). Longfin eel (5)
Lake Ahaura	Crested grebe (2). Longfin eel (5)
Lake Haupiri	Bittern (2), white heron (1), black shag (6), longfin eel (5), giant kokopu (5), <i>Carex tenuiculmis</i> , <i>Deschampsia cespitosa</i> (5)
Arnold River Dam	Fernbird (6), giant kokopu (5), black shag (6), longfin eel (5)
Lady Lake	Giant kokopu (5), longfin eel (5), fernbird (6)
Kangaroo Lake	Bittern (2), black shag (6), fernbird (6), longfin eel (5)
Orangipuku River Mouth	Crested grebe (1), white heron (1), black-billed gull (4), black shag (6), little black shag (7)
Lake Brunner	Bittern (2), white heron (1), crested grebe (1), fernbird (6), black shag (6), little black shag (7), longfin eel (5).
Lake Poerua	Longfin eel (5), black shag (6), little black shag (7)
Lake Swan	Fernbird (6)
Lake Whitestone	Fernbird (6)
Lake Kaniere	Crested grebe (2), grey duck (2), giant kokopu (5), longfin eel (5)
Lake Mahinapua	Bittern (2), white heron (1), crested grebe (1), grey duck (4), black shag (6), little black shag (7), giant kokopu (5), mudfish, longfin eel (5), <i>Myriophyllum robustum</i> (5), <i>Olearia virgata</i>
Lake Arthur	Fernbird (6), grey duck (2)
Lake Mudgie	Fernbird (6)
Arahura River	Blue duck (2)
Hokitika River	Blue duck (2)
Kakapotahi Swamp	Fernbird (6), bittern (2), grey duck (2), giant kokopu (5), <i>Myriophyllum robustum</i> (5)
Lake Ianthe	Crested grebe (2), grey duck (2) and little black shag (7), brown mudfish (5); <i>Scirpus polystachus</i>
Lake Rotokino	Fernbird (6), white heron (1), little black shag (7), crested grebe (2), marsh and spotless crane (6), giant kokopu (5), brown mudfish (5)
Lake Windemere	White heron (1)
Waitangiroto River	White heron (1), Only white heron breeding colony in NZ (1)
Wanganui River	Fernbird (6), spotless crane (6)
Lake Mapourika	Grey duck (2), Crested grebe (2)
Lake Wahapo	Crested grebe (2), grey duck (4), white heron (1), black shag (6), little black shag (7)
Zolas Pond	Spotless crane (6), grey duck (2)
Styx River	Blue duck (2)
Lake Matheson	Grey duck (2), <i>Myriophyllum robustum</i> (5)
Lake Pratt	Crested grebe (2), grey duck (4), white heron (1), black shag (6), little black shag (7)
Cook River	White-fronted tern (5), banded dotterel (5), black-billed gull (4), bittern moulting site, marsh crane (6), black shag (6), little black shag (7), grey duck (4). Excellent wading bird and whitebait habitat
Lake Mueller, Lake Gibb	Crested grebe (2)
Lake Gault	Fernbird (6)
Papakeri Creek	Fernbird (6)
Waikowhai Stream	Fernbird (6), bittern (2), black shag (6), little black shag (7)
Lake Moeraki	Crested grebe (2), fernbird (6), grey duck (2)
Lake Paringa	Crested grebe (2), fernbird (6), grey duck (2)
Lake Rasselas	Crested grebe (2), fernbird (6), grey duck (2)

Lake or River	Threatened species and threat classification
Māori Lakes Complex	Bittern (2), fernbird (6), crested grebe (2), white heron (1), black shag (6), little black shag (7), grey duck (2), giant kokopu (5), Myriophyllum robustum (5), Deschampsia cespitosa (5)
Lake Nisson	Fernbird (6)
Hapūka River	Giant kokopu (5)
Nerger Creek	Fernbird (6), bittern (2)
Okuru River	Giant kokopu (5)
Turnbull River	Giant kokopu (5)
Waita River	Giant kokopu (5)
Lake Ellery	Crested grebe (2), grey duck (2), black shag (6), little black shag (7)
Lake Mary-Aspiring	Crested grebe (2), grey duck (2), black shag (6), little black shag (7)
Upper Cascade Oxbow	Fernbird (6)



Schedule 1B: Water Supply Values

This schedule identifies existing water takes from lakes, ~~and~~ rivers, and groundwater where the water taken is used for public water supply purposes. Rules 12.1.4 and 12.2.4 provides for replacement consents for these takes as a controlled activity, to provide certainty for these communities. The potential impact of activities on these takes will be taken into account when considering applications for resource consents.

Site No.	Water body or Catchment Arranged North to South	Description of water supply system	Water Supply Values and Resource Consent No
1	Unnamed Creek at NZMS L28:321 788	Weir intake to 2 storage tanks	Little Wanganui Water Supply RCN96064
2	Groundwater bore – NZMS L27: 359948		Karamea school and town supply RC01237 (consent held by Ministry of Education)
			Karamea Dairy Company factory and houses
3	Brewery Creek at NZMS L28:217 633	Pumped from creek to main	Mokihinui Water Supply RC01283/5
4	Dean Stream at NZMS L28:178 567	Pipe from stream bed	Ngakawau/Hector Water Supply RC01284/1
			Granity community supply
			Birchfield community supply
5	Conns Creek at NZMS K29:087 413	Weir intake to reservoir	Waimangaroa Water Supply RC01281/1
6	Groundwater bore - NZMS L29:	Bore water pumped to reservoir tanks	Inangahua Junction community supply
7	Groundwater bore – NZMS L30:164 979	Bore water pumped to main and reservoir	Reefton community supply RC01282
			Mawheraiti community supply
8	Giles Creek – south branch at NZMS K29: 016348	Weir intake to reservoir II to treatment plant	Westport/Carters Beach Water Supply RC03081/2 Nth branch RC03081/3 Sth branch (Consent still under application)

Site No.	Water body or Catchment Arranged North to South	Description of water supply system	Water Supply Values and Resource Consent No
9	Omanu Creek at NZMS K29:941 276	Weir intake to tank reservoir	Cape Foulwind Water Supply RC03264
10	Groundwater bore – NZMS K30:735 010	Weir intake to tank reservoir (subterranean source)	Punakaiki community supply RC86080
11	Goat Creek at NZMS K33: 923179	Intake	Otira Water Supply
12	Coal Creek at NZMS 260 671605	Main intake – true right bank	Greymouth water supply RC01092/3
13	Grey River, Omoto at NZMS 260 J31:639604	Lifelines emergency intake on true left bank	Greymouth water supply RC01180/1
14	Groundwater bore, Sidde Road, Coal Creek at NZMS 260 J31: 652607	Bore source, confined aquifer	Rünanga water supply RC01180/2
15	Blackball Creek at NZMS 260 K31: 796708	Main intake true right bank	Blackball water supply RC01180/3
16	Groundwater bore adjacent to Taylorville Road NZMS 260 K31: 747624	Bore source, unconfined aquifer	Stillwater water supply RCN94482
17	Grey river NZMS 260 K31: 709607	Main intake, true right bank	Taylorville/Dobson water supply RC86080
18	Old gold mining tunnel at NZMS J32: 618395	Intake	Kumara Water Supply RC90011
19	Cashmere Bay Road – NZMS K32 871:432 .	Bore from confined aquifer	Site No.10 Te Kinga water supply
20	Groundwater bore – NZMS J32: 486359		Arahura community supply RC91028 RC910108
21	Lake Kaniere at NZMS J33: 577213	Intake	Hokitika Water Supply RC91035
22	Unnamed waterbody at NZMS J33: 469280	Reservoir	Hokitika Water Supply RC80066
23	Groundwater bore – NZMS J33:469281		Hokitika backup community supply
24	Minehan Creek at NZMS J33: 309088	Intake	Ross Water Supply RC86040
25	Groundwater bore from Jones and Donnelly Creeks – NZMS J33:323095		Ross community supply RC91027

Site No.	Water body or Catchment Arranged North to South	Description of water supply system	Water Supply Values and Resource Consent No
26	Harrold Creek at NZMS I34: 149805	Intake	Harihari Water Supply RC91029
27	Unnamed creek at NZMS I34: 115809	Intake	Harihari Water Supply RC01167
28	Groundwater bore – NZMS I34:113812		Harihari Water Supply RC01216
29	Arthur Creek at NZMS I35: 977657	Intake	Whataroa Water Supply RC91030
30	Unnamed waterbody at NZMS I35: 976661		
31	Groundwater bore – NZMS I35: 957684		Whataroa community supply RC03068
32	Mint Creek at NZMS I35: 982657	Intake	Whataroa Rural Water Supply
33	Unnamed tributary of Waiho River at NZMS H35: 823531	Intake	Franz Josef Water Supply RC00390/1
34	Carters Creek at NZMS H35: 692 447	Intake	Fox Glacier Water Supply RC00391/1
35	Groundwater bore – NZMS F37: 927953		Haast Village community supply RC01164/1
36 37	Groundwater bore - NZMSH34: 798718 Groundwater bore in Coastal Marine Area		Okarito community supply RCN97132 Okarito Community supply RC01185 (consent held by Okarito Community Association)
38	Little Groper Creek at NZMS F37: 776877	Intake	Hannah's Clearing Water Supply RC91033
38	Groundwater bore – NZMS F37: 780887		Hannahs Clearing community supply RC02094/1
39	Unnamed waterbody at NZMS E37: 580834	Intake	Jackson Bay Water Supply RC01165/1

Schedule 1C: Schedule of spiritual and cultural beliefs, values and uses of significance to Poutini Ngäi Tahu

This schedule identifies the spiritual or cultural beliefs, values or uses associated with water bodies of significance to Poutini Ngäi Tahu. Poutini Ngäi Tahu provided the information that appears in this schedule.

Kaitiakitanga and Mauri are not listed for each river as these elements apply to all lakes and rivers on the West Coast. Shared rohe for Makaawhio and Ngäti Waewae are shown in italics.

Table 2: Explanation of the values identified in the Schedule 1C Columns

Waahi tapu and/ or Waiwhakaheke	Sacred places; sites, areas and values associated with water bodies that hold spiritual values of importance to Poutini Ngäi Tahu. (Note: Poutini Ngäi Tahu may be consulted regarding the location of these places, sites, areas and values.)
Waahi taonga	Treasured resource; values, sites and resources that are valued and reinforce the special relationship Poutini Ngäi Tahu have with the West Coast's water resources.
Mahinga Kai	Places where food is procured or produced. Examples include eels, whitebait, kanakana (lamprey), kokopu (galaxiid species), koura (freshwater crayfish), freshwater mussels, indigenous waterfowl, watercress and raupo.
Kohanga	Important nursery/ spawning areas for native fisheries & breeding areas for birds
Navigation routes	Water bodies which formed part of traditional routes.
Cultural materials	Water bodies that are sources of traditional weaving materials (such as raupo and paru) and rongoa (medicines).
Waipuna	Waters highly regarded for their purity, healing and health-giving powers.
Trad. Campsite	Area or site of either temporary, seasonal or permanent traditional occupation
Nohoanga	Ngäi Tahu seasonal occupation sites, given contemporary effect through the Ngäi Tahu Claims Settlement Act
Statutory Ack. Areas	Statutory Acknowledgements areas are in Appendix 20.1 and are areas of particular significance for Ngäi Tahu.

Schedule 1C Poutini Ngäi Tahu Spiritual and Cultural Beliefs Values and Uses

	Waahi tapu	Waahi taonga	Mahinga Kai	Kohanga	Navigation routes	Cultural materials	Waipuna	Trad. campsite	Nohoanga	Statutory Ack areas
Kahurangi	X			X	X			X		
Whakapoai (Heaphy)	X		X	X	X			X		
Wekakura				X						
Kohaihai				X	X			X		
Oparara			X	X	X					
Roto Aorere		X			X		X			
Karamea	X	X		X	X	X		X		
Whanganui iti			X	X	X					
Mokihinui		X	X	X	X	X	X	X		
Ngakawau			X	X	X					
Orikaka			X	X	X			X		
Orowaiti				X	X					
Matakitaki				X	X					

	Waahi tapu	Waahi taonga	Mahinga Kai	Kohanga	Navigation routes	Cultural materials	Waipuna	Trad. campsite	Nohoanga	Statutory Ack areas
Maruia	X			X	X			X		
Inangahua				X	X					
Kawatiri (Buller)	X	X	X	X	X			X		
Ohikanui			X	X	X			X		
Okari		X	X	X	X					
Totaranui			X	X	X					
Totara iti				X						
Waitakere (Nile)			X	X	X					
Tiropahi				X						
Potikohua (Fox)			X	X	X	X		X		
PunuNgäiro Bullock Crk	X		X				X			
Pororari		X	X		X					
Punakaiki			X	X	X			X		
Canoe Creek		X				X		X		
Kotuku Whakaohē (L Brunner)	X	X	X	X	X	X	X	X		
Kotuku awa (Arnold)	X	X	X	X	X	X	X	X		
Lakes: Lady, Kangaroo, Haupiri, Ahaura		X		X						
Mawhera (Grey)	X	X	X	X	X	X	X	X		
Paroa			X					X		
Kaimata/ New River			X					X		
Hohonu				X	X	X	X	X		
Taramakau	X	X	X	X	X	X	X	X	X	X
Kapitea		X				X				
Waimea		X	X			X				
Arahura	X	X	X	X	X	X	X	X		
Kaniere		X	X	X	X	X	X	X		
Hokitika	X	X	X	X	X	X	X	X		
Tauwharewhare			X	X						
Mahinapua (Lake and Ck)	X	X	X	X	X	X				
Totara			X							
Mikonui			X	X					X	
Waikoriri		X	X			X				
Waitaha		X	X	X	X	X	X			
Wanganui			X				X	X		
Matahi (lanthe)		X	X	X		X	X			
Poerua		X	X	X	X	X				X
Poeruahapūia Lagoon		X	X	X		X		X		
Whataroa			X					X		
Waitangi Tahuna			X					X		
Waitangi Roto			X	X						
Lake Wahapo			X					X		
Okarito River & Lagoon	X	X	X	X		X		X	X	X
Lake Mapourika			X							
Waiiau & Tatara					X					
Totara Iti & Nui/ 3 & 5 Mile Lagoons			X							
Omoeroa			X					X		
Waikukupa			X							
Te Wai A Hope			X							

	Waahi tapu	Waahi taonga	Mahinga Kai	Kohanga	Navigation routes	Cultural materials	Waipuna	Trad. campsite	Nohoanga	Statutory Ack areas
Lake Mueller										
Lake Matheson			X							
Ohinetamatea			X		X					
Karangarua River & Lagoon			X			X		X	X	X
Manakaiiua			X					X		
Hunts Creek			X							
Ta Heke A Kai		X								
Makaawhio	X	X	X			X		X		X
Papkeri & Lake Kini			X							
Mahitahi			X					X	X	
Ohinemaka			X							
Paringa River			X					X		
Lake Paringa		X	X			X		X		X
Kaitaru/Gates Creek			X							
Waipai Rasselas Creek			X							
Lake Paringa	X	X	X			X				X
Lake Moeraki			X			X				
Whakapohai			X							
Tauparikaka/ Ships Creek			X							
Tawharekiri/ Māori Lakes			X			X		X	X	
Waita			X						X	
Awarua/Haast			X		X					
Otoatahi/ Landsborough					X					
Putakuru/Okuru			X		X			X	X	
Putaiwhenua/ Turnbull			X					X		
Opuka/Hapūka				X						
Waitoto/Waiatoto			X						X	
Hindley Crk			X							
Haehaeakumata/ Lake Nissan			X							
Arawhata			X					X		
Jacksons	X									
Tahutahi/Cascade	X		X						X	
Lake Ellery			X							
Matyr	X									
Kotearohake/ Smoothwater		X								
Papaki/Hope River	X	X								
Spoon & Hackett	X	X								
Hautai/Gorge River	X	X								

Schedule 2

LOCATION OF SURFACE WATER FLOW RECORDER SITES AND MEAN ANNUAL LOW FLOW

Schedule 2 identifies the location of monitoring sites that record surface water flow on the West Coast. Many catchments which are significant water resources do not have flow records. Estimates of low flows and flood flows can be made by concurrent flow gauging, synthesising flow data, and regional estimation methods (MFE Flow guidelines for instream values, 1998).

The Regional Council Low Flow Monitoring Programme collects manual flow gauging data on small tributaries of catchments, including the lower Inangahua, Grey, Hokitika, Wanganui, and Whataroa River catchments. Data from a series of manual flow gaugings can often be used to establish a relationship with flow at a nearby monitoring site. This relationship can then be used to produce either a flow record or flow statistics for the stream that does not have continuous monitoring data.

Site Name	Site No.	Operator	WCRC Flood Warning site?	Catchment Area (km ²)	Mean Annual 7 Day Low Flow (m ³ /s)
Arawhata at County Br	86301	NIWA (F)		971	43
Haast at Roaring Billy	86802	NIWA (F)	Y	1026	41
Moeraki at L Moeraki	87301	NIWA (F)		97.8	5.45
Makaawhio at Rocks	87801	NIWA (F)		135	6.97
L Wahapo at Lake	89103	NIWA (C)		51	-
Whataroa at SHB	89301	NIWA (C)	Y	445	29
Cropp at Gorge	90607	NIWA (F)		12.3	1.05
Hokitika at Colliers Ck	90604	WCRC	Y	344	23
Butchers Ck at L Kaniere	90605	WCRC		3.99	0.012
Taipo at SHB	91103	NIWA (F)		182	14
Taramakau at Greenstone	91104	NIWA (F)		863	40
Arnold at L Brunner	91405	WCRC	Y	431	22.3
Grey at Dobson	91401	NIWA (F)	Y	3830	93
Ahaura at Gorge	91407	NIWA (F)	Y	821	25.7
Grey at Waipuna	91404	NIWA (F)	Y	642	15.8
Pattinson at Weir	91412	NIWA (F)		0.660	1.41
Inangahua at Blacks Pt	93207	NIWA (F)		232	2.33
Tiropahi at SHB	92602	NIWA (F)		36.5	0.32
Devils Ck at Weir	93220	NIWA (C)		6.5	0.036
Inangahua at Landing	93206	WCRC	Y	991	12.4
Buller at Woolfs	93208	WCRC	Y	4560	75
Buller at TeKuha	93203	NIWA (F)	Y	6350	108
Karamea at Gorge	95102	NIWA (F)	Y	1160	27

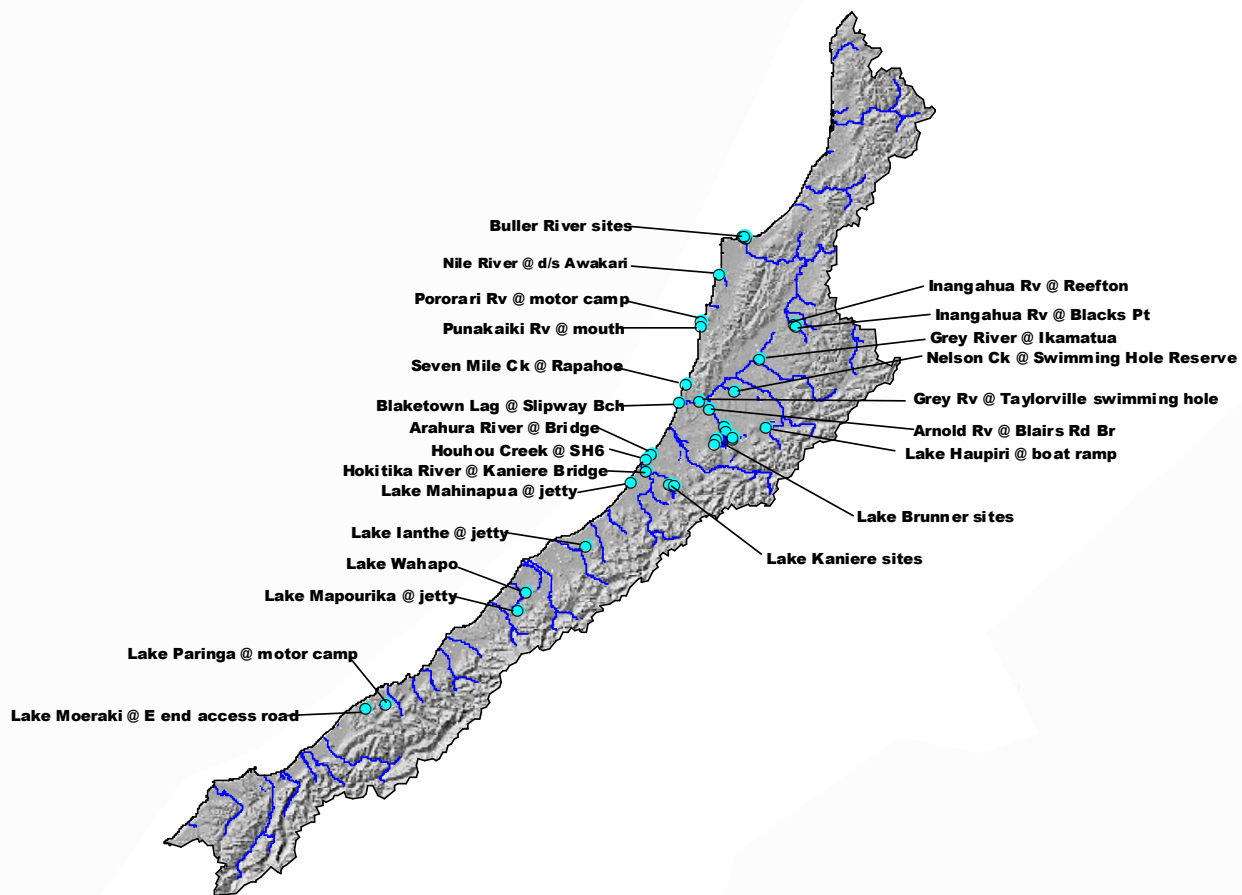
Note: — NIWA (F) = Data is collected by the National Institute of Water and Atmosphere with funding from the Foundation for Research, Science and Technology

— NIWA (C) = Data is collected by the National Institute of Water and Atmosphere with funding from private clients. Whataroa River data is funded by Meridian and Meo.
Mean Annual 7 Day Low Flow statistics derived from record to end 1999.

Schedule 3 Scheduled Swimming Areas

The following areas are scheduled as swimming areas and are to be managed to contact recreation water quality.

- Shingle Beach (Eastern Tiphead), Buller River
- Marrs Beach, Buller River
- Inangahua River at Blacks Pt and Reefton
- Nile River
- Punakaiki River
- Pororari River
- Grey River at Taylorville swimming hole
- ~~Arnold River at Blairs Road bridge~~
- Grey River at Ikamatua
- Blaketown Lagoon at slipway beach
- Rapahoe Lagoon (Seven Mile Creek mouth)
- Nelson Creek at Nelson Creek Reserve
- Lake Brunner at Moana
- Lake Brunner at Iveagh Bay
- Lake Brunner at Cashmere Bay
- Lake Brunner at Bain Bay and Mitchells
- Lake Haupiri
- Arahura River
- ~~3 Mile Creek (Houhou)~~
- Lake Kaniere at Sunny Bight
- Lake Kaniere at Hans Bay
- Kaniere River
- Lake Mahinapua
- Lake Ianthe
- Lake Wahapo
- Lake Mapourika
- Lake Paringa
- Lake Moeraki



Schedule 4
WATER CONSERVATION (BULLER RIVER) ORDER
2001

The following are sections of the Water Conservation (Buller River) Order 2001 that are relevant to the West Coast region:

WATER CONSERVATION (BULLER RIVER) ORDER 2001

SR 2001/139

Pursuant to sections 214 and 423 of the Resource Management Act 1991, Her Excellency the Governor-General, acting on the advice and with the consent of the Executive Council, makes the following order.

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1. Title
2. Commencement
3. Interpretation
4. Outstanding characteristics and features
5. Waters to be retained in natural state
6. Waters to be protected
7. Restrictions on damming of waters
8. Restrictions on alterations of river flows and form
9. Restrictions on alteration of lake levels
10. Requirement to maintain fish passage
11. Restrictions on alteration of water quality
13. Scope of order
14. Exemptions

SCHEDULE 1

SCHEDULE 2

ORDERS

1. Title

This order is the Water Conservation (Buller River) Order 2001.

2. Commencement

This order comes into force on the 28th day after the date of its notification in the Gazette.

3. Interpretation

In this order, unless the context otherwise requires,—

Act means the Resource Management Act 1991

NTU means Nephelometric Turbidity Unit

reasonable mixing means the mixing that occurs—

- (a) within a maximum radius of 200 metres from a discharge into a still water body; or
 - (b) within a maximum distance of 200 metres downstream from a discharge into a river
- river means the main stem of the waters specified in Schedule 1, 2, or 3; and includes any unnamed naturally occurring still water bodies that lie along the main stem
- tributaries means all the tributaries of the rivers or sections of rivers identified in Schedule 1, 2, or 3.

4. Outstanding characteristics and features

The waters specified in any of Schedule 1, 2, or 3 include, to the extent identified in Schedule 1, 2, or 3, the following outstanding characteristics, features, and values:

- (a) outstanding recreational characteristics:
- (b) outstanding wild and scenic characteristics:
- (c) outstanding fisheries or wildlife habitat features:
- (d) outstanding scientific values.

5. Waters to be retained in natural state

Because of the outstanding characteristics, features, and values identified in clause 4, the quality, quantity, level, and rate of flow of the waters specified in Schedule 1 are to be retained in their natural state.

6. Waters to be protected

Because of the outstanding characteristics, features, and values identified in clause 4,—

- (a) the waters specified in Schedule 2 are to be protected in accordance with the restrictions and prohibitions in clauses 7 to 11, as specified in Schedule 2:

7. Restrictions on damming of waters

- (1) For the purposes of this clause, damming does not include any intake or deflection structure that does not—

- (a) harm any salmonid fish spawning or prevent the passage of any fish; or
- (b) prevent the use of the waters for rafting or canoeing; or
- (c) reduce the wildlife habitat; or
- (d) intrude visually to the extent that it reduces wild and scenic values.

- (2) No resource consent may be granted or rule included in a regional plan permitting the damming of the waters specified in Schedule 2 whenever any of the characteristics in subclause (1) are listed as outstanding in Schedule 2 and that schedule refers to this clause.

8. Restrictions on alterations of river flows and form

- (1) No resource consent may be granted or rule included in a regional plan—
 - (a) if the effect of the resource consent or rule would not generally maintain the channel cross-section, meandering pattern, and braided river channel characteristics of the form of any river specified in Schedule 2:
 - (b) if the effect of the resource consent or rule would alter the naturally occurring instantaneous flow of the water in any river specified in Schedule 2 by more than 5%.
- (2) The restriction in subclause (1)(a) does not apply in respect of dams, weirs, roads, fords, bridges, access ways, or fish passes lawfully existing on the date this order comes into force.

9. Restrictions on alteration of lake levels

No resource consent may be granted or rule included in a regional plan for the waters of Lake Rāhui, item 22 of Schedule 2 (this may be an error – see item 20 in Schedule 20), if the effect of that resource consent or rule would alter the mean natural level of the lake or allow a daily fluctuation that exceeds—

- (a) 10% of the natural annual fluctuation; or
- (b) the natural limits of fluctuation.

10. Requirement to maintain fish passage

No resource consent may be granted or rule included in a regional plan for the waters specified in Schedule 2 unless that resource consent or rule maintains—

- (a) adequate natural or artificial passage for trout through those waters where Schedule 2 identifies trout as an outstanding characteristic; and
- (b) adequate natural or artificial passage through those waters for those native fish that require such passage where Schedule 2 identifies native fish as an outstanding characteristic.

11. Restrictions on alteration of water quality

- (1) No resource consent may be granted or rule included in a regional plan permitting a discharge into any of the waters specified in Schedule 2 if, after allowing for reasonable mixing of the discharge with the receiving waters, the discharge would—
 - (a) alter the concentration of suspended solids or turbidity in the receiving waters by more than 1 milligram per litre or 1 NTU where the ambient concentration of suspended solids or turbidity is less than or equal to 10 milligrams per litre or 10 NTU respectively; or
 - (b) alter the ambient concentration of suspended solids or turbidity in the receiving waters by more than 10 milligrams per litre or 10 NTU where the concentration of suspended solids or turbidity is more than 10 milligrams per litre or 10 NTU respectively; or
 - (c) alter the visual clarity of the waters by more than 20%; or
 - (d) alter the natural temperature of the receiving waters—
 - (i) by more than 3 degrees Celsius; or
 - (ii) by increasing the water temperature to more than 20 degrees Celsius; or
 - (iii) so as to adversely affect, during their spawning season, the spawning of—
 - (A) rainbow and brown trout:
 - (B) inanga:
 - (C) koaro:

- (D) giant, banded, and short-jawed kokopu;
 - (E) alpine, long-jawed, dwarf, and common galaxias.
- (2) No resource consent may be granted or rule included in a regional plan permitting the discharge into any of the waters specified in Schedule 2 unless, after allowing for reasonable mixing of the discharge with the receiving waters,—
- (a) any change in the acidity or alkalinity in the receiving waters, as measured by the pH and attributable to that discharge, would either—
 - (i) maintain the pH within the range of 6 to 9 units; or
 - (ii) not allow a change by more than 0.5 units when the natural pH lies outside the range of 6 to 9 units; and
 - (b) there would be no undesirable biological growths attributable to the discharge, including—
 - (i) bacterial or fungal slime growths that are visible to the naked eye; or
 - (ii) seasonal maximum covers of streams or river beds by—
 - (A) periphyton as filamentous growth or mats (larger than 3 millimetres thick) exceeding 40%; or
 - (B) biomass exceeding 100 milligrams of chlorophyll-a per square metre; or
 - (C) 40 grams ash-free dry weight per square metre of exposed surface area; and
 - (c) aquatic organisms are not made unsuitable for human consumption through the accumulation of excessive concentrations of contaminants; and
 - (d) the water is not made unsuitable for recreation by the presence of contaminants, or the median bacterial level of 5 samples or more taken over a period of 30 days would not exceed 126 E coli per 100 millilitres.
- (3) No resource consent may be granted or rule included in a regional plan permitting a discharge into any of the waters specified in Schedule 2 if, after allowing for reasonable mixing of the discharge with the receiving waters, the discharge would reduce the concentration of dissolved oxygen below 80% of saturation.
- (4) For the purposes of subclause (3), if the natural concentration is less than 80% of saturation, the natural level must be maintained or increased.

13. Scope of order

- (1) This order does not limit section 14(3)(b) and (e) of the Act, which relates to the use of water for domestic needs, for the needs of animals, and for, or in connection with, fire-fighting purposes.
- (2) This order does not restrict or prevent the grant of resource consents to the Department of Conservation or rules being included in a regional plan that would permit minor water uses if those minor uses are necessary for the management of land administered by the Department.
- (3) This order does not restrict or prevent the grant of resource consents for the purpose of—
 - (a) research into, and enhancement of, fisheries and wildlife habitats; or
 - (b) hydrological or water quality investigations; or
 - (c) the construction, maintenance, or protection of any road or bridge, or the maintenance or protection of any other network utility operation (as defined in section 166 of the Act); or
 - (d) the construction or maintenance of soil conservation and river protection works undertaken in accordance with the Soil Conservation and Rivers Control Act 1941.

- (4) This order does not prevent the granting of further resource consents for the Maruia Springs Thermal Resort on similar terms and conditions to those imposed on the resource consents held on the date this order comes into force.

14. Exemptions

Nothing in this order prevents the grant of a resource consent that would otherwise contravene the conditions set out in clauses 7 to 12 if—

- (a) a consent authority is satisfied that—
- (i) there are exceptional circumstances to justify the grant of the resource consent; or
 - (ii) any discharge is of a temporary nature; or
 - (iii) any discharge is associated with necessary construction and maintenance work for works and structures not otherwise prohibited by this order; and
- (b) a consent authority is satisfied that the exercise of any such resource consent would not compromise the preservation and protection of the outstanding characteristics and features identified for the waters specified in the Schedules.

SCHEDULE 1

cl 5

WATERS TO BE RETAINED IN NATURAL STATE

<i>Item</i>	<i>Waters</i>	<i>Outstanding characteristics or features</i>
13	Lake Daniels	Rainbow trout fishery, Wild and scenic Native fishery
15	Te Wharau Creek (Stony River)	Headwater trout fishery
16	Blackwater River and Ohikaiti River	Wild and scenic, Blue duck, Native fishery
17	Ohikanui River and all its tributaries	Headwater trout fishery, Wild and scenic Native fishery, Blue duck

SCHEDULE 2

cl 6

PROTECTED WATERS

<i>Item</i>	<i>Waters</i>	<i>Outstanding characteristics or features</i>	<i>Restrictions and prohibitions</i>
4	Buller River from Maruia confluence to Iron Bridge	Canoeing, Rafting, Wild and scenic	cls 7, 8(1), 8(2), 10, and 11
5	Buller River from Iron Bridge to Te Kuha	Rafting Wild and scenic	cls 7, 8(1), 8(2), 10, and 11
16	Maruia River downstream of Alfred River confluence and including the Alfred River to the upper end of the Mainstem Gorge at the Jones Creek confluence (map reference L30 434 017)	Headwater trout fishery Wild and scenic	cls 7, 8(1), 8(2), 10, and 11
19	Rappahannock River, Station Creek, Woolley River, and Rahu River	Headwater trout fishery Trout spawning habitat Native fishery	cls 7, 8(1), 8(2), 10, and 11
20	Lake Rāhui	Wildlife habitat	cls 9, 10, and 11

Marie Shroff,

Clerk of the Executive Council.

EXPLANATORY NOTE

This note is not part of the order, but is intended to indicate its general effect.

This order, which comes into force on the 28th day after the date of its notification in the Gazette, declares that—

- (a) the waters described in Schedule 1 are to be retained in their natural state because of the outstanding characteristics, features, and values of the waters:
- (b) the waters described in Schedule 2 are waters to be protected because of the outstanding characteristics, features, and values of the waters:

The order specifies how the waters are to be preserved and protected. The order also specifies the limitations of the preservations and protections.

Issued under the authority of the Acts and Regulations Publication Act 1989.

Date of notification in Gazette: 21 June 2001.

This order is administered in the Ministry for the Environment.

Schedule 5
NATIONAL WATER CONSERVATION (GREY RIVER)
ORDER 1991

NATIONAL WATER CONSERVATION (GREY RIVER) ORDER 1991

SR 1991/133

PURSUANT to section 20D of the Water and Soil Conservation Act 1967, Her Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following order.

CONTENTS

1. Title and commencement
2. Interpretation
3. Outstanding characteristic and features
4. Retention of natural waters in natural state
5. Partial retention of natural waters
6. Scope

ORDERS

1. Title and commencement

- (1) This order may be cited as the National Water Conservation (Grey River) Order 1991.
- (2) This order shall come into force on the 28th day after the date of its notification in the Gazette.

2. Interpretation

In this order, "Act" means the Water and Soil Conservation Act 1967.

3. Outstanding characteristic and features

It is hereby declared that the Ahaura River from Hamers Flat (NZMS 260 K31/064616 to NZMS 260 K31/973681) includes and provides—

- (a) An outstanding natural characteristic in the form of an incised river gorge with a meandering pattern; and
- (b) Outstanding scenic features.

4. Retention of natural waters in natural state

The waters of the Blue Grey River (from NZMS 260 L31/382656 upstream), its tributaries, and Lake Cristabel shall be preserved as far as possible in their natural state.

5. Partial retention of natural waters

Because of the outstanding characteristic and features specified in clause 3 of this order—

- (a) No water right under section 21 of the Act shall be granted in respect of the Ahaura River upstream from Hamers Flat for the purposes of hydro-electric power generation

or other works if the effect of granting the right would detract from the outstanding characteristic and features specified in clause 3 of this order:

- (b) No right to dam the waters of the Ahaura Gorge shall be granted under section 21 of the Act:
- (c) No right under section 21 of the Act shall be granted for the purposes of damming the rivers downstream of the Ahaura Gorge if the effect of granting the right would be to change the rate of flow or water levels in that gorge:
- (d) Any water right may be granted under section 21 of the Act and any general authorisation may be given under section 22 of the Act, for mining and other water uses in the Ahaura Gorge, unless the effect of granting the right or authorisation would detract from the outstanding characteristic and features specified in clause 3 of this order:
- (e) Any water right may be granted under section 21 of the Act and any general authorisation may be given under section 22 of the Act, in respect of the waters specified in clause 3 of this order, for the purposes of—
 - (i) The construction, maintenance, or protection of roads, bridges, pylons, or other necessary public utilities:
 - (ii) Soil conservation, river protection, or other activities undertaken pursuant to the Soil Conservation and Rivers Control Act 1941.

6. Scope

Nothing in this order shall be construed as limiting the effect of the second proviso to section 21(1) of the Act relating to the use of water for domestic needs, for the needs of animals, and for or in connection with fire-fighting purposes.

MARIE SHROFF,

Clerk of the Executive Council.

EXPLANATORY NOTE

This note is not part of the order, but is intended to indicate its general effect.

This order, which comes into force 28 days after its notification in the Gazette, declares the waters of the Ahaura Gorge downstream of Hamers Flat—

- (a) To be an outstanding natural characteristic in the form of an incised river gorge with a meandering pattern; and
- (b) To have outstanding scenic features.

The order also includes various provisions to preserve and protect the waters of the Grey River.

Issued under the authority of the Acts and Regulations Publication Act 1989.

Date of notification in Gazette: 25 July 1991.

This order is administered in the Ministry for the Environment.

Schedule 6
SCHEDULE OF TRANSITIONAL PROVISIONS
REPEALED BY THIS REGIONAL WATER PLAN

Permitted activities repealed by proposed Water Management Plan	Replacement permitted activities
1. To take water for water blasting use and to discharge after use	12.1.1, 12.1.3, 12.5.4
2. To take water for dairy shed use	12.1.1, 12.1.2, 12.2.1
3. To take water for pest and weed spraying	12.1.3
4. To discharge non-toxic water from swimming pools	12.5.3
5. To divert natural water associated with river protection and drainage works existing prior to 2 October 1989	12.4.2
6. To divert and discharge natural water associated with land drainage	12.4.3, 12.5.2
7. To take water for small scale (hobby) mechanical mining purposes and to discharge after use	12.1.1, 12.1.3, 12.5.5
8. To take water for domestic needs	No rule required — permitted under Section 14(3) of the RMA
9. To take water for the needs of animals	No rule required — permitted under Section 14(3) of the RMA
10. To take water in connection with fire fighting	No rule required — permitted under Section 14(3) of the RMA

<p>Schedule 7</p> <p>HYDRO ELECTRIC SCHEMES CONTROLLED UNDER</p> <p>RULE 12.5.1</p>
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Arnold River Hydro Electric Scheme	<ul style="list-style-type: none"> • Arnold River Dam and spillway discharge; • Pipeline including intake, arch dam and pipeline bridge; • Powerstation and associated surge tank and penstocks; • Tailrace and discharge to Arnold River.
Dillmans, Duffers and Kumara Hydro Electric Scheme	<ul style="list-style-type: none"> • Arahura Wainihinihi race and Rough Wainihinihi race and their intakes and discharges; • Duffers powerhouse and intake from Kawhaka Creek; • Loopline and Kapitea reservoirs; • Dillman's powerhouse and intake and discharge to Dillmans race; • Kumara powerhouse and discharge to the Taramakau river.
Fox Hydro Electric Power Scheme	<ul style="list-style-type: none"> • Weir structure on Skiffingtons swamp; • Weir structure on Lake Gault; • Intake, tunnel and penstock from Lake Gault to Power House; • Discharge from tunnel and powerstation to Clearwater Creek
McKays Creek Hydro Electric Scheme	<ul style="list-style-type: none"> • Kaniere River Weir and No. 2 race gates & intake; • No. 2 race, Coal Creek and Armco flumes; • Powerstation and associated penstock, forebay & screens, emergency bywash and spillway and discharge to Kaniere River.
Kaniere Forks Hydro Electric Scheme	<ul style="list-style-type: none"> • Lake Kaniere weir, lake level control boards, intake control gates and screen; • No. 1 race and Johnsons flume • Powerstation and associated penstock, forebay and screens and discharge to Kaniere River.
Turnbull Hydro Electric Power Scheme	<ul style="list-style-type: none"> • Intake structure on Turnbull River; • Settling basin, pipeline, surge tank and penstock to power house; • Discharge from settling basin, surge tank and powerstation to unnamed creek which flows into the Turnbull River
Wahapo Hydro Electric Scheme	<ul style="list-style-type: none"> • Lake Wahapo weir and Armco culvert; • Race, race overflow and head pond plus intake into pipeline; • Powerhouse and discharge to Okarito River

Chapter 19

GLOSSARY

Aerial discharge	The discharge of any agrichemical from any aircraft.
Aquatic plant	Any plant species that grows in water and is either totally or predominantly submerged in water.
Bore interference	The reduced ability of users in a localised area to take water from a bore, due to the taking of water from another bore, reducing the pressure and/or the level of groundwater.
Contact recreation	Recreational activities involving contact with water; either primary (full immersion) or secondary (that which may result in some form of contact with water).
Contaminated Site	A site at which hazardous substances occur at concentrations above background levels and where assessment indicates it poses or is likely to pose an immediate or long term hazard to human health or the environment. Background levels refer to ambient levels of a contaminant in the local area of the site under consideration.
Controlled lake	A lake where structures are used to manage the quantity of water leaving the lake.
Dam	A structure used or to be used for the damming of any water, or water body.
Deposition	The deposit of any substance, other than water or water borne contaminants (discharge), or fill material (reclamation).
Divert	In relation to the diversion of water, the process of redirecting the flow of water.
Drain	Artificial channel or subsurface conduit (e.g., mole drain, tile drain or drainage tunnel, or roadside swale) constructed to either lower the water table or divert water, excluding a water race. A drain is a collection and delivery system that collects water from generally unsealed surfaces (eg. on farm or rural roadside drains) but also includes water collected from sealed surfaces with no associated reticulated stormwater system such as roadside swales and concrete dish swales. The hollows of humped and hollowed land are considered drains.
Erosion	The processes of the wearing away of the land surface (including the land that forms the bed of a lake or river) by natural agents and the transport of the material that results.
Fertiliser	Any proprietary substance specifically manufactured for use in increasing the nutrient status of land.
Geothermal Energy	Energy derived or derivable from and produced within the earth by natural heat phenomena; and includes all geothermal water
Geothermal Water	Water heated within the earth by natural phenomena to a temperature of 30 degrees Celsius or more; and includes all steam, water, and water vapour, and every mixture of all or any of them that has been heated by natural phenomena.
Groundwater	Water that occupies or moves through openings, cavities or spaces in geological

	formations under the ground. Groundwater does not include geothermal water, for the purpose of the Rules.
Hazardous substance	<p>Unless expressly provided otherwise by regulations, any substance--</p> <p>(a) With one or more of the following intrinsic properties:</p> <p style="padding-left: 40px;">Explosiveness:</p> <p style="padding-left: 40px;">Flammability:</p> <p style="padding-left: 40px;">A capacity to oxidise:</p> <p style="padding-left: 40px;">Corrosiveness:</p> <p style="padding-left: 40px;">Toxicity (including chronic toxicity):</p> <p style="padding-left: 40px;">Ecotoxicity, with or without bioaccumulation; or</p> <p>(b) Which on contact with air or water (other than air or water where the temperature or pressure has been artificially increased or decreased) generates a substance with any one or more of the properties specified in paragraph (a) of this definition.</p>
Herbicide	Substance toxic to plants and used to kill or control plants.
Instream values	Any values associated with water in streams.
Landholder	Occupier.
Landholding	<p>For land subject to the Land Transfer Act 1952, land in:</p> <p>(i) A single certificate of title; or</p> <p>(ii) Two or more adjoining certificates of title, with a common occupier.</p> <p>For land not subject to the Land Transfer Act 1952, all contiguous land last acquired under one instrument of conveyance and occupied by a common occupier.</p>
Leachate	A liquid contaminant resulting from the liquid being exuded from or percolated through some more or less solid matter.
Main stem	The principal course of a river (i.e., does not include tributaries).
Mean Annual Low Flow (Seven Day)	<p>The seven-day low flow in any year is determined by calculating the average flow over seven consecutive days for every seven consecutive day period in the year, and choosing the lowest.</p> <p>When this is done for every year of record, the seven-day mean annual low flow can be determined by adding the lowest seven-day low flows for every year of record and dividing by the number of years in the record.</p> <p>The MALF is “naturalised” by including an estimate of upstream takes on the flow.</p>
Minimum flow	The flow below which the holder of any resource consent to take water must cease taking water from that river.
Mixing zone	An area of water associated with a discharge within which any standards or requirements relating to water quality are set aside to enable reasonable mixing to occur.
Non-metal	For the purpose of Policy 7.4.2 of this Plan a non-metal is restricted to the elements arsenic, boron, sulphur, selenium and their compounds.

Person	Includes the Crown, a corporation sole, and also a body of persons whether corporate or unincorporated.
Point source discharge	A discharge of water or contaminant that enters a water body at a definable point, often through a pipe or drain.
Reticulated Stormwater System	Any system that collects water from impervious surfaces such as roofs, buildings and other structures (incl. kerb and channel).
Runoff	Overland flow of water not contained within or forming part of a water body.
Slope dewatering	Works to control naturally occurring groundwater flows from cut batter slopes.
Stormwater	The water running off from any impervious surface such as roads, car parks and roofs.
Structure	Any building, equipment, device, or other facility made by people and which is fixed to land; and includes any raft.
Surface water	Does not include geothermal water, for the purpose of the Rules.
To Dam Included under Dam	In relation to the damming of water, is the process of impounding the water for any purpose and for any period of time, as in a reservoir.
Trace Concentrations	In terms of Rule 12.5.5 means the presence of a contaminant in concentrations that will not alter the background concentration in receiving waters by more than 20 percent or exceed the ANZECC aquatic ecosystem guidelines. Note: The Australian and New Zealand Guidelines for Freshwater Quality are produced by the Australian and New Zealand Environmental and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand.
Water	Means water in all its physical forms whether flowing or not and whether over or under the ground. Includes fresh water, coastal water and geothermal water; but does not include water in any form while in any pipe, tank or cistern.
Water body	Fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer or any part thereof, that is not located within the coastal marine area.

Chapter 20 APPENDICES

20.1 STATUTORY ACKNOWLEDGEMENT AREAS

In the Ngäi Tahu Claims Settlement Act 1998, the Crown acknowledged statements by Te Rünanga o Ngäi Tahu of the particular cultural, spiritual, historic, and traditional association of Ngäi Tahu with areas described in that Act. The statements, which are called “statutory acknowledgements”, are set out in schedules in the Act. The areas to which the statutory acknowledgements relate are known as statutory areas and include the following Sites relevant to this Plan:

Kotuku-Whakaoho (Lake Brunner/Moana)	Okari Lagoon
Taramakau River	Pouerua (Saltwater Lagoon)
Lake Kaniere	Karangarua Lagoon
Makaawhio (Jacobs) River	Okarito Lagoon
Lake Paringa	

Statutory Acknowledgement Areas

Note: This section is attached for public information purposes only, in accordance with Section 220(2) of the Ngäi Tahu Claims Settlement Act 1998. This information is neither part of the Plan, nor subject to the provisions of the First Schedule of the Resource Management Act 1991.

The Regional Council must include in the regional plan information recording all statutory acknowledgements affecting statutory areas covered wholly or partly by that regional plan. Nine statutory areas in the West Coast region are covered by this Plan. The Ngäi Tahu associations with these nine areas, taken from the Ngäi Tahu Claims Settlement Act, are reproduced below.

The significance of statutory acknowledgements is:

- (1) The Regional Council must forward to Te Rünanga o Ngäi Tahu a summary of every application for a resource consent for activities within, adjacent to, or impacting directly on a statutory area before the application is notified, and before the regional council makes a decision to dispense with notification [refer section 207 Ngäi Tahu Claims Settlement Act and to the Ngäi Tahu Claims Settlement (Resource Management Consent Notification) Regulations 1999].
- (2) The Regional Council must have regard to the statutory acknowledgements in deciding whether Te Rünanga o Ngäi Tahu is a person who may be adversely

affected by the granting of a resource consent for an activity within, adjacent to, or impacting directly on the statutory area, and whose written approval must be given before the application for a resource consent for that activity can be dealt with on a non-notified basis.

- (3) Te Rūnanga o Ngāi Tahu, and any member of the Ngāi Tahu Whānui, may cite the statutory acknowledgement as evidence of the association of Ngāi Tahu with the statutory area in submissions to, and at any hearing held by, the regional council on a resource consent application, a policy statement, or a plan.

Further information on the statutory acknowledgements for the nine statutory areas can be found in Schedules 24, 25, 31, 33, 38, 47, 48, 53, and 56 of the Ngāi Tahu Claims Settlement Act 1998. Maps showing the location of the Statutory Acknowledgement areas are held at Regional Council offices.

~~The associations for the nine statutory areas within the West Coast region covered by this Plan, as set out in the Ngāi Tahu Claims Settlement Act, are:~~

~~Ngāi Tahu Association with Okari Lagoon~~

~~Manawhenua (tribal authority over the area) was gained through Ngāi Tahu 's defeat of Ngāti Wairaki, Tumatakokiri and Ngāti Toa. For Ngāi Tahu, histories such as this reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped Ngāi Tahu as an iwi.~~

~~This hapū (estuary) once supported a number of significant kainga nohoanga (settlements) including Tauraka, Omau, Oweka, Orowaiti, Te Kuha, Orikaka, Waimakaroa and Whareatea. As a result of this pattern of occupation, there are a number of recorded and unrecorded archaeological sites associated with the Okari, including middens. Such sites are a focus for memories of Ngāi Tahu tupuna, and as such are wahi taonga to the descendants of those tupuna. Okari was and still is a significant spawning ground and kohanga (nursery) for a variety of fish species and a significant breeding area for manu (birds). The lagoon remains a source of rich and abundant harvests.~~

~~The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the lagoon, the relationship of people with the lagoon and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today. As a mark of the significance of the area as a mahinga kai and because of the kainga nohoanga, a reserve was set aside for Ngāi Tahu in this area at the time of the 1860 Arahura Deed of Sale.~~

~~The mauri of Okari represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the lagoon.~~

Ngāi Tahu Association with Kotuku-Whakaoho (Lake Brunner/Moana)

The name Kotuku Whakaoho relates to a husband and wife called Kotuku and Mawhera. Both were killed at this site which led to one (Kotuku) having their name applied to the lake and the other (Mawhera) lending their name to the Grey River. As with most lakes, there is also a tradition of a taniwha connected with Kotuku-Whakaoho. The story tells how two taniwha were killed by a chief because they had killed his father and sister. On their deaths, the taniwha became islands which now lie in the lake.

For Ngāi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations. These histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi. Kotuku Whakaoho holds an important place in Ngāi Tahu history as the site of the tribe's battle with Ngāti Wairaki. Victory in this battle saw Ngāi Tahu gain manawhenua in the area. Besides being a famous battle ground, Kotuku Whakaoho was important as the site of a permanent settlement, acting as a focal point for food gathering parties. The principal food taken from the lake was tuna (eel). Waterfowl and forest fowl were also important mahinga kai in this area.

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai, and other taonga, ways in which to use the resources of the lake, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today. The importance of the area to Ngāi Tahu was recognised by the Crown in the setting aside of a reserve at the lake for Ihaia, Tainui, and Waipapara.

The mauri of Kotuku Whakaoho represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the lake.

Ngāi Tahu Association with the Taramakau River

“Manawhenua (tribal authority over the area) was gained through Ngāi Tahu 's defeat of Ngāti Wairaki, Tumatakokiri, and Ngāi Toa. For Ngāi Tahu, histories such as this reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped Ngāi Tahu as an iwi.

The Taramakau River was, and still is, a significant indigenous fishery and source of manu (birds). The river remains a source of rich and abundant harvests. The area is noted particularly for its tuna (eel) and inaka (whitebait) fisheries.

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai, and other taonga, ways in which to use the resources of the river, the relationship of people with the river and their dependence on it, and

tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today. There was a pa at the mouth of the river, and kainga nohoanga (temporary settlements) were established along the length of the river which were related to the taking of mahinga kai and, in particular, the retrieval of pounamu. The river itself was, therefore, a significant part of the pounamu trail, via which the taonga was transported from its source to be traded up and down the country.

The tupuna had an intimate knowledge of navigation, river routes, safe harbours and landing places, and the locations of food and other resources on the river. The river was an integral part of a network of trails which were used in order to ensure the safest journey, and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whānau and hapū and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the river.

The mauri of Taramakau represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the river.”

Ngāi Tahu Association with Lake Kaniere

Kaniere is noted in Ngāi Tahu tradition as a lake occupied by the Ngāti Wairaki explorer, Raureka. According to tradition, Raureka was the first to cross Ka Tiritiri o te Moana (the Southern Alps) from her village at Arahura. Apparently she left the village after an argument with her Ngāti Wairaki Whānaunga (relatives). Raureka was accompanied by her slave as she wandered up to Kaniere and eventually came across a pass which took her to the Rakaia Valley and eventually the Canterbury Plains.

This route came to be later known as Noti Raureka (Brownings Pass). On the east coast, Raureka fell in with a number of Ngāi Tahu in the Temuka region who were felling timber with adzes. Raureka showed them her pounamu (greenstone) adze and proceeded to fell the ti tree. The Ngāi Tahu agreed that her pounamu was a better stone for an adze. Raureka eventually led a Ngāi Tahu party across the Alps to show them the source of pounamu.

For Ngāi Tahu, histories such as this reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped Ngāi Tahu as an iwi. Kaniere was also an important mahinga kai used by parties crossing between the coasts. Tuna (eels) and weka were the main foods taken in this area. The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the lake, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today. Because of its importance as a mahinga kai, the Crown set aside a reserve at the lake for Ngāi Tahu last century.

The mauri of Kaniere represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the

natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the lake.

Ngāi Tahu Association with Pouerua

Manawhenua (tribal authority over the area) was gained through Ngāi Tahu 's defeat of Ngāti Wairaki, Tumatakokiri and Ngāti Toa. For Ngāi Tahu, histories such as this reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped Ngāi Tahu as an iwi.

Pouerua once supported a number of significant kainga nohoanga (settlements) including one on the lagoon itself, and others at the mouths of the Waitangi Taona, Waitangi Roto, Whataroa and Poherua Rivers. As a result of this pattern of occupation, there are urupa and archaeological sites associated with Pouerua. Urupa are the resting places of Ngāi Tahu tupuna and, as such, are the focus for whānau traditions. These are places holding the memories, traditions, victories and defeats of Ngāi Tahu tupuna, and are frequency protected by secret locations. Pouerua was and still is a significant spawning ground and kohanga (nursery) for a variety of fish species and a significant breeding area for manu (birds). The Lagoon remains a source of rich and abundant harvests.

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the lagoon, the relationship of people with the lagoon and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today. As a mark of the significance of the area as a mahinga kai and because of the kainga nohoanga, reserves were set aside for Ngāi Tahu in this area at the time of the 1860 Arahura Deed of Sale. It was at Pouerua in 1860 that the Crown agent James Mackay sealed the purchase of Te Tai Poutini (the West Coast) from the chiefs of Poutini Ngāi Tahu, although the Arahura Deed giving effect to this purchase was actually signed at Mawhera.

The mauri of Pouerua represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the lagoon.

Ngāi Tahu Association with Okarito Lagoon

The Okarito Lagoon area was traditionally occupied by the Ngāti Wairaki and Rapuwai hapū before Ngāi Tahu gained manawhenua (tribal authority over the area). The area was important as the site of the Ngāti Wairaki Whare Wananga. It was to this wananga that the Ngāi Tahu raNgātira (chiefs) went so as to learn the whakapapa to the South Island. For Ngāi Tahu, histories such as this reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Ngāi Tahu as an iwi.

Okarito is well known as the place occupied by the kotuku (white heron) and there are many Ngāi Tahu waiata (songs) that tell the tale of the kotuku.

The lagoon was also a rich mahinga kai. The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the Lagoon, the relationship of people with the lagoon and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngäi Tahu today. The mauri of Okarito represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngäi Tahu Whänui with the area.

Ngäi Tahu Association with Karangarua Lagoon

Manawhenua (tribal authority over the area) was gained through Ngäi Tahu 's defeat of Ngäti Wairaki, Tumatakokiri and Ngäti Toa. For Ngäi Tahu, histories such as this reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped Ngäi Tahu as an iwi.

Seasonal kainga nohoanga (settlements) were established at the mouth of the Karangarua Lagoon for the taking of kai awa (river sourced foods) and manu (birds). Karangarua Lagoon was and still is a significant spawning ground and kohanga (nursery) for a variety of fish species and a significant breeding area for manu. The Lagoon remains a source of rich and abundant harvests. Pokorotutu and Otehautumua were and are notable mahinga kai areas at the north and south ends respectively of the Karangarua. The area is noted particularly for its tuna (eel) and inaka (whitebait) fisheries, as a source of raranga (weaving) materials and other useful plants including raupo, wiwi and harakeke. The traditional practice of collecting seagull eggs from the lagoon during spring is still carried out by local Ngäi Tahu.

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the lagoon, the relationship of people with the lagoon and their dependence on it and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngäi Tahu today. As a mark of the significance of the lagoon as a mahinga kai, reserves were set aside for Ngäi Tahu in this area at the time of the 1860 Arahura Deed of Sale, and subsequently under the South Island Landless Natives Act 1906.

The mauri of Karangarua represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngäi Tahu Whänui with the lagoon.

Ngäi Tahu Association with the Makaawhio (Jacobs River)

According to legend, the Makaawhio River is associated with the Patupaiarehe (flute playing fairies) and Maeroero (ogres of the forest). It is said that Tikitiki o Rehua was slain in the Makaawhio River by the Maeroero. The name 'Tikitiki o Rehua' is now attached to the ridge of hills (sometimes called Jacobs Ridge) on the north bank of the Makaawhio River. For Ngäi Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce

tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngāi Tahu as an iwi.

Manawhenua (tribal authority over the area) was gained through Ngāi Tahu 's defeat of Ngāti Wairaki and Tumatakokiri. That manawhenua was cemented by the establishment of kainga nohoanga (permanent settlements) at the mouth and on both banks of the river because of the plentiful supply of mahinga kai from the river and its estuary and surrounds. A northern settlement strategically sited on Tahekeakai (Jacobs Bluff) acted as a sentry lookout that warned of approaching visitors.

As a result of this pattern of occupation, there are a number of urupa and wahi tapu along the river. Urupa are the resting places of Ngāi Tahu tupuna and, as such, are the focus for whānau traditions. Urupa and wahi tapu are places holding the memories, traditions, victories and defeats of Ngāi Tahu tupuna, and are frequently protected by secret locations.

The Makaawhio was and still is the source of a range of mahinga kai. Rocks at the mouth of the river still provide an abundance of kaimoana (seafood). The estuary of the river itself still provides an abundance of kaiawa (freshwater fisheries), including tuna (eels), patiki (flounders) and inaka (whitebait) and remains a significant kohanga (nursery) for a variety of fish species.

The area is still a significant manu (bird) breeding area, once yielding a rich harvest. The flora of the area provided not only food, but also the raw materials for raranga (weaving), rongoa (medicines) and the building of waka (canoes) and whare (houses). In addition to its bounty of mahinga kai resources, the Makaawhio is a source of the mineral kyanite (Aotearoa).

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the river, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngāi Tahu today. Because of the kainga nohoanga, reserves were set aside on the river for Ngāi Tahu at the time of the 1860 Arahura Deed of Sale. One of these was an urupa, where notable Ngāi Tahu tupuna Te Koeti Turanga and Wi Katau Te Naihi are buried, among others.

The mauri of the Makaawhio represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngāi Tahu Whānui with the river.

Ngāi Tahu Association with Lake Paringa

Manawhenua (tribal authority over the area) was gained by Ngāi Tahu 's defeat of Ngāti Wairaki, Tumatakokiri and Ngāti Toa. For Ngāi Tahu, histories such as this reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped Ngāi Tahu as an iwi.

Seasonal kainga nohoanga (settlements) were established for the taking of mahinga kai. Paringa was and still is a noted tuna (eel) fishery, significant spawning ground and kohanga (nursery) for a variety of fish species and significant breeding area for manu (birds), including ducks, kukupa (kereru/ wood pigeon) and weka (now extinct in this area). The lake was therefore a source of rich and abundant harvests. The area also provided plants utilised in raranga (weaving) and other practices.

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka (landing places), places for gathering kai and other taonga, ways in which to use the resources of the lake, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngäi Tahu today. Because of the kainga nohoanga, a reserve was set aside for Ngäi Tahu in this area at the time of the 1860 Arahura Deed of Sale.

The lake also is a wahi tapu. Wahi tapu are places holding the memories, traditions, victories, and defeats of Ngäi Tahu tupuna, and are frequently protected by secret locations. The mauri of Lake Paringa represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngäi Tahu Whänui with the lake.

Nohoanga

As well as those outlined above, there are also a number of nohoanga, or seasonal occupation sites, given contemporary effect through the Ngäi Tahu Claims Settlement Act 1998. There are a number of water bodies that have nohoanga nearby. These include: Mikonui River, Okarito River and Lagoon, Karangarua River and Lagoon, Mahitahi River, Lake Tawharikiri, Waita, Putakuru, Okuru, Waitoto, and Tahutahi River.

20.2 SPORTSFISH HABITATS

The list below is not an exhaustive inventory of West Coast rivers and lakes, nor does it include many valuable tributaries. However the list includes most of the catchments supporting the Region's more significant sports fisheries.

Adamsons Creek.	Moonlight Creek.
Ahaura River	Murray Creek.
Allen Creek.	Nancy River
Arahura River	Nelson Creek.
Arnold River	New River
Berry Creek.	Nile River
Big River	Ohikanui River
Blue Grey River	Okari River
Bradshaws Creek.	Okarito River
Bruce Stream	Omoeroa River
Buller River	Orangapuku River
Camelback Creek.	Poerua River
Camp Creek.	Punakaiki River
Campbells Creek	Redjacks Creek.
Clarke River	Rough (Otututu) River
Clear (Nicholas) Creek.	Stony River
Crooked River	Styx River
Crow River	Taipo River
Cunninghams Creek.	Taramakau River
Deep Creek.	Ten Mile Creek.
Falls Creek.	Toaroha River
Fox River	Totara River
Goose Creek.	Vickers Creek.
Gordons Creek.	Waimea River
Grey River	Waitaha River
Harris Creek.	Waitahu River
Haupiri River	Waitangi Taona River
Hohonu River	Walls Creek.
Hokitika River	Wanganui River
Inangahua River.	Whataroa River
Jacobs River	Whitcombe River
Kaniere River.	Windbag Creek.
Karamea River	LAKES
Kokatahi River	Ahaura
La Fontaine River	Brunner
Larrys Creek.	Ellery
Mahinapua Creek.	Haupiri
Mahitahi River	Ianthe
Manakaiarau River	Kangaroo
Mawheraiti River	Kaniere
Mikonui River	Lady
Mokihinui River	Mahinapua
Molloy Creek.	Moeraki
	Okuku Resevior
	Paringa
	Poerua
	Wahapo

20.3 FISH SCREEN GUIDELINES FOR WATER INTAKES

Where a person is taking water from a surface water body in reliance on Rules 12.1.1, 12.1.2 or 12.1.3 a fish screen shall be installed which ensures, as far as practicable, that fish are prevented from entering the intake. The screen shall be functional at all times. The following fish screen design specifications are considered to be best practice standards.

- (a) — To exclude native fish fry, the following mesh sizes are recommended:
 - (i) — 2mm for intakes within 2kms of the coast, a coastal lake or estuary;
 - (ii) — 3mm when between 2kms and 8kms from the coast, a coastal lake, estuary or in a recognised trout spawning stream; or
 - (iii) — 5mm for anywhere else.
- (b) — To exclude salmon, the following mesh sizes are recommended:
 - (i) — 3.2mm ordinary mesh size; or
 - (ii) — 2.4mm slot mesh size; or
 - (iii) — 4.2mm perforated plate.

Note: the 2mm mesh size is based on native fish requirements. Mesh sizes can differ because of different aperture shapes — for instance ordinary mesh has a square aperture which is more restrictive to fish than the rectangular slot mesh aperture. Similarly, the round holes of perforated plate are more restrictive than ordinary mesh, so can be slightly larger. For example, a 3mm opening size in woven mesh screens is equivalent to a 2mm opening in profile bar screens and 3.2mm opening for perforated plate screens.

- (c) — the fish screen should be positioned to ensure that there is unimpeded fish passage to and along the waterway to avoid the entrapment of fish at the point of abstraction.
- (d) — sweep velocities should be higher than approach velocities and the angle between the intake grill face and the water current should be less than 45 degrees. Orientating the inlet structure as parallel to the water flow as practicable will also assist in minimising the approach velocity.
- (e) — for all open channel intakes where there is no direct pumping (e.g. diversions with rotary and static screens), the design and maintenance of the fish screen should ensure that the velocity of flow at and through the screen will prevent fish and fish fry being trapped on the screen.