

APPLICATION UNDER SECTIONS 205 AND 216 OF THE RESOURCE MANAGEMENT ACT TO AMEND THE WATER CONSERVATION (KAWARAU) ORDER 1997 IN RESPECT OF THE NEVIS RIVER

OTAGO REGIONAL COUNCIL

Introduction

My name is James Fraser McRae, and I am the Director of Policy and Resource Planning of the Otago Regional Council. I am the Executive Officer responsible for the preparation and review of policy and plans under the Resource Management Act 1991 and am authorised to give this evidence today.

My evidence is arranged to set a context for the Council submission before addressing the resource planning documents prepared by Council, including describing the content of those documents as they relate to the matters raised by the application to amend the Water Conservation (Kawarau) Order 1997 in respect of the Nevis River. At the conclusion of each section I briefly discuss the material presented.

1 Water Conservation Order application

The Water and Soil Conservation Act 1967 included provisions for creating Water Conservation Orders. The Resource Management Act 1991 that repealed the Water and Soil Conservation Act recognised those same provisions in Part 9.

The original application, by the Department of Conservation, lodged in June 1991 preceded the enactment of the Resource Management Act in October 1991. However, the Water Conservation (Kawarau) Order 1997 was signed by Order in Council on 17 March 1997 pursuant to section 214 of the Resource Management Act 1991.

In May 2007, the New Zealand Fish and Game Council and the Otago Fish and Game Council applied under sections 205 and 216 of the Resource Management Act to amend the Water Conservation (Kawarau) Order 1997 in respect of the Nevis River. This application sought to add a prohibition on damming and diversion of the Nevis River, add a condition on water takes, delete clause 7 of the Order and amendments to recognise outstanding characteristics of the Nevis River. [Note Clause 7 states: Provisions for Nevis River – The regional council may grant a resource consent or make a rule in a plan for hydro-electric development in respect of the Nevis River if that resource consent or rule complies with the restrictions and prohibitions set out in Schedule 2].

2 Resource Management Act

The Resource Management Act includes provisions at sections 5, 6 and 7 that relate to management of freshwater [freshwater being defined as *all water except coastal water and geothermal water* – section 2 Resource Management Act], and specifically:

- section 5 includes, sustaining the potential of resources, safeguarding the life supporting capacity of water and ecosystems
- section 6 includes, preserving the natural character of rivers and their margins, protecting outstanding landscapes and habitats of indigenous fauna, maintenance of access to and along rivers

- section 7 includes, intrinsic values of ecosystems, protection of the habitat of trout and salmon.

These provisions in concert give a clear regime for the sustainable management of freshwater and logically include the water of the Nevis River.

3 Otago Regional Council

The Otago Regional Council considered its approach to the original application for a water conservation order in July 1991 and resolved that:

- a water conservation order is not the most appropriate means of achieving the desired outcomes and that a management plan would be a better approach
- the council was in support of the need to protect in principle the scenic and recreational values of the Kawarau River
- the order should cover the outstanding characteristics only with non-outstanding matters being left to the Council as a water management agency
- although a water management plan was considered to be a better mechanism, the application was supported in respect of the Kawarau, Shotover and Nevis Rivers to the extent that it was effective, able to be practically implemented and that it not unnecessarily constrain development opportunities
- there was insufficient evidence to support the order in respect of Lake Wakatipu and its tributaries and the other tributaries of the Kawarau River

Since then the Council has prepared a regional policy statement [Regional Policy Statement for Otago] and regional plans, including a plan specifically for the management of fresh water [Regional Plan: Water for Otago].

The Statement contains a number of policies aimed at managing the use, development and protection of water and its values in Otago. The regional plan provides specific management policies addressing the matters raised in the regional policy statement and the original water conservation order application.

The Council retains this view that the conservation order creates issues against singularity whereby the catchment is managed by multiple rather than a single document, with the opportunity for conflict and inconsistency being very real.

3.1 Resource Management Act, section 30

Otago Regional Council has the functions, powers and duties of a regional council defined in section 30 of the Resource Management Act [refer Attachment 1], including the following which are particularly relevant to the matters addressed by this water conservation order:

- section 30(1)(a) relating to planning to achieve integrated resource management
- section 30(1)(c)(ii) and (iii) relating to controlling land use to maintain water quality and quantity
- section 30(1)(c)(iii)a) relating to maintaining ecosystems in water bodies
- section 30(1)(e) relating to controlling use, damming and diversion of water
- section (1) (f) relating to controlling discharge of contaminants to water
- section (1) (fa) relating to allocate taking or use of water
- section 30(1)(g) relating to controlling planting on river beds to maintain water quality and quantity
- section 30(1)(ga) relating to maintaining indigenous biological diversity.

These provisions in concert address the matters of concern raised in the original Water Conservation (Kawarau) Order 1997 and this application to amend that Order, dated September 2008.

4 Regional Policy Statement for Otago

The Regional Policy Statement for Otago became operative on 1 October 1998 and includes issues, objectives, policies, methods and anticipated environmental outcomes, as required by the Resource Management Act. Chapter 6 of the Statement directly relates to water management, including both quality and quantity [refer Attachment 2].

Issues and objectives address:

- consumptive use of water
- insufficient sources of local water
- inefficient use of water
- maintaining high water standards and redressing degraded water bodies
- impacts of adverse effects on surface and groundwater quality
- impacts on amenity and intrinsic values of wetlands
- impacts of use and development on water values
- limits on access to water body margins
- flooding and river bank erosion.

Those matters of concern raised in the application to amend the Water Conservation (Kawarau River) Order 1997, are addressed by Statement policies, including:

- wild and scenic characteristics (ref 6.5.2, 6.5.4, 6.5.6, 6.5.7, 6.5.9)
- recreational purposes (ref 6.5.4, 6.5.9)
- trout spawning habitat and fishery (ref 6.5.2, 6.5.4, 6.5.7, 6.5.8, 6.5.9)
- natural landforms (ref 6.5.8)
- native fishery habitat (ref 6.5.2, 6.5.4, 6.5.7, 6.5.8, 6.5.9)
- historic and cultural characteristics (ref 6.5.1, 6.5.2, 6.5.4, 6.5.7, 6.5.9).

Also, Policy 6.5.10 relates to public access to margins of water bodies and constrains opportunities to restrict such access.

Anticipated environmental outcomes reflect the policy frame relating to the above matters. The conservation order amendment application prohibitions on damming and diversion, or taking water, or imposing a minimum flow on the Nevis are not included in the Statement, as the Resource Management Act precludes the inclusion of rules in a statement.

4.1 Discussion:

The regional policy statement was prepared after consultation across Otago and is an expression of community views on, amongst other things, the management of water in the Nevis catchment. The statement provides for the use and development of water resources while ensuring adverse effects are addressed by the activities causing those effects.

5 Regional Plan: Water for Otago

The Regional Plan: Water for Otago became operative on 1 January 2004 and includes issues, objectives, policies, methods and anticipated environmental outcomes, consistent with the Regional Policy Statement for Otago. Chapter 6 of the Plan directly relates to water quantity management [refer Attachment 3], while Chapter 7 relates to water quality.

Issues in the plan address:

- impacts of taking water on life-supporting capacity of aquatic ecosystems and natural character of rivers
- consumptive use of water constrained by insufficient supply
- opportunities for use constrained by inefficient use of water
- adverse effects of takes on other activities
- inter-catchment transfer of water adversely affecting receiving catchment
- control of flows can adversely affect rivers [and lake levels] can adversely effect the environment
- establishing minimum flows is constrained by mining privileges [deemed permits]

Objectives in the plan address:

- retaining flows to maintain life-supporting capacity of aquatic ecosystems and natural character of rivers
- proving for the water needs of primary and secondary industries and community water supplies
- minimising conflict among water takers
- maximising diversity in consumptive uses of water
- minimising adverse effects on receiving environments from transfers of water between catchments
- minimising adverse down stream effects of managed flows
- minimising adverse effects from fluctuations in controlled lake levels

Policies build on the management frame developed by these objectives. The matters of concern raised in the application to amend the Water Conservation (Kawarau River) Order 1997, and addressed by plan policies, include policies managing water address:

- enabling taking (ref 6.4.1)
- limiting quantity for allocation through primary allocation (ref 6.4.2)
- within Schedule 2A rivers setting minimum flows to restrict primary allocation takes (ref 6.4.3)
- other than Schedule 2A rivers establishing minimum flows to restrict primary allocation takes (ref 6.4.4)
- applying minimum flows to consents for taking water (ref 6.4.5)
- within Schedule 2A rivers granting consents within allocation and above minimum flow (ref 6.4.6)
- requiring a residual flow at the point of take (ref 6.4.7)
- excluding community supplies from minimum flows (ref 6.4.8)
- providing supplementary allocation for taking water (ref 6.4.9)
- providing for further supplementary allocation (ref 6.4.10)
- suspending water taking at minimum flows (ref 6.4.11)
- supporting water allocation committees (ref 6.4.12)
- suspending water taking as required by an allocation committee (ref 6.4.13)

- recognising water augmentation for taking water (ref 6.4.14)
- linking consented volume to intended use (ref 6.4.15)
- requiring measurement of consented takes (ref 6.4.16)
- managing transfer of consents (ref 6.4.17)
- reasoning for cancelling an inoperative water take consent (ref 6.4.18)
- establishing the maximum term of a consent to take water (ref 6.4.19)
- recognising 2021 as the expiry date for deemed permits (ref 6.4.20)
- managing interaction between individual water take consents (ref 6.4.21)

And, included are policies managing [lake levels and] the damming, diversion and augmentation of rivers:

- relating to the purpose of lake operating levels (ref 6.5.2)
- recognising adverse effects of regulating flows (ref 6.5.4)
- recognising adverse effects of augmenting flows (ref 6.5.5)
- providing for financial contributions offsetting effects of water diversion (ref 6.5.6)

Also included are policies promoting water management by resource users by:

- promoting water conservation practices (ref 6.6.1)
- promoting storage of water (ref 6.6.2)
- rationalising use of deemed permits (ref 6.6.3)

Anticipated environmental outcomes reflect the policy frame relating to the above matters. The consent order amendment application seeks to insert prohibitions on damming and diversion, or taking water, or imposing a minimum flow on the Nevis are not included in the plan, as the plan seeks to provide for the use and development of water while addressing adverse effects of use and development.

Council has recently notified Plan Change 1C to the Plan. This change includes policies and rules relating to the sharing of water allocated from surface and groundwater sources. For the purpose of today's discussion Plan Change 1C has no material effect.

5.1 Discussion:

The plan includes schedules, providing catchment specific details to the above policy frame, include references to the Nevis catchment, [the Nevis River, and named and unnamed tributaries of the river] within Schedule 1A Natural values and Schedule 1D Kai Tahu values. The schedules also include minimum flow and allocation limits for some rivers but there is no plan scheduled allocation or flow limits on the Nevis River although, if required, such limits are possible.

For the record, the Otago Regional Council is preparing for publication a report describing an ecosystem focused management flow regime for the Nevis River. This publication and the management flow are the precursors to community consultation before setting minimum flows, and for the Nevis River such consultation is scheduled for 2010/2011. The Nevis River is one of several rivers the council is committed to investigate possible minimum flows for inclusion into Schedule 2A: Specific Minimum Flows.

6 Nevis River management

In the absence of particular minimum flows and allocation limits defined in the Plan, management of water falls under the default provisions and are:

- allocation limit, Policy 6.4.2, 50% of the 7-day mean annual low flow
- minimum flow, Policy 6.4.4, providing for aquatic ecosystems and natural character.

Presently, taking water from the Nevis River and its tributaries is consented through a mixture of mining privilege/deemed permits and resource consents. Four parties hold permission to take water in the Nevis catchment being: Carrick Irrigation, van der Witt and others as deemed permits; and Skinner, and Pioneer Energy as resource consents.

7 Otago Regional Council submissions

7.1 Submission on original 1991 application for the Water Conservation (Kawarau) Order.

The Otago Regional Council submitted against the original Water Conservation (Kawarau) Order application. Council took this stance on the basis that a management plan would be a better approach to protecting the scenic and recreational values of the Kawarau River. Council believed that if a conservation order was made it should only cover the outstanding characteristics of the Kawarau, Shotover and Nevis Rivers to the extent that it was effective, able to be practically implemented and that it not unnecessarily constrain development opportunities. And finally, there was insufficient evidence to support any order in respect of Lake Wakatipu and its tributaries and the other tributaries of the Kawarau River.

7.2 Submission to May 2007 application to amend the Water Conservation (Kawarau) Order 2007.

The Otago Regional Council submitted against the application to amend the original conservation order [refer attached] reiterating the original view with additional points relating to:

- the addition of further tools and unnecessary complications through the Water Conservation (Kawarau) Order 1997, in regard to the Regional Plan: Water for Otago
- the Nevis River was subject to the original application by the Minister of Conservation and restrictions were explicitly decided upon and provided for.
- the current tools, provisions and processes in place under the Regional Policy Statement for Otago and the Regional Plan: Water for Otago are sufficient and appropriate
- the Statement and Plan mechanisms already provide for sound and robust public processes that are required to be undertaken, including public consultation.

Council is of the opinion that a water conservation order, or any subsequent amendment, is an inappropriate process for altering Regional Planning documents, including in relation to damming and diversion, and setting minimum flows.

Any alteration of a planning or regulatory regime should occur through the Resource Management Act 1991 First Schedule process, where there is provision for private plan changes, in order to ensure coherence of Resource Management Act 1991 control instruments.

7.3 Discussion:

Council opposed the original conservation order and now opposes this alteration of that order. This opposition is based on creating prohibitions on activities which fail to provide for the sustainable use of the water resource of the Nevis River and continuing to complicate the context for decision

making on management matters by retaining multiple planning documents. As such the order focuses on activities, which is counter to the effects basis of the Resource Management Act, and negates any opportunity for activities which may avoid, remedy or mitigate adverse effects through their design or operation.

Resource Management Act , Section 30

- (1) Every regional council shall have the following functions for the purpose of giving effect to this Act in its region:
- (a) The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region:
 - (b) The preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance:
 - (c) The control of the use of land for the purpose of—
 - (i) Soil conservation:
 - (ii) The maintenance and enhancement of the quality of water in water bodies and coastal water:
 - (iii) The maintenance of the quantity of water in water bodies and coastal water:
 - [(iiiia) the maintenance and enhancement of ecosystems in water bodies and coastal water:]
 - (iv) The avoidance or mitigation of natural hazards:
 - (v) The prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances:
 - [(ca) the investigation of land for the purposes of identifying and monitoring contaminated land:]
 - (d) In respect of any coastal marine area in the region, the control (in conjunction with the Minister of Conservation) of—
 - (i) Land and associated natural and physical resources:
 - [(ii) The occupation of space on land of the Crown or land vested in the regional council, that is foreshore or seabed, and the extraction of sand, shingle, shell, or other natural material from that land:]
 - (iii) The taking, use, damming, and diversion of water:
 - (iv) Discharges of contaminants into or onto land, air, or water and discharges of water into water:
 - [(iva) The dumping and incineration of waste or other matter and the dumping of ships, aircraft, and offshore installations:]
 - (v) Any actual or potential effects of the use, development, or protection of land, including the avoidance or mitigation of natural hazards and the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances:
 - (vi) The emission of noise and the mitigation of the effects of noise:
 - (vii) Activities in relation to the surface of water:
 - (e) The control of the taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body, including—
 - (i) The setting of any maximum or minimum levels or flows of water:
 - (ii) The control of the range, or rate of change, of levels or flows of water:
 - (iii) The control of the taking or use of geothermal energy:
 - (f) The control of discharges of contaminants into or onto land, air, or water and discharges of water into water:
 - [(fa) if appropriate, the establishment of rules in a regional plan to allocate any of the following:
 - (i) the taking or use of water (other than open coastal water):
 - (ii) the taking or use of heat or energy from water (other than open coastal water):
 - (iii) the taking or use of heat or energy from the material surrounding geothermal water:
 - (iv) the capacity of air or water to assimilate a discharge of a contaminant:]
 - [(fb) if appropriate, and in conjunction with the Minister of Conservation,—
 - (i) the establishment of rules in a regional coastal plan to allocate the taking or use of heat or energy from open coastal water:
 - (ii) the establishment of a rule in a regional coastal plan to allocate space in a coastal marine area under Part 7A:]
 - (g) In relation to any bed of a water body, the control of the introduction or planting of any plant in, on, or under that land, for the purpose of—
 - (i) Soil conservation:
 - (ii) The maintenance and enhancement of the quality of water in that water body:

- (iii) The maintenance of the quantity of water in that water body:
 - (iv) The avoidance or mitigation of natural hazards:
 - [(ga) the establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity:]
 - [(gb) the strategic integration of infrastructure with land use through objectives, policies, and methods:]
 - (h) Any other functions specified in this Act.
- [(2) A regional council and the Minister of Conservation may perform the functions specified in subsection (1)(d) to control the harvesting or enhancement of aquatic organisms to avoid, remedy, or mitigate—
- (a) the effects on fishing and fisheries resources of occupying a coastal marine area for the purpose of aquaculture activities:
 - (b) the effects on fishing and fisheries resources of aquaculture activities.]
- [(3) However, a regional council and the Minister of Conservation must not perform the functions specified in subsection (1)(d)(i), (ii), or (vii) to control the harvesting or enhancement of aquatic organisms for the purpose of conserving, using, enhancing, or developing any fisheries resources controlled under the Fisheries Act 1996.]
- [(4) A rule to allocate a natural resource established by a regional council in a plan under subsection (1)(fa) or (fb) may allocate the resource in any way, subject to the following:
- (a) the rule may not, during the term of an existing resource consent, allocate the amount of a resource that has already been allocated to the consent; and
 - (b) nothing in paragraph (a) affects section 68(7); and
 - (c) the rule may allocate the resource in anticipation of the expiry of existing consents; and
 - (d) in allocating the resource in anticipation of the expiry of existing consents, the rule may—
 - (i) allocate all of the resource used for an activity to the same type of activity; or
 - (ii) allocate some of the resource used for an activity to the same type of activity and the rest of the resource to any other type of activity or no type of activity; and
 - (e) the rule may allocate the resource among competing types of activities; and
 - (f) the rule may allocate water, or heat or energy from water, as long as the allocation does not affect the activities authorised by section 14(3)(b) to (e).]

Regional Policy Statement for Otago: Chapter 6

6.1 Introduction

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

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

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

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

and Tributaries requires that certain values in the area are to be sustained and protected.

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

6.2 Roles of Different Agencies

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

6.2.1 Central Government

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

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

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

Lake Wanaka and the maintenance and enhancement of water quality.

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

6.2.2 Otago Regional Council

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

controlled, non complying or prohibited will be specified in the Regional Plan: Water.

6.2.3 Territorial Local Authorities

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

6.3 Issues

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

There are conflicts in the allocation of water because of competing uses and values. These competing demands on the resource cannot, at times, be satisfied. Water is of importance for:

- Drinking water and other domestic uses
- Intrinsic, cultural and spiritual values
- Wildlife values
- Aesthetic and scenic values
- Irrigation and other agricultural uses
- Industrial uses
- Recreational values including angling
- A medium for the disposal of wastes.

The Resource Management Act provides that mining privileges for water resources (now called deemed permits) will expire in 2021. Deemed permits have become a significant element of Otago’s water management regime and confer significant benefits upon the region and its communities. They can constrain the opportunities for the setting of minimum flows to provide for instream uses and values and can also constrain the re-allocation of water for other consumptive users off-site.

6.3.3 Inefficient uses of water and wastage of water can occur.

Irrigation requires large quantities of water, and significant wastage can occur through inefficient practices. Inefficient water use often occurs when people are unaware of wasteful practices. Industrial and domestic urban water use may also contain many inefficiencies, including losses from reticulation services through to inefficiencies by the consumer. It is also of concern that where water resources are in short supply they be used in the most beneficial way for the region.

6.4.1
6.4.3

6.5.3
6.5.11

4.3.2 to 4.3.5
5.3.3
10.3.1
12.3.1 to 12.3.2
14.3.1 to 14.3.6
15.3.1

Efforts to reduce wastage of water need to be encouraged and built upon.

6.3.4 There is a need to maintain Otago’s generally high standard of water quality and to improve degraded areas.

Otago has some of New Zealand’s highest quality water in its natural state. This quality is an important element of the overall character of the region and supports a diversity of ecosystems and uses. The health of people and communities can be adversely

6.4.2
6.4.3
6.4.5
6.4.6

6.5.5

4.3.2 to 4.3.3
4.3.5
8.3.6
10.3.1
10.3.40

affected by contaminated water. Tourism and recreation are becoming significant aspects of Otago’s economy and are dependent on water of high quality. Freshwater bodies which provide sources of food and primary productive uses of the water resource also rely on the water being of a high standard. Areas of poor water quality however, require remedial action to bring about improvement to an acceptable standard.

- 6.3.5 Otago’s existing surface water quality is compromised by the adverse effects of:**
- (a) Contamination from point source and non point source discharges;**
 - (b) Landuse activities;**
 - (c) Activities within the beds and on the banks of water bodies; and**
 - (d) Reduced flows through abstractions or diversions.**

Water quality can be compromised by point source discharges of industrial, agricultural, and community wastes. The direct discharge of contaminants to surface water, for example industrial waste, sewage effluent and urban stormwater can seriously compromise water quality. Recreational pressures can also impact on water quality. Water quality also can be a useful indicator of the state of the land. Some land management activities such as vegetation clearance, working soil on steep slopes, grazing riparian margins and applying fertiliser have mobilised sediments and nutrients into Otago’s water bodies and have degraded aquatic habitats. Stormwater runoff from urban settlement often contains undesirable contaminants.

6.4.2	6.5.2	4.3.2 to 4.3.5
6.4.3	6.5.4	5.3.3
6.4.4	6.5.5	5.3.5
6.4.5	6.5.6	8.3.1
	6.5.7	8.3.6
	6.5.8	8.3.8
	6.5.9	9.3.1
		10.3.1
		10.3.4
		11.3.7
		12.3.1
		13.3.2

Instream activities, such as excavation and gravel removal, can also result in degradation of the water resource through increased sediment loading and the smothering of instream habitats. Discharges from domestic, commercial and industrial land uses, such as sewage and industrial effluent, can result in contamination of water resources. Such degradation of water bodies reduces opportunities for utilising the water resource for recreation, food gathering, tourism, production or consumption uses, and for the sustainability of mahika kai resources to Kai Tahu.

When instream flows are reduced through abstractions and diversions, their capacity to assimilate point source and non-point source discharges of contaminants can be significantly reduced.

- 6.3.6 Otago’s groundwater resources may be adversely affected by landuse activities and contamination.**

Groundwater resources have varying rates of recharge and may be affected by drainage of wetland areas, the diversion of water

6.4.1	6.5.3	4.3.2 to 4.3.5
6.4.2	6.5.5	5.3.3
		8.3.1

		bodies and the removal of vegetation in catchment areas. The quality of groundwater varies depending on geology and land management activities occurring in the vicinity of the supply. Extractions of groundwater must not exceed the rate of recharge. Contamination through discharges from landfills, chemical spraying, effluent disposal and other activities is difficult to reverse in areas where groundwater flows are slow and quantities are small.	6.4.3	6.5.11	8.3.6 9.3.1 11.3.7 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1
6.3.7	Ecological, amenity and intrinsic values associated with Otago’s wetlands are compromised by:	The ecological importance of wetlands has been increasingly recognised over recent years and the preservation of their natural character, and protection from inappropriate subdivision, use and development, is identified as a matter of national importance in Section 6(a) of the Act. The major ecological values associated with wetlands are hydrological and habitat values, although wetlands may also have significant landscape values, such as the wetlands of the Upper Taieri scroll plain. The hydrological values of wetlands include water storage capability, which can buffer low flows in water short areas, and contribution to water quality through nutrient absorption; for example, many land based sewage disposal systems use artificial wetland systems. Wetlands also provide significant, remnant habitat for indigenous flora and fauna, particularly fish and bird species, and also provide habitat for a wide range of non indigenous animal species, such as ducks and swans. Wetlands have been identified as being particularly valuable as spawning grounds for some fish species. The habitat values of wetlands also mean that they are valued by Manawhenua as mahika kai and by the public generally for their recreation values. Modification of wetlands through drainage or reclamation has removed or decreased habitats suitable for waterfowl, fish life and invertebrate fauna.	6.4.1	6.5.1	4.3.2 to 4.3.5
	(a) Reductions in instream flows and surface water availability through damming, diversions, drainage and abstractions;		6.4.2	6.5.2	5.3.3 to 5.3.5
	(b) Degraded water quality;		6.4.3	6.5.3	8.3.1
	(c) Adverse effects of activities in and around wetlands.		6.4.4	6.5.4	8.3.6
			6.4.5	6.5.5	9.3.1
			6.4.6	6.5.6	10.3.1
			6.4.7	6.5.7	10.3.4 to 10.3.5
			6.4.8	6.5.8	11.3.7
				6.5.9	12.3.1
					13.3.2
					13.3.4 to 13.3.6
					14.3.1 to 14.3.6
				15.3.1	
6.3.8	Use and development pressures in and around Otago’s lakes, rivers and other freshwater bodies may compromise:	The use and enjoyment of Otago’s water resources is important to Otago’s communities as these areas often have high visual appeal, are important habitats for both indigenous and introduced wildlife and offer a wide range of recreational opportunities. Many of Otago’s fresh water bodies still retain their natural character and form an	6.4.1	6.5.1	4.3.2
	(a) Their natural character and landscape value;		6.4.2	6.5.2	4.3.4 to 4.3.5
	(b) Their outstanding natural features;		6.4.3	6.5.4	5.3.3 to 5.3.5
			6.4.4	6.5.5	8.3.1
			6.4.5	6.5.6	9.3.1
				10.3.1	
				10.3.4 to 10.3.5	

<p>(c) Significant indigenous vegetation and significant habitats of indigenous fauna; (d) Their ecological, amenity, intrinsic and habitat values.</p>	<p>integral part of the Otago landscape, eg parts of the Clutha and Taieri rivers. The use of the water resource and adjacent land areas, can result in adverse effects on the ecological, amenity, intrinsic and habitat values associated with those water resources. The quality of the water is important in maintaining those values and the quantity of instream flows and the availability of surface water are also important factors to consider when making use of the water resource. The adverse effects of activities need to be avoided where necessary and otherwise remedied or mitigated so that the natural character of water bodies may be preserved and outstanding landscape features and significant habitat protected. It is noted that natural instream river flows during times of water shortage may be enhanced by the release of water storage from dams.</p>	<p>6.4.6 6.4.7 6.4.8</p>	<p>6.5.7 6.5.8 6.5.9 6.5.10</p>	<p>11.3.6 to 11.3.7 12.3.1 13.3.2 13.3.4 to 13.3.6 14.3.1 to 14.3.6 15.3.1</p>
<p>6.3.9 Public access to and along the margins of some of Otago’s water bodies is limited and development, landuses and other activities have the potential to further reduce public access to and along these margins.</p>	<p>The provision of public access to and along the margins of Otago’s water bodies is important to many of Otago’s citizens. Development and landuses alongside those water bodies have the potential to reduce that access. Section 6 of the Resource Management Act requires the maintenance and enhancement of public access as a matter of national importance. The provisions of the Act in respect of access cannot impose public access over privately owned land and permission still needs to be sought from landholders, including Crown pastoral lessees. However, the Act does provide for the creation of esplanade strips, esplanade reserves and for access strips at time of subdivision in order to maintain and enhance public access to and along lakes and rivers. There will also be times when access to water bodies may be restricted for reasons including the need to protect sensitive areas, habitats and sites of cultural importance from adverse effects.</p>	<p>6.4.4 6.4.7</p>	<p>6.5.9 6.5.10</p>	<p>4.3.1 to 4.3.2 4.4.4 to 4.3.5 5.3.5 to 5.3.6 8.3.4 9.3.1 10.3.1 10.3.4 11.3.1 14.3.1 to 14.3.6 15.3.1</p>
<p>6.3.10 Flooding and riverbank erosion threaten land resources adjacent to some of Otago’s water bodies.</p>	<p>Otago has always faced the threat of flooding from its major water bodies. The protection of Otago’s land resource from flooding has been an ongoing and continuing activity for over a century. Major urban areas, such as Balclutha and areas of primary production, such as the lower Taieri and Clutha plains, have benefited from these works. Bank instability can also adversely affect land areas adjacent to Otago’s water bodies.</p>	<p>6.4.5 6.4.6</p>	<p>6.5.7 6.5.8 6.5.9</p>	<p>4.3.1 to 4.3.2 4.3.4 to 4.3.5 5.3.2 5.3.7 8.3.2 to 8.3.3 9.3.1 10.3.1 11.3.1 to 11.3.7</p>

6.4 Objectives

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

<p>6.4.4 To maintain and enhance the ecological, intrinsic, amenity and cultural values of Otago’s water resources.</p>	<p>The ecological, intrinsic, amenity and cultural values of Otago’s water resources are important elements of those water resources which must be recognised in the management of those resources. They provide much of the character of the water resource. The Otago community and visitors to the region readily identify with Otago’s water areas as integral elements of Otago’s landscapes. Tourism relies on the inherent quality of the water resources in Otago. These resources must be protected or enhanced for the benefit of the region’s economy as well as for the aesthetic advantages they provide.</p>	<p>6.5.10 6.5.11 6.5.1 6.5.2 6.5.3 6.5.4 6.5.5 6.5.6 6.5.7 6.5.8 6.5.9 6.5.10 6.5.11</p>	<p>14.4.1 to 14.4.2 15.4.1 4.4.1 to 4.4.5 5.4.3 5.4.5 8.4.2 8.4.4 to 8.4.5 9.4.1 to 9.4.3 10.4.1 to 10.4.3 11.4.4 12.4.1 to 12.4.3 13.4.1 to 13.4.4 14.4.1 to 14.4.2 15.4.1</p>
<p>6.4.5 To avoid, remedy or mitigate degradation of water resources resulting from the use, development or protection of the beds and banks of Otago’s water bodies and of adjacent land areas.</p>	<p>The use, development or protection of the beds and banks of Otago’s water bodies and adjacent land areas can result in adverse effects which can degrade the water resource. Reducing these adverse effects as far as practicable will assist in maintaining the overall quality of Otago waters.</p>	<p>6.5.7 6.5.8 6.5.9</p>	<p>4.4.2 to 4.4.5 5.4.1 to 5.4.3 5.4.5 9.4.1 9.4.3 10.4.1 10.4.3 11.4.4 13.4.1 13.4.4 14.4.1 to 14.4.2 15.4.1</p>
<p>6.4.6 To mitigate the threat of flooding and riverbank erosion resulting from the use, development or protection of Otago’s water bodies and lake beds.</p>	<p>Many activities undertaken within the beds and banks of water bodies and on land areas adjacent to water areas can help in mitigating the adverse effects of flooding and riverbank erosion. The clearing of dense stands of trees in water bodies can reduce the risk of flood waters banking up behind them. At the same time, trees are useful means of providing improved habitat and for reducing riverbank erosion by binding and holding the bank soil in place. Different approaches will be required in different areas.</p>	<p>6.5.7 6.5.8 6.5.9</p>	<p>4.4.2 to 4.4.3 4.4.5 5.4.2 5.4.5 8.4.3 9.4.1 9.4.3 10.4.3 11.4.1 to 11.4.4 14.4.1 to 14.4.2 15.4.1</p>
<p>6.4.7 To maintain and enhance public access to and along</p>	<p>Otago’s water bodies provide a range of use opportunities, including</p>	<p>6.5.1</p>	<p>4.4.1 to 4.4.5</p>

the margins of Otago’s water bodies.

recreation, tourism, scientific and educational opportunities. It is important that public access to water bodies exists and is enhanced wherever possible, subject to appropriate considerations such as ecological and cultural sensitivity, public health and safety, and the agreement of landholders where access crosses private or Crown leasehold land.

6.5.6 5.4.4
6.5.9 8.4.6
6.5.10 9.4.1
 12.4.1
 14.4.1 to 14.4.2
 15.4.1

6.4.8 To protect areas of natural character, outstanding natural features and landscapes and the associated values of Otago’s wetlands, lakes, rivers and their margins.

Otago’s lakes, rivers and wetlands are made up of a variety of different landscapes and natural features which make them unique. People appreciate the natural beauty and character of these water bodies and wish to retain that character. The preservation and protection of the natural character and the outstanding natural features and landscapes of lakes, rivers, wetlands and their margins is a matter of national importance under Section 6 of the Resource Management Act and important in achieving integrated management of the region’s water resources.

6.5.1 4.4.2 to 4.4.5
6.5.2 5.4.2 to 5.4.5
6.5.4 to 9.4.1 to 9.4.3
6.5.11 10.4.1 to 10.4.3
 11.4.1
 11.4.4
 12.4.1 to 12.4.2
 13.4.1 to 13.4.4
 14.4.1 to 14.4.2
 15.4.1

6.5 Policies

	<p>(a) Explaining water principles and reasons for adapting losses of water before, during and after application and use of water, and promoting water use practices which require less water, and</p>	<p>provide most efficient use. Casual attitudes towards water conservation may not encourage efficient use. Reducing the amount of available water among competing users.</p>
<p>6.5.1 To recognise and provide for the relationship Kai Tahu have with the water resource in Otago through: (a) Working toward eliminating human waste and other pollutants from entering all water bodies; and (b) Consulting with Kai Tahu over any application that would result in the mixing of waters from different water bodies and the setting of water flows and levels.</p>	<p>These principles and the essential relationship iwi and runanga have with water are integral to the relationship iwi have with the water resource. The health of the water bodies reflects the health of the surrounding catchment. The degradation of the water resource is a great source of concern to Kai Tahu. The many classifications of water known to Kai Tahu require consideration from planners and resource managers when policy and resource consents are under consideration.</p>	<p>5.5.1 5.5.5 7.5.1 8.5.1 9.5.1 9.5.4 to 9.5.6 10.5.1 to 10.5.2 13.5.1 13.5.8 13.5.10 14.5.1 to 14.5.8 15.5.1 to 15.5.2</p>
<p>6.5.2 To allocate water in areas of Otago where there is or potentially will be insufficient water supplies through:</p>	<p>Water is required for many uses within Otago and within some areas the supply of water is limited. In these areas it will be necessary to allocate water on the basis of considering the importance of competing needs. The Resource Management Act already requires that the domestic and stock drinking water requirements of communities be met where this does not have an adverse effect on the environment. The needs of primary and secondary industry are of importance as are instream amenity and habitat values. They are important to the continued ecological well being of any water resource and to the social, economic and cultural needs of those communities that use those resources for recreational or other purposes. These competing needs will need to be considered together, while also considering the cultural and spiritual values that Kai Tahu place on that water resource.</p>	<p>6.6.1 6.6.2 6.6.4 6.6.5 6.6.7 6.6.8 6.6.11 6.6.12 6.6.14 6.6.16 6.6.17 6.6.18 6.6.21 to 6.6.27 6.6.29 6.6.30 6.6.32</p>
<p>(a) Considering the need to protect instream amenity and habitat values; and (b) Considering the needs of primary and secondary industry; and (c) Considering Kai Tahu cultural and spiritual values; and (d) Considering the extent to which adverse effects can be avoided, remedied or mitigated.</p>	<p>6.5.4 To investigate and, where appropriate, set minimum flow levels and flow regimes for Otago water bodies and maximum and minimum lake levels to protect any of the following: (a) The needs of Otago's communities; (b) Kai Tahu cultural and spiritual values; (c) Lake margin stability; (d) The natural character of the water body; (e) Habitats of indigenous fauna and flora; (f) Amenity values; (g) Intrinsic values of ecosystems; (h) Salmon or trout habitat; (i) Outstanding natural features or landscapes.</p>	<p>In some water short areas, it may be necessary to establish minimum flow levels and flow regimes for rivers and water bodies to protect significant values associated with them. Minimum maximum lake levels may similarly need to be set. The setting of such levels and regimes will depend on the particular water resource and the values associated with it.</p> <p>In investigating the need or otherwise to set and apply minimum flows through the Regional Plan: Water, recognition will be given to the effects of Mining Privileges for water resources (now called deemed permits) and the options available for addressing adverse effects. Because Mining Privileges will expire in 2027 provision will need to be made to manage this change through implementation and review of the Regional Plan: Water.</p>
<p>6.5.3 To promote efficient consumptive water use through:</p>	<p>6.5.5 To promote a reduction in the adverse effects of contaminant discharges into Otago's water bodies through: (a) Adopting the existing water quality of Otago's water bodies as a minimum acceptable standard; and (b) Investigating and where appropriate, enhancing</p>	<p>Otago's existing water quality is generally high but there are areas, such as the lower reaches of some rivers and in water bodies such as Lake Hayes, where degradation has occurred. Maintaining high water quality is important for human consumption, community health, and aquatic ecosystems. In order to maintain water quality that is of a minimum acceptable standard and to enhance degraded areas, discharges of contaminants will have to be treated.</p>

6.6.17
6.6.18
6.6.22
6.6.23
6.6.24
6.6.25
6.6.26

6.6 Methods

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

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

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

- 6.6.2 Develop policies and other means, including rules where appropriate, within the Regional Plan: Water for the management of the region's water resources.
- 6.6.3 Develop policies and other means, including rules where appropriate, within the Regional Plan: Water to avoid, remedy or mitigate the adverse effects of the use, development or protection of the beds and banks of Otago's water bodies.
- 6.6.4 Consider including conditions on resource consents or consider declining such consents as necessary to maintain and where practicable enhance the quality of Otago's water resources.
- 6.6.5 Consider including conditions on resource consents or consider declining such consents as necessary to protect Otago's significant wetlands.
- 6.6.6 Investigate and identify the region's significant wetlands as part of the preparation of the Regional Plan: Water.
- 6.6.7 Initiate, support and encourage research and monitoring programmes, including self monitoring, to provide information on Otago's water issues and solutions.
- 6.6.8 Encourage and, where necessary, require the inclusion of research, management and enhancement programmes for any affected flora or fauna in any major developments utilising Otago's water resources.
- 6.6.9 Promote, encourage, and, where necessary and practicable, require the creation of habitats of a similar or improved nature in compensation for any loss of habitat resulting from development utilising Otago's water resources.

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

- **Identify the methods and strategies to be used to achieve an orderly transition from Mining Privileges to Water Permits under the Resource Management Act.**

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

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

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

Explanation and Principal Reasons for Adopting

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

6.7 Anticipated Environmental Results

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

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

Regional Plan Water for Otago: Chapter 6**6.1 Introduction**

Water is an important resource to many of Otago's people and communities due to its use for domestic and public water supply, stock drinking water, irrigation, hydro-electric power generation and industrial supply. This chapter deals with resource use conflicts related to the quantity of water in lakes and rivers. As activities change the quantity of water in these water bodies, the people and communities who are reliant on this water, and its life-supporting capacity, become affected.

Resource conflicts arise from activities such as taking, damming or diversion of water, and recreation and other instream natural and human use value needs, particularly when supplies are naturally limited. Demand may exceed supply during periods of low flow in several Otago subregions, including Central Otago, Maniototo and North Otago.

A number of Otago water bodies have water taken from them through the exercise of mining privileges. These privileges were granted under past mining legislation, and provided for the taking, damming and discharging of water. However, most of these takes are now used for irrigation purposes rather than for mining. Appendix 2 presents a brief discussion on mining privileges in respect of water (deemed permits).

This chapter, along with the relevant rules, ensures that water will be managed in a sustainable manner. This is achieved through the regulation of the taking, damming or diversion of water. The chapter also promotes management of the rationing of water takes during periods of water shortage by resource users where this can be effective. This chapter applies in detail the direction given by the Regional Policy Statement for Otago to the management of activities affecting water quantity.

There is an important relationship between water quantity and quality, which is recognised in this chapter. A reduction in the quantity of water in a lake or river can affect its capacity to assimilate contaminants and can lead to higher water temperatures under low flow conditions.

The water allocation provisions of this chapter are intended to provide for the maintenance of aquatic ecosystem and natural character values of water bodies. The provisions for the regulation of takes, in terms of minimum flow and allocation limits, are considered to be generally conservative of aquatic life and natural character. Allocation beyond those requirements must have regard to any potential adverse effects on the natural and human use values of affected water bodies, including effects arising from any loss of capacity to assimilate contaminant discharges, and any raising of water temperatures.

Chapter 7: Water Quality provides for the management of contaminant discharges at source.

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 of water can reduce the life-supporting capacity of aquatic ecosystems and the natural character of Otago's rivers.

Explanation

As water is taken from water bodies, lake levels and river flows may fall below that which is required to support their aquatic ecosystems and protect their natural character. As the supply of water diminishes naturally during dry periods, the demand for water increases, and this in turn increases the potential for stress on the water body and the life it supports.

Objectives: 6.3.1

Policies: 6.4.1 to 6.4.21, 6.6.1 to 6.6.3

6.2.2 The consumptive uses of Otago's water resources can be constrained by insufficient supply of water.

Explanation

Natural resource limits can lead to demand for water exceeding its supply. The quantity of water supplied naturally by a catchment is a function of many factors including precipitation, topography and hydrological characteristics of the catchment. Where the water supply is unable to meet the potential demand, primary and secondary industries that depend on water can be adversely affected.

Objectives: 6.3.2

Policies: 6.4.1 to 6.4.21, 6.5.2 to 6.5.5, 6.6.1 to 6.6.3

6.2.3 Opportunities for the wider use of available water resources are constrained by inefficient water use practices.

Explanation

A range of domestic, agricultural, industrial and commercial uses rely on sufficient quantities of water in Otago. However, wider use of the water is constrained by water shortages. Such shortages can arise for either of two reasons: the natural limits of the water resource or the inefficient water use practices. The latter 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
- (c) Taking more water than is needed.

Objectives: 6.3.4

Policies: 6.4.1 to 6.4.21, 6.6.1 to 6.6.3

6.2.4 The rate at which water is taken can affect lawful activities.

Explanation

The rate at which water is taken for consumptive use by particular users, or groups of users, can compromise the use of a water body by other users where, for example, there is less water available for those taking water, or the assimilative capacity of the water body is reduced. The rate of take refers to the quantity of water taken over a certain period of time. Where the ability of existing users to access water is compromised by new takes of water, potential for conflict among these users is created. There is a need to minimise any conflicts that may arise, and to ensure people and communities can continue to derive the benefits from water taken, through equitable access to water.

Objectives: 6.3.2, 6.3.3

Policies: 6.4.1 to 6.4.21, 6.6.1 to 6.6.3

6.2.5 The inter-catchment transfer of water can lead to adverse effects in the receiving catchment, due to the mixing of water.

Explanation

Water can be taken from one place to another to augment supplies and provide for growth in water demand. The transfer of water from one catchment to another, however, can result in the introduction of species to areas where they are not already present, such as trout or pest plants. The mixing of waters from different catchments may lead to a reduction in water quality in the receiving catchment, where the waters have different characteristics. This mixing is also an affront to the values of Kai Tahu because where water is sourced from another catchment (as defined by the coastal mouth) the mauri of the receiving water body is adversely affected.

Objectives: 6.3.5

Policies: 6.5.5

6.2.6 The control of flows can result in adverse effects in the river.

Explanation

The control of water flows from dams, diversions, augmentation, flood control, and other activities can have positive effects for the community, the ecology and instream values of a river. However, the activity can modify naturally variable flow regimes in terms of:

- (a) Long periods of low flow, which may adversely affect natural and human uses and other people using a river;
 - (b) Long periods of high flow, which may adversely affect natural and human uses and other people using a river, and the stability of river beds and banks;
- and

(c) The rates of change of flow, which may adversely affect natural and human uses of a river.

Where flows are being managed at a dam they can also affect lake levels upstream and this is addressed in Issue 6.2.7.

Objectives: 6.3.6

Policies: 6.5.4, 6.5.6

6.2.7 The management of lake levels can lead to adverse effects in the environment.

Explanation

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

- (a) The form and topography of the lake and the stability of the shore and bed of a lake;
- (b) The water level of the lake and its fluctuation.

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

Objectives: 6.3.7

Policies: 6.5.1 to 6.5.3, 8.4.2

6.2.8 Opportunities for establishing minimum flow regimes on a number of streams and rivers are constrained by mining privileges (now called deemed permits).

Explanation

Mining privileges (see Appendix 2) are an issue peculiar to Otago because of the large number that have been granted and that are still able to be used. Mining privileges are not subject to the same type of management conditions (such as the necessity to adhere to a minimum flow established under this Plan) as other water permits. For some catchments mining privileges can de-water part of some rivers during the irrigation season, which may impact on instream values.

Policies: 6.6.3

Other methods: 15.7.1.1, 15.9.1.1 to 15.9.1.3

Monitoring and Review 19.3 (8)

Appendix 2

6.3 Objectives

6.3.1 To retain flows in rivers sufficient to maintain their life-supporting capacity for aquatic ecosystems, and their natural character.

Explanation

This objective seeks to avoid the loss or degradation of aquatic ecosystems supported by rivers and the natural character of those rivers. This can be achieved by maintaining flows necessary for the life-supporting capacity for aquatic ecosystems and the natural character of those rivers. By providing for aquatic life and natural character, any adverse effects on other natural and human use values will be no more than minor.

Principal reasons for adopting

This objective is adopted in recognition of the importance of river flows in sustaining aquatic life and the natural character of Otago's rivers, and to ensure that this role continues.

Policies: 6.4.1 to 6.4.21, 6.6.1 to 6.6.3

See also: 9.4.9

6.3.2 To provide for the water needs of Otago's primary and secondary industries, and community domestic water supplies.**Explanation**

The economic, social and cultural well being of Otago's people and communities relies on them securing suitable quantities of water. The present and reasonably foreseeable needs for water will therefore need to be met. This includes existing consumptive users who rely on current takes of water, as well as hydro-electric power generation and other non-consumptive 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 Otago's communities and their primary and secondary industries.

Policies: 6.4.1 to 6.4.21, 6.5.2 to 6.5.5, 6.6.1 to 6.6.3

6.3.3 To minimise conflict among those taking water.**Explanation**

The taking of water by one user can reduce the amount of water available for other users, creating or exacerbating the potential for conflict. It is important that conflict among users is minimised. This can be achieved through the consideration of the effect of new takes of water on the exercise of lawfully established takes of water and by maintaining existing priorities.

Principal reasons for adopting

This objective is adopted to ensure continued access for the taking of water. This recognises the investment that Otago's people and communities have made in

resources to take and utilise water, and the need to avoid wastage of these resources.

Policies: 6.4.1 to 6.4.21, 6.6.1 to 6.6.3

6.3.4 To maximise the opportunity for diverse consumptive uses of water which is available for taking.

Explanation

It is important that the opportunity exists for people and communities to utilise water available for consumptive use. Benefits able to be derived from water taken should be as diverse as the community demands. As such, those taking water should not be unnecessarily restricted in the uses to which the water can be put.

Principal reasons for adopting

This objective is adopted to enable Otago's people and communities to benefit from the consumptive use of water that is available for taking.

Policies: 6.4.1 to 6.4.21, 6.6.1 to 6.6.3

6.3.5 To minimise adverse effects on the quality of receiving water, including its ecology and mauri, where such water is subject to any new inter-catchment transfer of water.

Explanation

Inter-catchment transfers of water can increase the supply of water available for consumptive and other uses. New transfers, however, may result in the degradation of receiving water quality, or the introduction of species to areas where they are not already present. The objective is to maintain existing conditions as far as practicable. Where new transfers mix waters from different catchments, the objective will recognise the importance of the water body's mauri to Kai Tahu, and minimise any adverse effects on it.

Principal reasons for adopting

This objective is adopted to limit the adverse effect on any receiving catchment or its mauri caused by new transfers of water between catchments.

Policies: 6.5.5

6.3.6 To minimise any adverse downstream effect of managed flows.

Explanation

The control of water flows from activities including damming, diversion, flow augmentation and flood control has contributed to the social and economic well being of Otago's people. Modified flows downstream of such activities, however, can have 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 passing of appropriate flows may be required to ensure that any adverse effect of the controlled flow is remedied or mitigated. The appropriateness of these flows will be determined by the nature and the flow requirements of:

- (a) Any natural and human use values that exist; and
- (b) Other uses of water that occur, downstream of the activity.

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. This is because other users of water and the natural and human use values can be particularly vulnerable to prolonged low flows and to sudden changes in flow.

Policies: 6.5.4, 6.5.6

6.3.7 To minimise the adverse effects from fluctuations in the levels of controlled lakes.

Explanation

Levels in controlled lakes are subject to fluctuations due to the active management of the lake. This management is enabled through a control structure such as a dam. Fluctuating lake levels may be deemed inappropriate when, as a result of the frequency, range, and rates of change in lake levels, they lead to an adverse effect on the environment surrounding, and within, the lake.

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. This is because other users of water and the natural and human use values can be particularly vulnerable to excessive drawdown and rates of change of the lake level.

Policies: 6.5.1 to 6.5.3, 8.4.2

6.4 Policies applying to the taking of water

6.4.1 To enable the taking of surface water subject to defined allocation quantities and subject to provision for the retention of instream flows.

Explanation

This policy enables the taking of surface water within specified limitations upon the total amount taken from any river, and subject to suspension of takes when specified minimum flows are reached. The details are provided in the following policies, incorporating:

- The identification of a limited quantity of water, called the primary allocation, as specified in Policy 6.4.2;

- Suspension of the taking of water within primary allocation, when flows fall below minimum flows specified:
 - In Schedule 2 for particular catchments in terms of Policy 6.4.3; and
 - On a case-by-case basis elsewhere in Otago in terms of Policy 6.4.4;
- The application of minimum flows to existing takes in specified Schedule 2A catchments, as set out in Policy 6.4.5 (b) when the Plan becomes operative;
- The progressive catchment by catchment application of minimum flows in the Manuherikia and central Taieri and other catchments as set out in Policy 6.4.5 (c) and (d);
- Exceptions to the requirements of Schedule 2 where the provisions as specified in Policy 6.4.6 can be met;
- A requirement to consider any need for a residual flow at the point of take, in addition to the minimum flow requirements above, through Policy 6.4.7;
- An exemption from minimum flow requirements for Schedule 1B community water supply takes under Policy 6.4.8;
- Supplementary allocation on a 50:50 flow-sharing basis, or on a case-by-case basis where there are no significant adverse effects, as specified in Policy 6.4.9 (a) and (b); or as specified in Policy 6.4.9 (c) and Schedule 2B for the Kakanui catchment area.
- Further supplementary allocation when flows are above the mean flow, in terms of Policy 6.4.10;
- The suspension of takes when minimum flows have been reached, in terms of Policy 6.4.11;
- The rationing of takes during periods of low flow by local water allocation committees or the Council as specified in Policies 6.4.12 and 6.4.13;
- The taking of augmented flows free of minimum flow restrictions in terms of Policy 6.4.14; and
- Various provisions regarding reasonable use requirements, the measurement of takes, transfers of permits to take, reallocation of unused primary allocation, the duration of permits, the matching of terms or conditions in catchments affected by deemed permits, and making consents subject to the exercise of other consents.

Principal reasons for adopting

This policy is adopted to enable consumptive users' access to water while sustaining instream values.

6.4.2 To limit allocation for the taking of surface water in any catchment, through the identification of a quantity, known as *primary allocation*, which is:

(a) For catchment areas in Schedule 2A the greater of:

- (i) The primary allocation specified in Schedule 2A; or
- (ii) The consented maximum instantaneous or consented 7-day take at 28 February 1998, less:
 - Any consents surrendered, lapsed, cancelled or not replaced on expiry, after 28 February 1998; and

- Any takes with a minimum flow that was set higher than those required by Schedule 2A; and
- Any takes that immediately return all of the take to the source water body.

(b) For catchment areas other than those in Schedule 2A the greater of:

- (i) 50% of the 7-day mean annual low flow; or
- (ii) The consented maximum instantaneous or consented 7-day take at 28 February 1998, less:
 - Any consents surrendered, lapsed, cancelled or not replaced on expiry, after 28 February 1998; and
 - Any takes that immediately return all of the take to the source water body.

Explanation

This policy sets a limit for primary allocation for the taking of surface water.

The primary allocation limits are:

- Set in Schedule 2A for the specified catchment areas; and
- 50% of the 7-day mean annual low flow (50% MALF) for all other catchment areas.

However, if existing consented (maximum instantaneous rate or 7-day rate) takes at the date of notification of the Plan (28 February 1998) exceeded these allocation limits, then the primary allocation is the volume of these existing takes. This provides for the existing needs for Otago's communities.

The consented 7-day take is the total weekly quantity of water allocated through resource consents at 28 February 1998, including deemed permits, using the process outlined in Method 15.8.1.1. In cases where the consented maximum instantaneous take is markedly higher than the 7-day take, the consented maximum instantaneous take will be used. Before issuing a consent for any new take, it is necessary to establish whether the existing quantity taken from the catchment exceeds the primary allocation specified in Schedule 2A or 50% MALF in the case of unscheduled catchments. Once 50% MALF is calculated by the Regional Council for a catchment, that value becomes fixed in terms of this policy.

Consents that have been granted subject to a higher minimum flow than is set in Schedule 2A, and takes that immediately return all the water taken to the source water body, are not part of the primary allocation.

- (a) For catchments in Schedule 2A;
 - (i) If the consented take is less than the primary allocation specified in Schedule 2A, more water can be allocated as primary allocation under this policy until that limit is reached.
 - (ii) If the consented take at 28 February 1998 exceeded the primary allocation specified in Schedule 2A, no further primary allocation is available and no new primary allocation consents will be granted. The

- primary allocation will reduce if any permits are surrendered, lapse, are cancelled or not replaced on expiry.
- (iii) Any further allocation, known as supplementary allocation, must then be considered under Policies 6.4.9 or 6.4.10.
- (b) For catchments other than those in Schedule 2A;
- (i) If the consented take is less than 50% of the 7-day mean annual low flow, more water can be allocated as primary allocation under this policy until that limit is reached.
 - (ii) If the consented take quantity as at 28 February 1998 exceeded 50% MALF, no further primary allocation is available and no new primary allocation consents will be granted. The primary allocation will reduce if any permits are surrendered, lapse, are cancelled or not replaced on expiry.
 - (iii) Any further allocation, known as supplementary allocation, must then be considered under Policies 6.4.9 or 6.4.10.

Where a consent to replace an existing consent is not applied for within the time frames set in Section 124 of the Resource Management Act, that water take will lose its primary allocation status. The allocation previously provided to that former consent will not be reallocated as primary allocation on any subsequent consent application where the catchment primary allocation exceeds the limits under (a)(i) or (b)(i) of this policy.

The catchments used in terms of calculating allocation under this policy are based on the point at which each catchment enters the Clutha or Kawarau main stems, Lakes Roxburgh, Dunstan, Hawea, Wanaka or Wakatipu, or the coastal marine area. An alternative upstream point may be used where practicable, having regard to the hydrological characteristics of that catchment. Allocation limits will not apply in terms of any take from the main stem of the Clutha or Kawarau Rivers nor do the subsequent policies set minimum flows for these rivers but the provisions of Chapter 5 apply.

The Otago Regional Council will keep a record of the quantity of water allocated from each catchment.

Principal reasons for adopting

This policy is adopted, in conjunction with the application of minimum flows, for catchments identified in Schedule 2A, to provide certainty regarding the availability of water resources for taking, while ensuring the effects of takes on the life-supporting capacity for aquatic ecosystems and natural character of rivers are no more than minor.

This policy also provides a conservative primary allocation for unscheduled catchments until studies can determine the appropriate allocation limits. However these catchments are not identified in Schedule 2A, and they do not have minimum flows specified in the Plan.

Rules: 12.1.4.2 to 12.1.5.1, 12.2.3.1

Other methods: 15.8.1.1

6.4.3 For catchments identified in Schedule 2A, except as provided for by Policy 6.4.8, minimum flows are set for the purpose of restricting *primary allocation* takes of water.

Explanation

This policy sets specific minimum flows, as identified in Schedule 2A for specified catchments, for the taking of water that is within the primary allocation in terms of Policy 6.4.2.

The taking of primary allocation water is a restricted discretionary activity under Rules 12.1.4.2 to 12.1.4.4 provided the minimum flows in Schedule 2A are applied. Policy 6.4.6 provides an alternative to applying Schedule 2A minimum flows as a full discretionary activity under Rule 12.1.5.1. An exemption for Schedule 1B community water supply takes is provided for in Policy 6.4.8. A residual flow may be required under Policy 6.4.7 in addition to a minimum flow applied under this Policy where the take is a Schedule 1B community supply or where the take is from a tributary of a river for which a minimum flow is set in Schedule 2A.

These provisions apply where flow-monitoring facilities are in place. Schedule 2A may be amended, such as by the addition of further rivers, through plan changes as appropriate, as minimum flows are set after investigations.

Principal reasons for adopting

This policy is adopted to enable the taking of water while providing for instream values where there are monitoring facilities present and sufficient flow information available to enable the inclusion of affected rivers on Schedule 2A. The minimum flows established provide for the maintenance of aquatic ecosystems and natural character under low flow conditions. The Shag River minimum flow at Goodwood has been set for the protection of community water supply.

Rules: 12.1.4.2 to 12.1.5.1

Other methods: 15.8.2.1, 15.8.2.2

6.4.4 For existing takes outside Schedule 2A catchments, minimum flows, for the purpose of restricting *primary allocation* takes of water, will be determined after investigations have established the appropriate minimum flows in accordance with Method 15.9.1.3. The new minimum flows will be added to Schedule 2A by a plan change and subsequently will be applied to existing takes in accordance with Policy 6.4.5(d).

For new takes in a catchment outside Schedule 2A, until the minimum flow has been set by a plan change, the minimum flow conditions of any primary allocation consents will provide for the maintenance of aquatic ecosystems and the natural character of the source water body.

Explanation

This policy provides for setting of minimum flows for catchments outside Schedule 2A, for restricting the taking of water that is within the primary allocation in terms of Policy 6.4.2. For existing takes (as defined by Rule 12.1.4.5(i)) the minimum flows will be set after investigations have determined the appropriate minimum flow and that minimum flow has been added to Schedule 2A by a plan change.

For new takes, within the primary allocation set in Policy 6.4.2(b)(i), minimum flows are to be set on a case-by-case basis recognising the water use needs of the community while providing for the aquatic ecosystems and natural character of the water bodies of the catchment. Consents will be subject to a review clause to enable the new minimum flow that is added to Schedule 2A, to be applied.

This policy combined with Policy 6.4.5(d) provides for consents that replace existing primary allocation takes to be granted without a minimum flow until a plan change establishes the minimum flow for that catchment area. Such consents will be subject to a review clause to enable the new minimum flow that is added to Schedule 2A, to be applied.

Monitoring arrangements will be made on a case-by-case basis in accordance with Method 15.8.2.2. River flows are to be measured at the catchment's discharge point, or as close as practicable upstream of that point having regard to any physical constraints. Where direct monitoring of flows is impracticable, flow recorder sites on other rivers may be used.

Schedule 1B community water supply takes within the primary allocation are exempt from these minimum flow requirements as provided for by Policy 6.4.8. A residual flow may also be applied under Policy 6.4.7.

Principal reasons for adopting

This policy is adopted to enable the taking of water from outside Schedule 2A areas while providing for the maintenance of aquatic ecosystems and natural character.

See also: Policy 7.7.5

Rules: 12.1.4.2 to 12.1.5.1

Other methods: 15.8.2.1, 15.8.2.2, 15.9.1.3, 15.9.1.4

- 6.4.5 The minimum flows established by Policies 6.4.3, 6.4.4, 6.4.6, 6.4.9 and 6.4.10 will apply to resource consents for the taking of water, as follows:**
- (a) In the case of new takes applied for after 28 February 1998, upon granting of the consent; and**
 - (b) In the case of any resource consent to take surface water from within the Taieri above Paerau and between Sutton and Outram, Shag, Kakanui, Water of Leith, Lake Hayes, Waitahuna and Lake Tuakitoto catchment areas as defined in Schedule 2A, upon the operative date of this Plan subject to the review of consent conditions under Sections 128 to 132 of the Resource Management Act; and**
 - (c) In the case of any existing resource consent to take surface water from the Manuherikia catchment area (upstream of Ophir) and the Taieri catchment areas Paerau to Waipiata and Waipiata to Sutton, as defined in Schedule 2A, upon collective review of consent conditions within those catchments under Sections 128 to 132 of the Resource Management Act; and**
 - (d) In the case of any existing resource consent to take surface water within a catchment area not specified in Schedule 2A, upon the establishment of a minimum flow set for the water body by a plan change, subject to the review of consent conditions under Sections 128 to 132 of the Resource Management Act.**

Explanation

This policy provides for the application of minimum flows to consents as follows:

1. New takes are subject to minimum flow provisions when the consent is granted.
2. For resource consents to take from rivers within catchments specified in Schedule 2A, except for the Manuherikia (upstream of Ophir) and the Taieri between Paerau and Waipiata, and between Waipiata and Sutton, the minimum flow provisions apply from the operative date of the Plan, subject to the review of consent conditions under Sections 128 to 132 of the RMA.
3. For the Manuherikia (upstream of Ophir) and the Taieri between Paerau and Waipiata, and between Waipiata and Sutton, the minimum flows will not apply until after a collective review of the consents in the catchments. This will occur before 2021 if there is agreement by the holders of mining privileges (deemed permits) to adhere to the minimum flows, or on the expiry of the mining privileges on 2 October 2021. Where environmental benefit will result from applying minimum flows to any resource consents (other than deemed permits) in these catchments, the review of those resource consent conditions may also occur earlier.

4. For resource consents to take from rivers within catchments not specified in Schedule 2A, the minimum flow provisions will apply from the operative date of a plan change setting the minimum flow for the river, subject to the review of consent conditions under Sections 128 to 132 of the RMA.

Reviews under Section 128 of the Resource Management Act will be undertaken simultaneously on all reviewable takes within each catchment, in the interests of equity.

In the case of mining privileges in respect of water (deemed permits, see Appendix 2) the Resource Management Act provides for their continuation without restriction, unless compensation is made, until they expire in 2021. However, arrangements for the conversion of such permits to resource consents may be developed before that time. Alternatively, arrangements for voluntary adherence by deemed permit holders to the minimum flows may occur. Under voluntary arrangements, or conversion of deemed permits to resource consents, or in 2021, these resource consents or deemed permits will become subject to the minimum flows established by this Plan. The process of consent review must be completed by 2 October 2021, allowing coordination with the review of any deemed permits that may be operating in an area.

Principal reasons for adopting

This policy is adopted to enable the minimum flow provisions of the Plan to be applied as soon as practicable to existing resource consents to take water.

In the Manuherikia catchment area (upstream of Ophir) and Taieri catchment areas between Paerau and Waipiata, and between Waipiata and Sutton, there is a very high proportion of mining privileges. Therefore the application of minimum flows to resource consents may be timed to coincide with their application to deemed permits (either through voluntary methods or in 2021). Where environmental benefit will result from applying minimum flows to any resource consents (other than deemed permits) in these catchments, the review of those resource consent conditions may also occur earlier.

In unscheduled catchments the minimum flows, once established and set by a plan change, will be applied to the reviewable consents in those catchments.

This will ensure that restricting water takes will result in actual environmental benefits.

Rules: 12.1.4.2 to 12.1.5.1, 12.2.3.1

Other methods: 15.9.1.3, 15.9.1.4

6.4.6 To consider granting an application for a resource consent to take water from a Schedule 2A river, within primary allocation, subject to a minimum flow lower than that specified in Schedule 2A, on a case-by-case basis, provided:

- (a) The take has no measurable effect on the flow at any Schedule 2A monitoring site at flows at or below the minimum flow applying to the primary allocation; and**
- (b) Any adverse effect on any aquatic ecosystem value or natural character of the source water body is no more than minor; and**
- (c) There is no adverse effect on any lawful existing take of water.**

Explanation

This policy provides criteria for the granting of consents to take water as exceptions to the requirements of Policy 6.4.3. Such takes are full discretionary activities in terms of the rules of this Plan.

The application to take may not be granted if it has more than a minor adverse effect on any aquatic ecosystem value or on natural character, or any adverse effect on another lawful take.

Principal reasons for adopting

This policy is adopted to enable consideration of applications for the taking of water as exceptions to the requirements of Policy 6.4.3 where such a take will have no more than a minor effect.

See also: Policy 7.7.5

Rules: 12.1.5.1

6.4.7 The need to maintain a residual flow at the point of take will be considered with respect to any take of water, in order to provide for the aquatic ecosystem and natural character of the source water body.

Explanation

This policy requires an assessment of whether there is any need to apply a condition on any consent to take water requiring the passing of a residual flow at the point of take. Such a residual flow condition may be applied in addition to a minimum flow applied under this Plan.

A residual flow condition may be applied to any take for community water supply purposes, or on a take from a tributary stream that has different flow characteristics from the main stem.

Residual flows will be applied and monitoring arrangements made on a case-by-case basis having regard to any effects on aquatic ecosystem values and the natural character of the source water body.

Principal reasons for adopting

This policy is adopted to enable the taking of water while providing for instream values of the source water body, particularly with respect to community water supplies and takes from tributaries that have different flow characteristics from the main stem under low flow conditions.

*See also: Policy 7.7.5
Rules: 12.1.3.1, 12.1.4.2 to 12.1.5.1*

6.4.8 Minimum flows required by Policies 6.4.3, 6.4.4 or 6.4.6 will not apply to community water supply takes identified in Schedule 1B.

Explanation

Under low flow conditions, priority is given to protecting takes for community water supply in primary allocation. This policy exempts scheduled community water supplies from restriction in terms of the minimum flow requirements of Policies 6.4.3, 6.4.4 and 6.4.6. The requirement under Policy 6.4.7 to consider the need for a residual flow at the point of take does apply to these community water supplies, having regard also to the need to provide for human health and safety. Existing residual flow conditions may be confirmed or reviewed through the application of this Plan. Community water supply takes beyond the primary allocation will be subject to Policy 6.4.9 or 6.4.10 and will need to be designed to maintain aquatic ecosystem values, while ensuring sufficient supply under low flow conditions so that human health and safety are not compromised. Section 14(3)(b) of the Resource Management Act provides for the unrestricted taking of water for an individual's reasonable domestic needs, provided the taking does not, or is unlikely to, have an adverse effect on the environment.

Principal reasons for adopting

This policy is adopted to enable continued unrestricted operation of Schedule 1B 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. In many instances the community has made a considerable investment in developing infrastructure to supply water, and has undertaken significant development that is dependent on the water supply.

Consideration of any need for a residual flow at the point of take may be needed in some instances to provide for specific values of the source water body.

Rules: 12.1.3.1

6.4.9 To provide for supplementary allocation for the taking of water, in blocks of allocation where that is appropriate:

- (a) Such that up to 50% of flow at the catchment main stem, minus the assessed actual take, is available for allocation subject to a minimum flow set to ensure that no less than 50% of the natural flow remains instream; or

- (b) On an alternative basis provided:**
- (i) The take has no measurable effect on the flow at any Schedule 2 monitoring site, or any site established in terms of Policy 6.4.4, at flows at or below any minimum flow applying to primary allocation; and**
 - (ii) Any adverse effect on any aquatic ecosystem value or natural character of the source water body is no more than minor; and**
 - (iii) There is no adverse effect on any lawful existing take of water.**
- (c) The first supplementary allocations and associated minimum flows for the Kakanui River are set in Schedule 2B.**

Explanation

Policy 6.4.2 provides for the taking of water as primary allocation. This policy provides for supplementary allocation for the taking of water on a 50:50 flow-sharing basis between instream and out of stream use. Fifty percent of available flow may be allocated, minus the assessed actual take, which is that volume of water in primary allocation that is actually being taken, as calculated under Method 15.8.1.1. Further supplementary allocation is provided through Policy 6.4.10.

In providing for supplementary allocation where there are multiple applications for new takes of water these may be granted in allocation blocks. These blocks are volumes of water, assessed as the consented maximum instantaneous rates of take. Schedule 2B establishes the first supplementary allocations and associated minimum flows for the Kakanui River.

The formula for calculating the supplementary minimum flows is as follows:

$$\text{Supplementary minimum flow} = \text{Assessed actual take} + \text{Supplementary allocation}(s)$$

Supplementary allocation takes that leave no less than 50% of the flow instream, or are specified in Schedule 2B for the Kakanui River, are a restricted discretionary activity under Rule 12.1.4.3.

Supplementary allocation may be made on an alternative basis, as an exception to 6.4.9(a), as long as aquatic ecosystem values, natural character and existing users downstream of the take are not adversely affected. Supplementary allocation takes that leave less than 50% of the flow instream, or are in addition to the first supplementary allocations specified in Schedule 2B for the Kakanui, will be considered as a full discretionary activity under Rule 12.1.5.1. When setting minimum flows and monitoring arrangements on this basis, the provisions of Policy 5.4.2 as they apply to aquatic ecosystems and natural character will be had regard to.

Principal reasons for adopting

This policy is adopted to enable access to water at moderate flows, while maintaining the aquatic ecosystem and natural character values of affected rivers,

and providing for natural flow variation. It also provides for a lower minimum flow to be applied, where adverse effects will be no more than minor.

See also: Policy 7.7.5, in relation to (b) of this Policy

Rules: 12.1.4.2 to 12.1.5.1

6.4.10 In addition to Policy 6.4.9, to provide for further supplementary allocation without any restriction on the volume taken, where the minimum flow applied is equal to the natural mean flow.

Explanation

This policy provides for further supplementary allocation than that which is provided for by Policy 6.4.9, when flows are above the natural mean flow. At such times, water is sufficiently abundant so that taking will have no more than minor effect on instream values or other takes.

This allocation is likely to be sought by those storing water. Where such takes are subject to a minimum flow equal to the natural mean flow, limiting the allocation is unnecessary. Rule 12.1.4.7 makes such takes a restricted discretionary activity. However, further supplementary takes in the Kakanui catchment are full discretionary activities under Rule 12.1.5.1 because of the provision of the first supplementary allocations in Schedule 2B and the potential effects of further supplementary takes on flow variability and instream values.

Principal reasons for adopting

This policy is adopted to provide access to water at higher flows and promote water harvesting, when the maintenance of the aquatic ecosystem and natural character values of affected rivers is not an issue.

Rules: 12.1.4.7 to 12.1.5.1

6.4.11 To provide for the suspension of the taking of water at the minimum flows set under this Plan.

Explanation

When the flow in any river is at or below that minimum flow set by rules or consent conditions under this Plan, all takes that are subject to that minimum flow shall cease taking. This applies where there is an automatic flow recorder that can be accessed by the Otago Regional Council's "Water Info" telephone service. Where no access to low flow information is available directly by that telephone service, then the Otago Regional Council will notify consent holders by public notice, or other appropriate means, that taking must cease until further notice.

The Otago Regional Council may, by public notice, also suspend the taking of water under permitted activity Rules 12.1.2.4 and 12.1.2.5 at such times.

Principal reasons for adopting

This policy is adopted to ensure that holders of resource consents for the taking of water will cease taking water at the specified minimum flows, in order to provide for the maintenance of aquatic ecosystems and natural character under low flow conditions in Otago's rivers.

See also: Policy 9.4.9

Rules: 12.1.2.4, 12.1.2.5, 12.1.4.2 to 12.1.5.1, 12.2.3.1

Other methods: 15.8.2.1, 15.8.2.2

6.4.12 To promote, establish and support appropriate water allocation committees to assist in the management of water rationing and flow monitoring during periods of water shortage.

Explanation

Water allocation committees can assist the Otago Regional Council to manage the region's water resources when flows approach minimum flows established by this Plan. These committees can effectively manage water rationing to avoid or delay reaching the minimum flow.

The committees will be made up of local representatives of people taking water from within the catchment affected by the minimum flow regime. The Otago Regional Council will appoint such committees, as subcommittees of the Council, for the purpose of developing and managing rationing regimes. It will support them by providing hydrological information, and advice on options for rationing to suit particular circumstances, and by enforcing compliance with rationing regimes, as provided for by Policy 6.4.13. The rationing regimes require approval of the Otago Regional Council.

Principal reasons for adopting

This policy is adopted to ensure that effective water rationing decisions can be made. Where possible it is intended to take full advantage of local knowledge of water user needs, to ensure local circumstances are taken into account. This is because details of rationing are best arranged among water users to avoid unnecessary conflict in periods of water shortage. The committee membership and committees' rationing regimes require the approval of Council before they can operate as committees of Council.

Other methods: 15.2.2.1, 15.3.2.1

6.4.13 To suspend the taking of water as required to comply with any rationing regime established, by a water allocation committee established in terms of Policy 6.4.12, or by the Council in the absence of a water allocation committee.

Explanation

This Policy is adopted to provide for the suspension of takes in accordance with the requirements of any rationing regime established by a water allocation committee or the Council, where a water allocation committee is not the preferred option of the water users. The Council will review and approve the rationing regimes of the allocation committees. Consent conditions will support the rationing regime established by the allocation committee or the Council.

The requirement for compliance with any approved rationing regime established by a water allocation committee or the Council, will be a condition of resource consents that can be included on new consents, or upon the review of existing consents.

Principal reasons for adopting

This policy is adopted to enable the equitable sharing of water resources under low flow conditions, and assist to delay the wider suspension of takes by a minimum flow restriction.

Rules: 12.1.4.2 to 12.1.4.4, 12.1.4.6, 12.1.4.7, 12.1.5.1, 12.2.3.1

Other methods: 15.2.2.1

6.4.14 Other than as may be provided for by Policies 6.5.5, 8.4.2 and 10.4.4, those taking water will not be restricted by the minimum flows set by this Plan, where the quantity taken is within any net flow augmentation specifically provided for that taking.

Explanation

This policy recognises that, where augmentation occurs, resource consents to take up to the augmentation volume may be issued, which are not subject to any minimum flow. Net flow augmentation is that water added to a water body through an augmentation scheme, for a subsequent take, which is estimated to still be present in the water body at the point of take. Quantities provided through augmentation may be reduced by leakage, or evaporation losses. Such losses will be deducted when determining the net flow augmentation that has been provided.

Other policies recognise a requirement to take water, which may have an adverse effect, but requires compensation. These policies are:

- (a) Policy 6.5.5, which requires regard to be given to avoiding specified adverse effects when augmentation involves inter-catchment transfers;
- (b) Policy 8.4.2, which recognises the need for compensation arising from the associated damming of water; and
- (c) Policy 10.4.4, which recognises that the taking of water may affect a wetland.

Principal reasons for adopting

This policy is adopted to provide for unrestricted access by resource users to water that they themselves have provided through augmented flows. Losses are

taken into account to ensure that takes that would not be subject to minimum flows would not result in minimum flows being breached.

Rules: 12.1.4.1

6.4.15 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 resource consent granted. Given the diverse nature of the Otago region, those requirements may also be affected by conditions within the catchment, and these should also be taken into account in determining the appropriate quantity of water to be granted.

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. This will enable more people to benefit from water available for consumptive use.

Rules: 12.1.4.2 to 12.1.5.1

Other methods: 15.3.1.1

6.4.16 In granting resource consents to take water, or in any review of the conditions of a resource consent to take water, to require the volume and rate of take to be measured in a manner satisfactory to the Council unless it is impractical or unnecessary to do so.

Explanation

It is appropriate to require that the volume and rate of any take of water be measured unless it is impractical or unnecessary to do so. This is the case where there may be uncertainty about the actual demand at various times and where adverse effects on the environment or users could arise due to demand being either under-estimated or over-estimated. The requirement to measure takes may be waived on a case-by-case basis when considering resource consent applications to take water, where measurement is not practicable or where there is no benefit derived from doing so.

Information on volume and rate of take may also be required as a result of a catchment wide review of consent conditions undertaken in accordance with Policy 6.4.5 (b), (c) and (d), Rules 12.1.4.2 (iii), 12.1.4.3 (iii), 12.1.4.4 (iv), and 12.1.4.7 (vi) and Method 15.9.1.

Principal reasons for adopting

This policy is adopted to provide for the measurement of water takes in a manner suitable to the needs of the Council and the environment. The policy will assist to identify actual demand for water, and thus may provide for more efficient allocation and use of water.

The reasons for requiring the measuring of takes as a result of a catchment wide review of consent conditions, under Policy 6.4.5 (b), (c) and (d), include:

- Better information on the volumes and rates taken will assist in establishing the influence of abstractions, if any, on the incidence and duration of minimum flows breaches, and also assist with water balance equations, allowing improved water management generally;
- Better information will assist water allocation committees to more effectively manage the rationing of takes during times of low flows to prevent minimum flows from being breached; and
- Better take information may enable supplementary allocation to be granted, ensuring instream values and flow variation are appropriately provided for and to prevent supplementary minimum flows from being breached.

Rules: 12.1.4.2 to 12.1.5.1

6.4.17 On the application of any consent holder, to approve the transfer of consents to take water in terms of Section 136(2)(b)(ii) of the Resource Management Act, retaining the take's allocation status, providing:

- (a) The transferred take is exercised within the same catchment as the original consent;**
- (b) The total take from the water body following transfer does not exceed that occurring prior to the transfer, as a result of the transfer;**
- (c) The quantity of water taken is no more than that required for the intended use of that water, having regard to the local conditions; and**
- (d) There is no more than minor adverse effect on any other take, any right to store water, or on any natural or human use value, as a result of the transfer.**

Explanation

Section 136(2)(b) of the Resource Management Act provides for the transfer of a resource consent, or part of a consent, to another site or to another person on another site, if both sites are in the same catchment (either upstream or downstream). Transferring a take under this policy will not change its allocation status. A take originally in the primary allocation will be transferred as a primary allocation take, and will remain subject to the primary allocation minimum flow.

An application to transfer the consent must be made to the Otago Regional Council. This policy sets out the requirements for the transfer of consents to take water to be approved by the Council. The explanation to Policy 6.4.16 provides additional guidance in terms of (c).

Principal reasons for adopting

This policy is adopted to enable new users to gain access to existing allocated resources provided the natural and human use values of Otago's water bodies, and other water users' interests in the water resource, are not adversely affected. Such transfers may become important where the demand on the water resource is already high. In such circumstances, transfers are a means by which opportunities for diverse consumptive use of the allocated resource can be achieved.

Rules: 12.1.4.2 to 12.1.5.1

6.4.18 Where a resource consent for the taking of water has not been exercised for a continuous period of 2 years or more, disregarding years of seasonal extremes, the Otago Regional Council may cancel the consent.

Explanation

Where any consent for a take of water has not been exercised for a period of 2 years, the consent may be cancelled under Section 126 of the Resource Management Act. This 2 year period will not include very dry years where water is not available to take, or very wet years when the water is not needed for the intended use of the consent.

Principal reasons for adopting

This policy is adopted to enable those wishing to use allocatable water to do so, by cancelling existing authorities to take that are not being exercised.

Rules: 12.1.3.1 to 12.1.5.1

6.4.19 The term of any permit that is granted subject to a minimum flow applied under Policies 6.4.3, 6.4.9(a) or 6.4.10 may be up to 35 years.

Explanation

Permits subject to a minimum flow applied under Policies 6.4.3, 6.4.9(a) or 6.4.10 may be granted for a term of up to 35 years, if that is the term applied for, because these minimum flows provide for aquatic ecosystems, natural character and other water users.

Principal reasons for adopting

This policy is adopted to enable long-term security of access to water resources where instream needs have been assessed and provided for in terms of this Plan. The use of longer terms will assist with minimising the costs of implementing the Plan.

Rules: 12.1.3.1 to 12.1.5.1

6.4.20 In catchments where water permits are affected by the exercise of mining privileges, any water permits granted by the Council will be:

- (a) For a term expiring on or before 1 October 2021; or**
- (b) For a longer term, subject to a condition enabling the Council to review the conditions of the water permit to restrict the exercise of that permit to allow the exercise of another water permit.**

Explanation

Mining privileges confer priorities to water. These historic priorities expire on 1 October 2021. Holders of mining privileges who wish to continue their activities after that date will need to apply for new water permits. At that time it will be appropriate for the Council to evaluate the inter-relationship of all activities affecting water (whether under a mining privilege or water permit) in the catchment to determine whether any water permit should be subordinate to any other water permit.

This policy creates no presumption that new priorities will or will not be afforded to any replacement consents.

So that this evaluation can be carried out, water permits will be granted for a term or on conditions that allow the Council to take account of activities authorised by water permits, as well as activities permitted by expiring mining privileges.

Where mining privileges do not affect other water permits then this policy will not be applied.

Principal reasons for adopting

The policy is adopted to enable the Council to simultaneously assess the relationship between takes and other uses involving water in catchments affected by the exercise of mining privileges and, where necessary and appropriate, restrict the taking or other activity affecting water under one permit in favour of another water permit.

Rules 12.1.4.1 to 12.1.5.1

6.4.21 In granting water permits, the Council may restrict the exercise of a water permit to allow the exercise of another water permit.

Explanation

In some circumstances the exercise of a water permit may need to be subject to, or subservient to, the exercise of another water permit.

For example, such consideration may be required to ensure that a water body is not adversely affected by the simultaneous exercise of multiple takes or the exercise of one take is not adversely affected by the exercise of the other take or

takes. This can occur when the instantaneous take volumes are larger than the water available to be taken and there are takes that can conflict with each other. Similar considerations may be needed on a river where there are dams that may affect or be affected by takes or other dams.

The Council may consider making one permit subordinate to another permit when it deals with an application for a consent for a water permit currently authorised by a mining privilege. In such cases, no assurance can be given that a replacement permit will be granted, nor that a new permit will continue any existing priorities.

Where an application is made for a permit to replace an expiring mining privilege, the Council will consider, but not exclusively:

1. Whether the take previously held priority or was subject to a priority.
2. When the mining privilege is exercised.
3. The extent to which the mining privilege is exercised.
4. How often the exercise, or potential exercise, of any water permit or lower priority mining privilege is, or could be, affected by the priority attached to a mining privilege.
5. Whether the amount of water authorised to be taken under the mining privilege is more than needed for the actual use.

Principal reasons for adopting

This policy is adopted to indicate that the Council may make water permits subject to or subservient to other water permits where appropriate and necessary whether mining privileges are involved or not.

Rules 12.1.4.1 to 12.1.5.1

6.5 Policies regulating the management of lake levels, and the damming, diversion and augmentation of rivers.

To set a minimum level for Lake Tuakitoto of 100.77 metres above datum, applying during the period beginning 30 September in any year and ending 16 May in any following year.

Explanation

Any new resource consent for an activity that would lower the level of Lake Tuakitoto must observe the relevant minimum level established by this policy. These activities would include existing or new:

- (a) Takes of water; and
- (b) Diversions of water.

Rules 12.1.1.1 and 12.3.1.4 prohibit the taking or diversion of water when the level is below 100.77 metres above datum.

Principal reasons for adopting

This policy is adopted to continue the minimum lake level already established to protect the lake's recreational and wildlife features by The Local Water Conservation (Lake Tuakitoto) Notice, 1991.

Rules: 12.1.1.1, 12.3.1.4

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 Otago's lakes are controlled through the use of dams for specific purposes, storage for irrigation supply and electricity generation for example. The purposes of any 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 6.5.3.

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.

Rules: 12.3.3.1

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

- (a) Natural and human use values identified in Schedule 1;**
- (b) The natural character of the lake;**
- (c) The amenity values supported by the lake;**
- (d) Lake margin stability; and**
- (e) The needs of Otago'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. It is also important when considering an activity affected by this policy that consideration is given to Policy 6.5.2.

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.

Rules: 12.3.3.1

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

- (a) The requirements of:**
 - (i) Natural and human use values identified in Schedule 1;**
 - (ii) The natural character of the water body; and**
 - (iii) Amenity values supported by the water body; and**
- (b) The periodic release of sufficient quantities of water at appropriate flow rates, where necessary to remove excess algal growth or an accumulation of sediment downstream of the dam; and**
- (c) The existing needs of consumptive users of water, while taking into account, where appropriate, 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 Rules 12.3.2.1 and 13.2.1.3, are excluded. Where the controlled flow conditions could lead to the river's natural and human use values, or uses of that water, being degraded or 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 flow levels. 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.

Where existing development affecting the water body may have led to a stable equilibrium situation with its own natural character, this will be taken into account when invoking the provisions of this policy.

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.

Rules: 12.3.3.1, 12.3.4.1, 12.4.2.1, 12.5.2.1, 12.13.1.1, 14.3.2.1

6.5.4 In considering resource consents for flow augmentation proposals involving any transfer of water between catchments that was not lawfully established before 28 February 1998, regard will be had to avoiding:

- (a) The introduction of flora or fauna which are not already present;**
- (b) The reduction of water quality in the receiving catchment; and**
- (c) Adverse effects on Kai Tahu cultural and spiritual beliefs, values and uses.**

Explanation

Augmentation of surface water flows for the purposes of this policy occurs where water is brought into a catchment 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.

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 on the flora and fauna, water quality, or cultural and spiritual beliefs, values or uses of the water resources.

Rules: 12.3.3.1, 12.3.4.1, 12.13.1.1

6.5.6. Financial contributions, or works or services may be required to offset, remedy or mitigate any unavoidable adverse effect of the diversion of water on:

- (a) Any natural or human use value identified in Schedule 1;**
- (b) The natural character of the water body;**
- (c) Any amenity value supported by the water body; or**
- (d) Any heritage value associated with any affected water body.**

Explanation

The diversion of water can result in unavoidable adverse effects on the natural and human use values supported by the water body. Where such effects occur, financial contributions, or 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 17 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 diversion of water.

Rules: 12.3.3.1, 12.3.4.1

See also: Chapter 17; Policies 8.4.2, 10.4.4

6.6 Policies for the promotion of management of water resources by users

6.6.1 To promote water conservation practices through:

- (a) Promoting water use practices which minimise losses of water; and**
- (b) Promoting water use practices which require less water.**

Explanation

The Otago Regional Council will promote voluntary action by agricultural, industrial and domestic water users, to minimise the amount used for any particular purpose. This policy identifies the areas which can be targeted to achieve this outcome. The Council will provide appropriate information to assist water users to identify opportunities to use water more efficiently.

Principal reasons for adopting

This policy is adopted to achieve more efficient use of the water resource and thereby increase the available supplies for existing and potential users within the constraints of minimum flows established by this Plan.

Other methods: 15.2.1.1, 15.2.3.1, 15.3.1.1, 15.4.2.1

6.6.2 To promote the storage of water at periods of high water availability through:

- (a) The collection and storage of rainwater; and**
- (b) The use of reservoirs for holding water that has been taken from any lake or river.**

Explanation

The Otago Regional Council will promote voluntary storage of water by resource users. This policy identifies the means by which storage is encouraged. Water used to fill storage is collected during periods of high flow, for subsequent use in periods when demand exceeds supply.

Principal reasons for adopting

This policy is adopted to give recognition to water storage as a way to achieve more efficient use of the water resource. Storage may reduce the need to take water from lakes or rivers when available supplies are limited and the potential for adverse effects of taking is greatest.

Other methods: 15.2.3.1, 15.3.1.1

6.6.3 To work with and seek the co-operation of holders of deemed permits in:

- (a) The observance of any minimum flows or levels applying to other users;**
- (b) Ensuring that the quantity of water taken is no more than that required for the intended use of that water, in accordance with Policy 6.4.15; and**
- (c) The measuring of takes and return flows.**

Explanation

Deemed permits (see Appendix 2) have become a significant element of Otago's water management regime and confer significant benefits upon the region's people and communities. This policy establishes means to assist in the development of methods and strategies for the orderly transition from deemed permits, which expire in 2021, to resource consents. The means in (a) to (c) of the policy are intended to introduce equity in the implementation of minimum flows, remove excessive allocation and provide resource use information. There

will be consultation with users to ensure that no arbitrary changes are required. Where voluntary methods fail the Council may consider using other options.

Principal reasons for adopting

This policy is adopted to support a possible transition from deemed permits to resource consents. This transition may be needed because the exercise of deemed permits can constrain opportunities to implement minimum flows established by this Plan to maintain the life-supporting capacity for aquatic ecosystems and natural character of rivers.

Seeking the co-operation of holders of deemed permits is an effective means of developing more appropriate provisions for management of water in the long term.

Other methods: 15.7.1.1 and 15.9.1

6.6A Policies relating to the Waitaki catchment

Policy on a whole-catchment approach

6.6A.1 By recognising the importance of connectedness between all parts of the catchment from the mountains to the sea and between all parts of freshwater systems of the Waitaki River and associated beds, banks, margins, tributaries, islands, lakes, wetlands and aquifers.

Explanation

The Waitaki catchment is large and complex. This policy recognises the importance of taking a whole-catchment “mountains to the sea” approach to water allocation in the catchment – an approach that recognises the physical, ecological, cultural and social connections throughout the catchment.

Policies on the allocation to activities

6.6A.2 In considering effects and when allocating to activities under the provisions of this Plan:

- (a) Tāngata whenua values are those held by Kāi Tahu;**
- (b) National effects refer to those that arise within New Zealand; and**
- (c) Local effects refer to those that arise in the Mackenzie District, the Waimate District and the Waitaki District.**

Explanation

This policy presents the scope of effects as they apply to this Plan. Part (a) reflects the Ngāi Tahu Claims Settlement Act 1998 which recognises the mana of Kāi Tahu in relation to a range of sites and areas in the South Island. Effects are considered from both national and local perspectives. It is recognised that local social and economic effects are likely to extend beyond the catchment boundary, and will vary unevenly with distance, depending on the circumstances of each case. For the purpose of this Plan however, it is necessary to define the

scope of local effects considered in order to define the basis of assessment, and this is provided in part (c) of this policy.

6.6A.3 To establish an allocation to each of the following activities:

- (a) Town and community water supplies;
- (b) Hydro-electricity generation;
- (c) Agricultural and horticultural activities;
- (d) Industrial and commercial activities;
- (e) Tourism and recreation facilities; and
- (f) Any other activities,

by:

- (i) **Having regard to the likely national and local effects of those activities;**
- (ii) **Reference to relevant national, regional and local plans and strategies;**
- (iii) **Recognising the importance of irrigation to agriculture and horticulture;**
- (iv) **Considering the relative environmental effects of the activities including effects on landscape, water quality, mauri, and the beds of lakes and rivers;**
- (v) **Assuming a high level of efficacy and technical efficiency;**
- (vi) **Giving a preference to needs for water within the catchment; and**
- (vii) **Expressing the allocation to activities in annual volumes downstream of Waitaki Dam but downstream of Black Point.**

Explanation

One of the requirements of the Resource Management (Waitaki Catchment) Amendment Act 2004 is that this Plan must provide for the allocation of water to activities. Policy 6.6A.3 contains the categories of activities and describes the approach used to make allocations among the activities. These allocations apply, at the point that water is taken, to new and replacement consents from all water bodies including canals, and will require all consents to specify an annual volume. Policy 6.6A.2 provides further description of how the local and national effects are defined. Any activity that falls outside the allocations set under this policy in the rules will be a non-complying activity and must demonstrate the effect of granting the consent on the entitlements to other allocations over the timeframe of the consent. Applications for resource consents are still required for taking or diverting water within the allocation volumes. They are subject to the other provisions of this Plan, and to the consideration of effects under the resource consent processes.

Rules: 12.1.4.4A, 12.1.4.5, 12.1.4.6, 12.1.4.7, 12.1.4.8, 12.1.6.1, 12.1.6.2, 12.2.4.1, 12.2.5.1, 12.3.3.1, 12.3.4.1, 12.3.5.1, 12.3.5.2

Other methods: 15.2.1.1, 15.2.3.1, 15.3.1.1

6.6A.4 In considering whether to grant or refuse consent to take, divert, dam or use water allocated for agricultural and horticultural activities, the consent authority will have regard to the extent to which exercise of the consent could result in the water quality objective in this Plan not being achieved.

Explanation

This policy recognises the importance of water quality considerations when allocating water to agricultural and horticultural activities and, in particular, to irrigation. The intensification of land use, including that arising from irrigation, increases the potential for adverse effects on water quality. The Waitaki catchment has some sensitive and pristine water bodies that have not to date had intensive land uses in their catchments. This policy links to the water quality chapter to ensure these matters are considered when deciding consents.

Objective: 7.5.1

Rules: 12.1.4.4A, 12.1.4.5, 12.1.4.6, 12.1.4.7, 12.1.4.8, 12.1.6.1, 12.1.6.2, 12.2.4.1, 12.2.5.1, 12.3.3.1, 12.3.4.1, 12.3.5.1, 12.3.5.2

Other methods: 15.2.3.1, 15.4.2.1, 15.4.2.2

6.6A.5 In considering whether to grant or refuse consents to take, divert or use water outside of the Waitaki catchment, the consent authority will have regard to the extent to which granting consent will reduce the availability of water to current and reasonably foreseeable in-catchment needs.

Explanation

In parts of the catchment there is insufficient water to reliably meet all current and future demands. This policy places a primacy on demands for water within the catchment by providing for in-catchment needs for water to be considered before a consent authority decides whether or not to grant applications to take water out of the catchment. The policy does not preclude the grant of applications for out-of-catchment use, but provides for consideration of likely in-catchment needs when considering such applications. Policy 6.5.5, concerning the adverse effects on Kāi Tahu cultural and spiritual beliefs, values and uses, including mauri, may also be relevant to the consideration of such applications.

Policy: 6.6.5

Rules: 12.1.4.4A, 12.1.4.5, 12.1.4.6, 12.1.4.7, 12.1.4.8, 12.1.6.1, 12.1.6.2, 12.2.4.1, 12.2.5.1, 12.3.3.1, 12.3.4.1, 12.3.5.1, 12.3.5.2

Other method: 15.2.3.1

Policy for Welcome Creek

6.6A.6 By setting an environmental flow and level regime in Welcome Creek that recognises and provides for the relationship of Kāi Tahu and their culture and traditions with

Welcome Creek, and enables appropriate access to waterfor activities identified in Policy 6.6A.3 to the extent consistent with the objective in this Plan.

Explanation

This policy sets the basis for the environmental flow and level regime for this creek which are set in the rules. It identifies particularly important values that were considered in setting the regime.

Policy 6.6A.3

Rules: 12.1.4.4A, 12.1.4.7, 12.1.4.8, 12.1.6.2, 12.3.5.2

Other method: 15.2.3.1

6.7 Anticipated environmental results

- 6.7.1 There is sufficient water remaining to support the life-supporting capacity and natural character of rivers.
- 6.7.2 People and communities have access to suitable supplies of water for their present and reasonably foreseeable needs.
- 6.7.3 Inter-catchment transfers of water do not result in the introduction of new flora or fauna.
- 6.7.4 The levels of controlled lakes are managed as far as practicable to be compatible with the surrounding environment.
- 6.7.5 Flows and flow variation downstream of dam structures provide for the requirements of other users of water, and the natural and human use values.
- 6.7.6 More efficient water taking and use practices are utilised.
- 6.7.7 Maximum community benefit is gained from available surface water resources and security of reasonable lawful access is provided for.
- 6.7.8 Conflict among those taking water is minimised.

Monitoring of the achievement of these anticipated environmental results will be carried out as outlined in Chapter 19.

Otago Regional Council Submission

To: Special Tribunal – Kawarau River Water Conservation Order
C/- Alex Miller
Ministry for the Environment
PO Box 10362
Wellington 6143

Name of Submitter: Otago Regional Council (Council)

This is a submission on:

An application from the New Zealand Fish and Game Council and Otago Fish and Game Council for an amendment of the Water Conservation (Kawarau) Order 1997 in respect of the Nevis River, to add a prohibition on damming and diversion of the Nevis River, add a condition on water takes, deletion of Clause 7 of the Order and amendments to recognise outstanding characteristics of the Nevis River.

The specific part of the application that this submission relates to is:

The application in its entirety.

This submission is:

The Otago Regional Council opposes the addition of further tools and unnecessary complications through the Water Conservation (Kawarau) Order 1997, in regard to the Regional Plan: Water for Otago.

The Nevis River was subject to the original application by the Minister of Conservation and restrictions were explicitly decided upon and provided for.

The Otago Regional Council is of the opinion that the current tools, provisions and processes in place under the Regional Policy Statement for Otago and the Regional Plan: Water for Otago are sufficient and appropriate. These mechanisms already provide for sound and robust public processes that are required to be undertaken, including public consultation.

Council is of the opinion that a water conservation order, or any subsequent amendment, is an inappropriate process for altering Regional Planning documents in relation to damming and diversion and minimum flows.

This alteration should occur through the Resource Management Act 1991 First Schedule process, where there is provision for private plan changes, in order to ensure coherence of Resource Management Act 1991 control instruments.

The Otago Regional Council seeks the following decision from the special tribunal:

That the application be declined.

The Otago Regional Council wishes to be heard in support of this submission.