

8. Landscape, Ecology and Heritage

8.1 Introduction

(a) Landscapes and ecosystems

Landscape is a term with a much wider embrace than just the visual. It is at once something physical - expressing character and identity, and something that rests on individual or collective perceptions - values placed on them by people. The quality of landscapes depends on both aspects. Ecosystems are interacting communities of plants, animals, and micro-organisms, and their environment. An important factor is interconnectedness - the species that make up an ecosystem depend on other species and their surroundings. The integrity and functioning of ecosystems is fundamental to all life, including human life. As well as having intrinsic value, ecosystems are an integral part of the natural landscape, and their changes affect the character and quality of landscapes throughout Canterbury. In approaching policies for resource management aimed at protecting or enhancing natural landscapes and ecosystems, it is helpful to understand the broad scope of landscape, and the linkages that characterise ecosystems.

While priority can be given to some natural features and landscapes by labelling them “significant” or “outstanding”, it is important to remember that for many, their greatest value may be as part of a bigger picture. For example, in the highly modified Canterbury Plains there are a number of small lagoons, wetlands, gravel pits and ponds, as well as Lake Ellesmere (Te Waihora) and Wainono. While individually the smaller water bodies might not rank as nationally, regionally or even locally significant, taken together, their importance as part of a global network for some migrating birds (and in some cases fish) gives them potentially international significance.

Lowland Canterbury now has only scattered remnants of formerly extensive indigenous habitats. Some are at risk of being so diminished as to lose their usefulness as parts of a larger whole. Integrated management and recognition of the strategic significance of ecological connections between these scattered habitats, and the processes that maintain them, is essential.

(b) High country landscapes

Some of Canterbury’s high country landscape could probably be classed as internationally outstanding. The high country is characterised by its vast and open landforms, including a wide range of outstanding glacial, fluvial and aeolian derived natural features and a relative lack of

modification. It includes significant native plant and animal communities and habitats - tussock grasslands and shrublands, glacial rivers, forests, lakes and wetlands, and alpine areas. The dominant land use is pastoral farming, and the predominant land tenure is leasehold.

Land degradation is a significant issue in parts of the high country. Vegetation depletion, and the spread of weeds such as hieracium, broom, gorse and wilding trees is impacting on landscape values. Other impacts arise from poorly designed earthworks (including tracking), structures, tree planting, and the clearance of indigenous vegetation.

The wide range of demands on high country areas for nature conservation, recreation, catchment management, amenity, and production must be considered against their diversity and comparative lack of resilience. Without sufficient protection of high country resources there could eventually be no income-earning potential for people who have a recognised commitment to living and working there.

(c) Indigenous vegetation

There are substantial areas of mountain beech forest in the catchments of the Ahuriri, Dobson/Hopkins, Rakaia and Waimakariri Rivers, Craigieburn Forest Park, Arthur's Pass National Park, and in the frontal ranges within the Ashburton and Waimakariri Districts. The Lake Sumner area and the headwaters of the Hurunui and Waiau Rivers are dominated by extensive red, silver and mountain beech forests. Good examples of mixed podocarp forest still exist in the Peel Forest area, and podocarp-hardwood forest at the head of the Rakaia, Wilberforce, and Mathias Rivers. Small areas may still be found on Banks Peninsula, and in the North Canterbury hill country. Coastal forest and shrubland remnants are one of the rarest communities in Canterbury, being restricted to a limited number of sites on Banks Peninsula and in North Canterbury. Lowland forest areas are also rare, particularly on the Canterbury Plains where they are restricted to a few small areas. Forest and shrubland remnants are threatened by browsing pressure, edge effects, weeds and pests.

Tussock grasslands cover large areas of the region's hill and high country. The health of these habitats is important to many significant native plants and animals, including specialised invertebrates, and alpine flowers. Healthy grassland and shrubland habitats also contribute to keeping soil cover intact, and in turn this protects waterways from siltation. Tussock grasslands have been significantly depleted by grazing, rabbit browsing and burning in many parts of the high country, most obviously in the intermontane basins, valley floors and slopes, and semi-arid areas. On mid-to-high-altitude tussock grasslands, in many areas where rabbits are not a significant factor, adverse grazing impacts are also evident.

Except on Kaitorete Spit, lowland native grasslands have been reduced to small remnants, mainly along roadsides. In the lowlands and foothills, native kanuka and other shrublands are now confined to very limited areas such as the Eyrewell Scientific Reserve. They have been severely modified by top-dressing, burning, oversowing with introduced grasses, and afforestation as well as introduced weeds and pests. Shrub areas, used for firewood and stock shelter, are often browsed to the point where they cannot regenerate. These factors need to be considered alongside their income producing capability.

(d) Forestry

Planted production forestry is of increasing importance to the region. There are large forests such as those at Hanmer, Balmoral, Ashley, Eyrewell, and Kakahu. Forestry on farms is increasing as an alternative land use.

(e) Freshwater habitats

Freshwater systems contribute significantly to the landscape character of many parts of Canterbury, and provide a major recreational resource. Many wetlands, rivers, streams, lakes and riparian habitats are of considerable significance but continue to be modified by the effects of adjacent land uses, and through wider catchment changes.

Riparian areas are the complex boundary between land and water systems. While their role is not always fully understood, they are known to be significant in the management of water quality, bank stability, as habitats for freshwater and terrestrial fauna, and as a wildlife corridor between scattered areas of native habitat.

Since European settlement, wetlands have been greatly reduced within Canterbury, particularly on the plains. What remains is largely confined to areas associated with coastal lakes and lagoons, and faces threats from farm development, grazing and coastal erosion. The high country contains some of the most extensive complexes within the region, but many areas are being modified as a result of changes in stocking from sheep to cattle, farm development, and burning and over-grazing of tall tussock wetland and riparian areas.

Wetlands have a wide range of values as habitats for fish, birds and invertebrates; as sediment traps and filters in river systems; as controls on water flows; and for recreation. While new wetlands can be created, and develop quite quickly, these are not a substitute for the protection of existing ones because they fail to imitate natural ecosystem complexity. Wetlands used for sediment trapping or pollution control do have temporary value as habitats, but generally the need to manage them for their main use detracts from that benefit.

(f) Natural character of the coast

Indigenous ecosystems, vegetation and habitat are important elements of the natural character of the coast, but have been significantly modified or lost over much of the coastline. Remaining natural values and processes are threatened by a number of activities. These include coastal structures and their development, commercial development, inappropriate scale or location of housing, clearance or modification of indigenous vegetation and coastal wetlands, modification of coastal processes through changes in sediment loadings on major rivers (such as the Waitaki), and recreational uses that damage ecological processes (such as trail bike damage to sand dune systems).

(g) Plant and animal pests

Much of Canterbury continues to be modified by introduced plants and animals that degrade indigenous habitats and through that change the landscape. While particular species have significance in different parts of the region, there is an overall threat to ecosystems from, among others, Hieracium, gorse, broom, lupins, old man's beard, wilding conifers, willows, wasps, possums, rabbits, feral deer, goats, pigs, stoats, weasels and thar.

(h) Landscape and ecosystem restoration

From the beginning of human habitation, there has been a continuing deterioration in the character, integrity and functioning of ecosystems outside the alpine areas of the region. These changes have affected ecological processes, such as natural regeneration and the succession of vegetation, migration of native fish and birds, and cycling of nutrients by decomposition. As a result there have been changes in landscape quality (for example the loss of large areas of indigenous forest).

In order to improve the health of many of the ecosystems (and the landscapes to which they contribute), there needs to be an active programme of restoration and management. Protection of a declining system is not always enough. There are some examples of restoration within the region at the moment, probably the most extensive is at Hinewai on Banks Peninsula where forest ecosystem restoration is taking place. Among others is the River Recovery Programme in the Mackenzie Basin to restore habitat values in a number of rivers. These are examples of restoration (as opposed to revegetation or creation).

(i) Geological features

The region's geological and geomorphological features include its braided rivers and a number of sites and areas that are important (e.g. Port Hills volcanic outcrops, South Canterbury limestone, Kaitorete sand). Some of these also offer sources of commercially useful materials and, according to demand, are attractive for mining or quarrying. But as well as changing the landscape character, extraction destroys the resource. The wider natural, amenity, scientific, and historical values of geological resources need to be understood and carefully considered.

(j) Cultural values

Canterbury is a multi-cultural region, and Tangata Whenua values have been given particular standing in the consideration of resource management. Many other people also have a special attachment to natural systems, and while they may not express it in the same way, have some of the same aims and needs of natural systems and special places as Tangata Whenua. There are potential differences over the management of water-courses for indigenous or introduced fish, about access over land, and in other things. It is important to continue to work for resolution of these issues, so that resource management truly represents both Tangata Whenua and other community values.

(k) Amenity values

Amenity values are "those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes" (section 2, RM Act). They are the things that make a place attractive to be in or visit. The region has landscapes that can be considered outstanding on a national, regional or local scale, and amenity value is one of the things that can give them that standing.

The amenity values of a particular area are not easy to describe or quantify, so that effects on them can also be difficult to determine. Effects are usually specific to a particular place and a particular change - replacing 200 hectares of tussock with pine trees would have different effects on amenity values from developing a ski-field. Amenity might be reduced by loss of the open character of Christchurch's Port Hills, obtrusive building in a natural landscape, the spread of wilding trees across open grassland, pollution of water by animal wastes, or change of character of rural

townships through decline in rural communities. Changes may be subtle (spread of undesirable plants) or more dramatic (building on a ridgeline). Mitigation is possible by the use of sensitive design, construction, and management.

(l) Heritage sites

Canterbury's various cultures each have sites and areas, both natural and modified, including areas within past and present settlements that have particular heritage value. These include wahi tapu, wahi taonga, historic routes such as Burkes Pass, the Lyttelton-Heathcote Bridle Path and numerous historic buildings such as Fyffe House in Kaikoura. Some of the sites valued by Tangata Whenua are best protected by not being publicised.

(m) Recreation and tourism

Growth in recreation and tourism based on the natural environment in Canterbury is likely to continue and in many areas be encouraged. Particular parts of the region (e.g. Kaikoura coast, Southern Alps, forests) are a drawcard for numerous visitors, and some rural communities are now supplementing income from primary production by hosting tourists.

However, the pressures of large numbers of tourists are already evident in eroded tracks, effluent and refuse disposal problems, and demand for car parking space and other facilities. There are also potential conflicts to be resolved between recreationists, for example, between power boaters and bird watchers.

The natural resources which provide the basis for much tourism will need careful management to maintain quality experiences.

(n) Biodiversity

The term biodiversity encompasses the range of species, ecosystems, patterns and ecological interactions or processes that make up the natural environment. As a general rule, indigenous biodiversity is more important than exotic - in New Zealand, native beech forest contributes more to global biodiversity than do trees introduced from other parts of the world. Maintaining biodiversity recognises the tendency towards increasing complexity as ecological systems grow older, and which is often accompanied by increased resilience in the face of adversity. A further important aspect of biodiversity is people's dependence on the natural environment and its ecological connections for food and for medicines. Maintaining variety reduces the risk of making some vital species or ecosystems extinct. Ecological processes that are crucial to maintaining biodiversity, are as much concerned with their inanimate surroundings as with organisms. Development has already led to irreversible changes including the extinction of a number of species. With human population growth, pressure on ecosystem, and hence biological diversity, has the potential to increase.

8.2 Issue Resolution

Issue 1

Adverse effects of the use, development, and protection of natural and physical resources on the integrity, distinctive characteristics, and contribution to a regional sense of identity of:

- (a) wetlands, including their overall area and functioning.
- (b) the natural character of the coastal environment, wetlands, lakes, rivers, and their margins.
- (c) natural features and landscapes including their cultural, amenity and recreational values.
- (d) indigenous vegetation, habitats of indigenous fauna and ecosystems.
- (e) the historical and cultural heritage of Canterbury including its amenity and recreational values.
- (f) the relationship of Tangata Whenua and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga.

Ch. 10 Beds of Rivers, Issue 1

Ch. 11 Coastal Env., Issue 1

Objective 1

Ch.6 Tangata Whenua, Obj.1

Protection or enhancement of wetlands, particularly the gross area of wetlands in the region, their ecological integrity and functioning, their cultural amenity and recreational values, and the preservation of their natural character.

Principal Reasons

To retain or increase the value to the Canterbury region of its wetland areas.

Policy 1

Ch.9 Water, Pol 1b, 8, 9b, c, d

- (a) Adverse effects on the ecological integrity, functioning, natural character, cultural, amenity and recreational values of wetlands (including the effects of drainage, reclamation, clearance of vegetation, burning, grazing, cultivation, dumping, subdivision or building) should be avoided, remedied or mitigated. Where practicable these wetland areas should be enhanced.

The particular sensitivity of wetlands to the effects of land use activities should be reflected in the provisions of regional and district plans.

- (b) Significant adverse effects on the natural flows and water levels, or the natural quality of water in any wetland, resulting from an adjoining use of land, the

discharge of contaminants, or the damming, use, taking or diversion of water, should be avoided, remedied or mitigated.

- (c) Encourage restoration or enhancement of lost or degraded wetland areas.**

Explanation

The term wetlands encompasses both fresh water, and brackish (ie. saline) wetland areas in coastal locations. As a result of human activities, the total area of wetlands within Canterbury has been reduced to about 10% of its former extent.

By protecting wetlands from threats to their natural character, existence or ecological functioning that result from incompatible uses of land, and by protecting all remaining wetlands from diversion of inflows, or deliberate actions to drain them, their future as natural features and habitats can be made more secure.

In order to protect the ecological functioning of wetlands it is also generally necessary to protect adjoining areas of indigenous vegetation which extend outside the wetland. These provide buffering and contribute to the biological diversity, habitat values and integrity of wetland areas, as well as contributing to their natural character.

Adverse effects may arise from earthworks, domestic animals on adjacent land or within the wetland itself, burning, plant and animal pests, the excessive application or release of contaminants or nutrients in a wetland or its catchment, or the planting or removal of plants. Where the adverse effects are not significant, it may sometimes be appropriate to use existing wetlands for the treatment of industrial discharges, including stormwater.

The long term security of some species, such as the Canterbury mudfish, can only be improved by increasing available areas of quality habitat, and to assist with this, Policy 1(c) encourages restoration and enhancement where feasible. A greater range and area of wetland would also be an asset to people, enhancing cultural and recreational opportunities, and amenity values. Regulation to achieve Policy 1(c) would be inappropriate, but various forms of encouragement, education, incentives, or conditions incidental to resource consents, might be used to this end.

Principal Reasons

For the protection of natural character, ecological health, and cultural values for example, and to provide for improvement in the extent and condition of wetlands in Canterbury.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Investigations

- (c) Encourage the preparation of iwi management plans
 - (d) Information provision
 - (e) Use of other legislation
 - (f) Advocacy, promotion and co-operation
 - (g) Heritage orders
 - (h) Resource consents
2. District/city councils in the preparation, variation, change or review of their district plans, through the exercise of their functions, should consider provisions to:
- (a) protect and enhance wetland areas and values under Policy 1(a).

Policy 2

Encourage artificial wetland areas in suitable places, either as a strategic improvement in the provision of natural habitats, or as a means of dealing with discharges of contaminants.

Explanation

New (or artificial) wetlands, given proper attention to their design, can help compensate for reduced areas of natural wetland, becoming an asset to wildlife and the landscape. They can equally be a useful tool for treating contaminated water, including stormwater. However, it is seldom that both advantages can be maximised from the same artificial wetland.

Principal Reasons

To improve habitat and landscape values, and as a way to improve water quality.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (d) Information provision
 - (f) Advocacy, promotion and co-operation
2. District/city councils in the preparation, variation, change or review of their district plans, through the exercise of their functions, should consider provisions to:
 - (b) encourage artificial wetland areas under Policy 2 as a strategic improvement in the provision of natural habitats.

Objective 2

landscapes that contribute to Canterbury's distinctive character and sense of identity, including their associated ecological, cultural, recreational and amenity values.

Principal Reasons

So that the value to the Canterbury region of its characteristic natural features and landscapes will be retained or increased.

Policy 3

Ch.7 Soils, Pol. 5

Natural features and landscapes that meet the relevant criteria of sub-chapter 20.4(1) should be protected from adverse effects of the use, development, or protection of natural and physical resources, and their enhancement should be promoted. Activities that may have adverse effects include those involving the clearance or modification of areas of indigenous vegetation (particularly tall tussock), earthworks, alteration to landforms, tree planting, or the erection of structures.

The particular sensitivity of these natural features and landscapes to regionally significant adverse effects in terms of sub-chapter 20.4(2) should be reflected in the provisions of district plans in the region.

Assessments of effects should be made by considering:

- (i) aesthetic values;**
- (ii) expressiveness;**
- (iii) transitory value;**
- (iv) natural science factors.**

Explanation

It is useful when making these assessments to reduce the many diverse considerations to a small number of broadly similar groups, or categories. Thus the values most closely associated with visual appreciation are grouped as aesthetic values. Likewise, those that reflect (or express) physical formation and long-term ecological processes are called expressiveness values. The things that come and go within the landscape - the lighting, the seasonal changes to plants and trees, the movements of wildlife - are termed transitory values. Landform, geology, and soil heritage values are grouped as natural science factors.

In applying this policy, the Regional Council, when acting as a consent authority and considering matters under section 104 of the RM Act, is not restricted to considering only natural features and landscapes that meet the relevant criteria in sub-chapter 20.4(1).

(i) Aesthetic values

Aesthetic values with regard to natural features and landscapes are gauged by things such as:

- (a) how memorable they are;
- (b) their naturalness; and
- (c) their composition (how their elements fit together).

Examples of things that may have an impact on aesthetic values include exotic tree plantings and the related problem of wilding tree spread, plant and animal pests, vegetation clearance, obtrusive rural buildings, tourist facilities, proliferations of roadside signs, and future collections of wind-powered generators.

(ii) Expressiveness

Expressiveness (the ability of a landscape or feature to legibly portray or express the formative processes from which they evolved) comprises:

- (a) the underlying geology;
- (b) topography;
- (c) vegetation and wildlife present; and
- (d) human influences past or present.

Examples are particularly evident in the Canterbury's braided rivers, and the volcanic craters of Banks Peninsula, and the tussock grasslands of the high country.

(iii) Transitory values

Transitory values represent qualities separate from those of the landform or land cover. They include:

- (a) wildlife occurrences or behaviour that are associated with places and impart distinctive qualities that although transitory are a noted characteristic, and
- (b) characteristic moods arising from local weather patterns.

Examples of these transitory values include visiting birds or animals that have become a characteristic of a place, such as whales and seals at Kaikoura, daily movements between shore and sea by penguins around Banks Peninsula, and inquisitive keas in the Alps. They also include seasonal changes in vegetation colours and patterns, recurring cloud formations such as the nor'west arch, lightning over the Alps, and views of the night sky.

Adverse effects on experiencing these qualities may be avoided by control of land use to facilitate or protect the ways they are experienced. For instance, permitting a new road access to a vantage point, preventing tree-planting that would obscure a view, or limiting visits by people to landfall or nesting sites where that might frighten the creature concerned away.

(iv) Natural science factors

Natural science factors include aspects of special interest to geologists and other students of earth features. They comprise:

- (a) landforms;
- (b) soil properties; and
- (c) their related active physical processes.

Examples of valued features include historic soils, fossil sites, springs (ie. the Hurunui River hot springs), mineral deposits and underlying landforms. These factors, and the active physical processes involved, contribute to an understanding of the geological and biotic evolution of the region, and its particular character.

Effects on natural science factors result from the extraction of minerals and the consequent loss of geological information, earthworks (including modifications to the beds of rivers, lakes and the foreshore), construction, and cultivation.

Principal Reasons

For the protection of natural aesthetic values, expressive natural landscapes and features, transient associations with landform and land cover, and important natural science dimensions for the continuing benefit of present and future generations.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Investigations
 - (c) Encourage the preparation of iwi management plans
 - (d) Information provision
 - (e) Use of other legislation
 - (f) Advocacy, promotion and co-operation
 - (g) Heritage orders
 - (h) Resource consents
2. District/city councils in the preparation, variation, change or review of their district plans, through the exercise of their functions, should consider provisions to:
 - (c) protect and enhance natural features and landscapes under Policy 3.

Objective 3

Ch.6 Tangata Whenua, Obj.1

Protection or enhancement of:

- (i) Indigenous biodiversity, (including the survival of threatened species, communities and habitats, and species, biological communities and habitats unusual in, or characteristic of Canterbury);**
- (ii) Indigenous ecosystem functioning; and**
- (iii) Indigenous vegetation and habitats which contribute to the region's natural character.**

Explanation

The value to the Canterbury region of its characteristic indigenous biodiversity should, as far as practicable, be retained or enhanced. In achieving this, it is important that indigenous ecosystem functioning is protected, and that no further indigenous species become threatened as a result of human activities so that an abundance and distribution of indigenous species is maintained or enhanced.

Principal Reasons

So that the value to the Canterbury region of its characteristic biological diversity is, as far as practicable, retained or increased.

Policy 4

*Ch.7 Soils, Pol. 3
Ch 9 Water, Pol 1b*

Areas of indigenous vegetation and habitats of indigenous fauna that meet the relevant criteria of sub-chapter 20.4(1) should be protected from adverse effects of the use, development, or protection of natural and physical resources, and their enhancement should be promoted. In particular, indigenous species, communities and habitats that are threatened, unusual in, or characteristic of Canterbury should be identified, and their survival, and the survival of ecosystems on which they depend, safeguarded as far as practicable.

The particular sensitivity of these areas of vegetation or habitats to regionally significant adverse effects in terms of sub-chapter 20.4(2) should be reflected in the provisions of district plans in the region.

Explanation

The genetic variety, distribution, and numbers of examples of indigenous plant, fish, bird, animal, and invertebrate life forms, particularly those restricted to Canterbury, need to be protected as an essential part of the region's biodiversity.

Characteristic areas of tussock grassland, shrubland, or forest should be retained, or enhanced. Where there are considered to be strong reasons for

compromising areas of vegetation or habitats, new areas should be established or other areas enlarged in compensation.

Where appropriate to foster the regeneration of indigenous vegetation, the role of species such as gorse and broom should be recognised. Some mitigation of effects on a particular area or habitat could be achieved through species protection in-situ (preservation in natural habitats), ex-situ (preservation in non natural habitats, zoos, gene banks, botanic gardens, amenity plantings), or restoration and translocation (re-creating habitats, shifting species back to the wild, etc).

Conditions required to constitute a viable indigenous habitat include relative freedom from exotic predators and competitors, and adequate protection from adjacent uses of resources. The use of resources, and especially land, should complement efforts under the Biosecurity Act 1993 to control target species. To control browsing and trampling of vegetation by goats, deer, and other feral animals, and exotic predators or competitors, pest strategies under the Biosecurity Act 1993 should be considered. A precautionary approach should be taken to the farming of animals, which, if they escaped could cause significant damage to native plant or animal communities.

In protecting aquatic habitats, particular regard should also be paid to the habitats of trout and salmon.

In applying this policy, the Regional Council, when acting as a consent authority and considering matters under section 104 of the RM Act, is not restricted to considering only areas of indigenous vegetation and habitats of indigenous fauna that meet the relevant criteria in sub-chapter 20.4(1).

Principal Reasons

For the protection of Canterbury's distinctive vegetation and wildlife character, and for the value of maintaining indigenous biological diversity.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Investigations
 - (d) Information provision
 - (e) Use of other legislation
 - (f) Advocacy, promotion and co-operation
 - (g) Heritage orders
 - (h) Resource consents
2. District/city councils in the preparation, variation, change or review of their district plans, through the exercise of their functions, should consider provisions to:

- (d) protect and enhance biological diversity under Policy 4.

Objective 4

Ch.6 Tangata Whenua, Obj. 1
Ch.10 Beds of Rivers, Obj. 4
Ch.11 Coastal Env. Obj. 1

Protection or enhancement of the historical and cultural heritage sites, buildings, places and areas, including their cultural, recreational and amenity values, that contribute to Canterbury's distinctive character and sense of identity.

Principal Reasons

To retain or increase the value to the Canterbury region of its historic sites, buildings, places and areas.

Policy 5

Ch. 9 Water, Pol. 2
Ch.10 Beds of Rivers, Pol. 7
Ch.11 Coastal Env. Pol.2
Ch. 6 Tangata Whenua, Pol. 4,5

- (a) **Historic sites, buildings, places or areas that meet the relevant criteria of sub-chapter 20.4(1), including their associated cultural and heritage values, should be protected from adverse effects of the use, development, or protection of natural and physical resources, and their conservation should be promoted.**

The particular sensitivity of these historic sites, buildings, places or areas to regionally significant adverse effects in terms of sub-chapter 20.4(2) should be reflected in the provisions of district plans in the region.

- (b) **Subject to (a), access for Tangata Whenua to wahi tapu and wahi taonga sites should be provided for where appropriate.**
- (c) **Information regarding the location of wahi tapu and wahi taonga sites, and whether use of that land or public access to it is appropriate should be obtained from Tangata Whenua. Such information as the Regional Council may have will only be released with prior agreement of Tangata Whenua. Any runanga initiative for appointment as a heritage protection authority should be supported where it would further facilitate the protection of wahi tapu and wahi taonga within their rohe.**

Explanation

Heritage values are those that descend from an earlier time (though not necessarily very long ago). They can include sites of historical or cultural significance, historic buildings, places, or areas, and the things that contribute to the historical character of those places or areas. Landfalls, mountain passes, battlegrounds, former pa and other settlement sites, unmodified soils, significant buildings (ie. the Edwardian architecture of Timaru) or their remains, gardens or other created landscapes, graveyards and burial grounds, a single tree atop a hill, a river feature (such as a gorge or braiding), are some examples.

The Register of Historic Places prepared by the Historic Places Trust includes many sites, buildings, areas, and wahi tapu that are considered important from the regional perspective.

Parts (b) and (c) of this policy are principally to protect sites of special value to Tangata Whenua.

Access to sites such as wahi tapu, wahi taonga and mahinga kai is of cultural significance to Tangata Whenua and should be provided for where appropriate to meet the provisions of sections 6(e), 7(a) and 8 of the RM Act. Where sites are of special significance, however, Tangata Whenua may wish to restrict access and information about their location.

In applying this policy, the Regional Council, when acting as a consent authority and considering matters under section 104 of the RM Act, is not restricted to considering only historic sites, buildings, places or areas that meet the relevant criteria in sub-chapter 20.4(1).

Principal Reasons

For preservation of the region's history as evidenced in features created by people, or related to the historic activities of people and their ancestors.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Investigations
 - (c) Encourage the preparation of iwi management plans
 - (d) Information provision
 - (e) Use of other legislation
 - (f) Advocacy, promotion and co-operation
 - (g) Heritage orders
 - (h) Resource consents
2. District/city councils in the preparation, variation, change or review of their district plans, through the exercise of their functions, should consider provisions to:
 - (e) protect and enhance heritage values under Policy 5.

8.3 Methods

1. Regional Council

The methods used or to be used by the Regional Council are:

(a) Regional plans

The Natural Resources Regional Plan (NRRP), at present being prepared, will comprise chapters on land, water, air and natural hazards that apply to the whole Canterbury region. The NRRP will develop detailed management strategies to ensure that the use of resources does not cause adverse environmental effects. The NRRP and any other relevant regional plan in Canterbury should include provisions aimed at achieving the objectives and policies stated above.

Until an applicable regional plan or plans is/are in effect, the Regional Council must have regard to any relevant regional objectives and policies when it is considering resource consent applications for activities affecting landscape, ecological or heritage values.

Among tools likely to be appropriate in regional plans are economic instruments. These might include subsidies for fencing-off areas of land, requiring financial contributions of various kinds, including contributions to enhancement or restoration projects and the like.

The inclusion of applicable provisions from iwi management plans should be considered.

Principal Reasons

Plan provisions are needed to protect landscape and related values, for example, the water quality and quantity in wetlands, regionally important natural features and landscapes areas of indigenous vegetation, wahi tapu, wahi taonga, and other heritage values.

(b) Investigations

During the 1995-96 financial year the Regional Council will invite other interested parties to join with it in an investigation of regionally important natural features, landscapes and heritage values. The aim of the investigation is the detailed identification of sites and areas in Canterbury where the values associated with:

- (a) wetlands,
- (b) natural features and landscapes,
- (c) indigenous vegetation and the habitats of indigenous fauna, and
- (d) the region's history or heritage,

are of regional importance.

The investigation is to take as its starting point the criteria in sub-chapter 20.4(1). It should also include consideration of how the significance of effects on the various values might be assessed, building on the sub-chapter 20.4(2) criteria. Part of the investigation is to determine the best means of conveying unambiguously to interested parties the locations of the sites and places identified. When completed the results of the investigation should be compiled into a form suitable for inclusion in the Regional Policy Statement or a regional plan and the necessary steps taken to add it to one of those documents using the processes set down in the First Schedule of the RM Act.

Sources of information should include the Department of Conservation, the Archaeological Sciences Database, the NZ Geological Society, the NZ Historic Places Trust and the Historic Places Register, representatives of Tangata Whenua, landowners/occupiers, fish and game councils, the Canterbury Regional Landscape Study, and other relevant sources.

Principal Reasons

For greater objectivity and certainty in management of landscape, ecology and heritage in Canterbury.

(c) Encourage the preparation of iwi management plans

Iwi management plans are non-statutory documents that have been prepared by Tangata Whenua. The Regional Council, in preparing regional plans, must have regard to iwi management plans. By agreement with the Regional Council all or part of an iwi management plan, for example, dealing with wahi tapu or wahi taonga, may be incorporated into a regional plan. The development of the regional plan would be subject to the public consultation processes set out in the RM Act. The Regional Council, by agreement with Tangata Whenua, recognises that there is an opportunity for this to occur.

Iwi management plans can provide mechanisms for implementing aspects of policy, for example: the process for managing the discovery of koiwi tangata; how any powers transferred will be discharged; and the joint management of sites and/or resources. They can also be a source of information that aids, but does not replace, consultation with Tangata Whenua during regional plan preparation or consideration of consents.

The Regional Council will encourage runanga to prepare iwi management plans and if requested, will provide advice to aid their formulation.

Principal Reasons

To assist the understanding and inclusion of Tangata Whenua perspectives, and to provide appropriate ways to achieve certain environmental policies.

(d) Information provision

More knowledge on which to base management decisions is always desirable, and this applies particularly to Canterbury's distinctive and characteristic landscapes and ecosystems.

A variety of ways to fill the information gaps can be considered, including Department of Conservation data such as that from Protected Natural Areas and other programmes, use of advice from voluntary groups such as the Royal Forest and Bird Protection Society and land user groups, and information requirements on consent applications under the Fourth Schedule of the RM Act. From this the Regional Council will be able to provide information to individuals and the community about the effects of activities on landscape, ecological, or heritage values, and to promote ways of enhancing those things.

The Historic Places Act 1993 protects archaeological sites. Archaeological values may easily be degraded inadvertently during earthworks. People should be advised that in the event of remains or artefacts being uncovered, the Historic Places Trust should be notified, and no further work carried out until the site has been inspected.

Principal Reasons

To influence attitudes, and achieve a higher level of individual responsibility for effects on landscape, ecological and heritage values.

(e) Use of other legislation

A range of duties and powers is bestowed on the Regional Council by statutes such as the Biosecurity Act 1993, the Historic Places Act 1993, and many others (see Appendix 2). These include the power to prepare pest management strategies to control any unwanted organism, and responsibilities to have particular regard to Historic Places Trust recommendations on provisions for historic areas and wahi tapu areas, and to generally co-operate with the Historic Places Trust to foster public interest in historic places and historic areas.

The RM Act and the Biosecurity Act 1993 should be used in complementary ways to avoid the adverse effects of target species on natural features or landscapes, cultural values, indigenous vegetation or indigenous fauna.

Principal reasons

To avoid conflict with other (often more appropriate) powers exercised by the Regional Council or territorial authorities, and to ensure an integrated approach to management of pests.

(f) Advocacy, promotion and co-operation

In giving effect to the sustainable management of natural and physical resources the Regional Council will seek to achieve the above objectives and policies for landscape, ecology and heritage values, and will also:

- (i) foster co-operation with other local authorities in the region;
- (ii) advocate to central government on matters over which the Regional Council has no direct control. For example, it could be useful for the protection of landscape and ecological values, to promote the establishment of further reserves within the Canterbury region;
- (iii) advocate to government departments for complementary approaches to shared problems, for example, to the Department of Conservation through submissions on its Conservation Management Strategy;
- (iv) encourage landowner/occupier co-operatives such as landcare groups and their approaches to achieving sustainable management of land. These should be recognised by the Regional Council for their potential to have a major role in developing solutions to problems at the “grass roots” level. The Regional Council intends to co-operate and facilitate wherever possible, by the provision of information, and assisting with monitoring and result analysis. This part of the method is expected to have strong links with Method (d);
- (v) encourage landowner/occupier participation in the Queen Elizabeth II National Trust covenant scheme;
- (vi) encourage the preparation of industry codes of practice.

Principal Reasons

For an improved level of integrated management of natural and physical resources in Canterbury, and to achieve outcomes beyond the direct powers of the Regional Council.

(g) Heritage orders

The RM Act provides for the use of heritage orders to protect any feature, area, or structure where such protection is in the public interest. Regional councils are heritage protection authorities, and

may serve notice on territorial authorities requesting them to include heritage orders in their district plans.

While a heritage order can be very effective, a heritage protection authority risks exposure to considerable costs subsequent to the use of a heritage order, and so other means of achieving the same ends will usually be explored first.

Principal Reasons

To assist with the protection of heritage values in appropriate cases.

(h) Resource consents

The Regional Council is a consent authority for some coastal permits, water permits, discharge permits, and land use consents in relation to use of the beds of lakes and rivers. The preceding objectives and policies relating to effects of the use, development, or protection of natural and physical resources on landscape, ecological and heritage values shall be had regard to when considering applications for any of these resource consents.

In particular, where a heritage resource is affected by any application, the Regional Council shall have regard to the principles of the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value.

Principal Reasons

To assist in attaining the outcomes intended of this chapter.

2. District plan provisions

Responsibility for the control of subdivision and the effects of the use, development, or protection of land rests with territorial authorities in Canterbury. The exercise of this responsibility is of considerable importance to the realisation of policies in this chapter. In addition to these regional concerns, it should be noted that district plans have the capacity to include outstanding and significant areas valued by the local community.

District/city councils in the preparation, variation, change or review of their district plans, through the exercise of their functions, should consider provisions to:

- (a) protect and enhance wetland areas and values under Policy 1(a).
- (b) encourage artificial wetland areas under Policy 2 as a strategic improvement in the provision of natural habitats.
- (c) protect and enhance natural features and landscapes under Policy 3.
- (d) protect and enhance biological diversity under Policy 4.
- (e) protect and enhance heritage values under Policy 5.

Principal Reasons

Many of the most significant effects on the matters dealt with in this chapter are directly related to the way in which effects of the use of land are controlled.

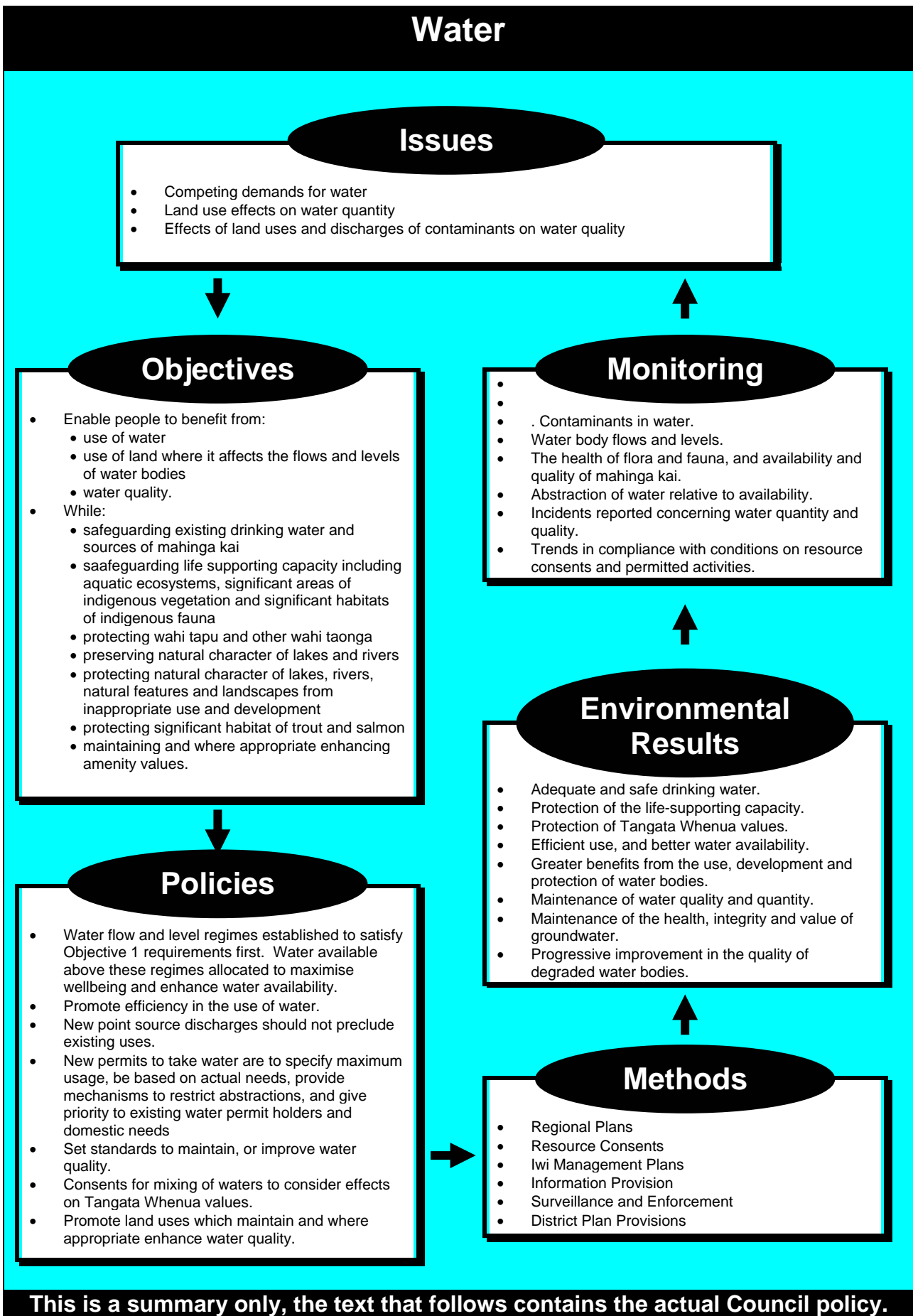
8.4 Environmental Results Anticipated

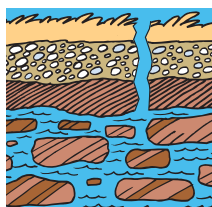
- (1) Protection or enhancement of distinctive characteristics of the Canterbury region, including:
 - (a) natural values within wetland areas identified in Policy 1(a);
 - (b) landscape values within areas identified in Objective 2;
 - (c) biological values within areas identified in Objective 3;
 - (d) heritage values within historic places or areas identified in Objective 4;
 - (e) wahi tapu and other taonga of value to Tangata Whenua within any of the above areas.
- (2) Protection of the quantity and quality of water within existing wetlands.
- (3) Greater use of artificial wetlands as means of water treatment or as natural habitats.

8.5 Monitoring Effectiveness

For landscape and ecology the following indicators should be monitored to assess the suitability and effectiveness of this part of the Regional Policy Statement, and any need for it to be reviewed:

- (1) Trends in quality and extent of wetlands.
- (2) Trends in rate and quality of change affecting natural features and landscapes.
- (3) Trends in indigenous biodiversity.
- (4) Incidents reported to the Regional Council relating to management of landscape and ecology, or related Tangata Whenua concerns.
- (5) Instances of heritage values being protected.





9. Water

9.1 Introduction

Water is of vital importance to the whole Canterbury community. A special characteristic of Canterbury is its broad braided snow-fed rivers. They give Canterbury a distinctive landscape and habitat for species adapted to this environment. The glacial and river derived plains and the mountain basins contain supplies of generally very high quality surface and groundwater. The Hanmer Basin contains a geothermal resource. Surface runoff from the plains and Banks Peninsula and groundwater springs all contribute to the inflows of Lake Ellesmere (Te Waihora) and Lake Forsyth (Wairewa), which have brackish water. These and other coastal lakes and surrounding wetlands form ecosystems of unusually abundant and diverse forms of life. The Canterbury high country lakes also have diverse flora and fauna, and some of the species present are restricted in distribution. In coastal areas, springs recharge shallow meandering streams such as the Avon and Heathcote. Many of these waterways, wetlands and estuaries have strong aesthetic values and are in recreational and commercial demand as are the marine resources of our coastline. Water bodies in the Canterbury Region are as diverse in character as they are in use and demand. Particularly in lowland areas, many water bodies have been modified from their natural state, through drainage, damming, flood protection works and other causes.

The high water quality of the upper catchments, high country lakes and braided rivers is a valuable feature of Canterbury. There are also a number of water bodies that have high natural character and recreational use or potential. It may be desirable to sustain the natural characteristics of these water bodies. Subject to investigations such water bodies may include:

- Lakes Ellesmere (Te Waihora), and Forsyth (Wairewa) and Wainono Lagoon;
- Clarence River, Hurunui River above the Mandamus, Ashley River above the Ashley Gorge road bridge, Waimakariri River above the bridge over the lower gorge, Rangitata River above the RDR intake, Godley River, Cass River and Tasman River;
- many of the high country lakes and tarns and their catchment streams and rivers that are not presently controlled for hydro-electricity storage.

There are three water bodies that are subject to Water Conservation Orders being the Rakaia River, Lake Ellesmere (Te Waihora) and Ahuriri River.

The maintenance of water quality and quantity is of extreme importance to Ngai Tahu, and reflected in their shellfish seeding operations and the quality and quantity of mahinga kai. Water is central to activity in Maori society: tradition, transport, fish/shellfish populations, religious ceremonies and recreation.

The Regional Council's function is to resolve water resource use and management issues by establishing constraints on water use in accordance with sections 5(2)(a) to (c) of the RM Act, and establishing mechanisms to address competing demands for both instream uses of water and abstractions.

9.2 Water Quantity

(a) Water allocation and instream requirements

Water use and allocation is very important to the economy. Canterbury's water produces a significant proportion of New Zealand's electricity generation. The Waitaki system alone provides about two-thirds of New Zealand's hydro storage capacity. Irrigation of the Canterbury plains allows a greater range of agricultural activities to occur.

The taking of water and the allocation of water in or out of stream, which can involve dams, diversions, drainage, and taking of heat and energy, frequently has adverse impacts on the ability of the water body to meet other needs. Such needs include the use of water for water supply, irrigation, cultural, recreation, wildlife, fisheries and ecosystem purposes. Demands placed on water bodies for domestic supply, industry, hydro-electricity and agriculture will sometimes exceed that available to meet all of these needs and to maintain instream values, particularly during periods of naturally low flows. A number of the past and present water resources of the region have already undergone profound changes with many wetlands drained completely and heavy abstractive demands placed on some river flows and groundwater. Areas where water quantity and associated abstractive uses can be clearly identified as issues of immediate concern include the Waipara, Ashburton, Pareora and Opihi Rivers and tributaries of Lake Ellesmere (Te Waihora).

Groundwater resources behave very differently to surface waters. The reservoir characteristics of groundwater systems cushion the effects of dry spells. This often allows abstractions at times to exceed rates of natural recharge. However, a series of dry summers and winters can lead to stresses on the system necessitating reductions in usage. Surface flows are more variable. Canterbury's rainfall and snow melts and the demand for water are unevenly spread across the year. Drought is a frequent phenomenon - so too are floods.

(b) Land use effects on water quantity

Land use or land management changes such as urbanisation, drainage of wetlands, afforestation or vegetation replacement, may increase or reduce river flows. Changing the water retaining capacity of smaller catchments will change the impacts of storm events. Removal of vegetation results in higher peak flows of shorter duration during flood events. Land use or management changes which retain water may have benefits for conservation or land stability. Other land uses such as those involving urbanisation or irrigation will affect water flows into surface or groundwater.

9.3 Water Quality

The aim of this part of the Regional Policy Statement is to set overall directions and priorities for managing the quality of Canterbury's water resources. A progressive improvement in water quality should be achieved over the next ten years, dealing with water bodies on a case by case basis. Many existing discharges will need to be improved or eliminated, and such requirements will be specified in regional plans.

(a) Groundwater quality

The major groundwater quality issue in Canterbury is the actual and potential contamination of sources of drinking water. Much of Canterbury's fresh water flows or lies beneath the ground. It is recharged from rain, rivers and irrigation.

Groundwater is most vulnerable to contamination in areas where an aquifer is unconfined, ie. there is no impermeable surface sediment which would prevent or minimise the downward flow of contaminants.

Activities or processes that are of greatest threat to groundwater quality include the following:

- timber treatment plant discharges.
- previously contaminated sites which continue to pollute.
- location of industry or settlement in areas vulnerable to contamination.
- underground storage tanks, fittings and pipelines.
- storage and handling of hazardous substances.
- stormwater disposal particularly from sites involving the storage or use of hazardous substances.
- agricultural solid and effluent waste disposal.
- pesticide and chemical storage and application.
- sewage disposal particularly from on-site systems such as septic tanks.
- location and discharge from landfills and waste disposal sites.

(b) Surface water quality

Canterbury's surface waters are largely free from significant contamination. Keeping water clean requires continuing community involvement, monitoring, and control.

Surface water quality degradation is caused by: direct discharges of contaminants into watercourses or coastal waters, contamination by animals, and land runoff containing contaminants. Some contaminants may not cause problems for the domestic use of water, but may have a significant effect on the water body as an ecosystem. For example, sediment washed into rivers reduces sunlight penetration and may lead to physical and chemical changes in the living conditions of aquatic life. The ecological characteristics of a freshwater river system depend on the biological and physical nature of that system as well as the external nutrient inputs. Each water body is unique with respect to the effects of such nutrient inputs.

The abstraction of water may increase the effects of contamination, with lower volumes of water available to dilute contaminants.

Concerns about surface water quality include the following:

- run off of water contaminated by soil, animal effluent or chemicals into rivers, lakes and streams.
- nutrient enrichment of Lake Ellesmere (Te Waihora), Lake Forsyth (Wairewa) and the small high country lakes, for example: Lake Alexandrina, Lake Grasmere.

- industrial and sewage discharges into the region's rivers, for example: Waimakariri River, Ashburton River, and the Opihi River system.
- identification and maintenance of special water ecosystems, for example: wetlands, areas of mahinga kai.
- sewage and contaminated stormwater effluent disposal into rivers, estuaries and harbours, for example: Lyttelton Harbour, Avon-Heathcote Estuary.
- stormwater discharges washing contaminants into urban waterways, for example: Avon, Heathcote Rivers.

9.4 Issue Resolution

Issue 1

There are competing demands for the quantity of water in water bodies from: abstractors; those who discharge into water either directly or indirectly through activities on land; instream users including those who store water and generate electricity; those who drain or divert water; fishers and other recreational users; those who value the water for its natural character and its ecological life-supporting capacity; and Tangata Whenua who value the water for its wahi tapu, wahi taonga and mahinga kai.

Objective 1

Ch. 6 Tangata Whenua, Obj. 1
Ch. 8 Landscape, Obj. 1,2,3
Ch. 10 Beds of Rivers, Obj. 1

Achieve sufficient quantities of water in the region's water bodies to enable present and future generations to gain cultural, social, recreational, economic and other benefits from those water bodies while:

- (a) safeguarding their existing value for efficiently providing sources of drinking water for people;**
- (b) safeguarding the life-supporting capacity of the water, including its associated: aquatic ecosystems, significant habitats of indigenous fauna and areas of significant indigenous vegetation;**
- (c) safeguarding their existing value for providing mahinga kai for Tangata Whenua;**
- (d) protecting wahi tapu and other wahi taonga of value to Tangata Whenua;**
- (e) preserving the natural character of lakes and rivers and protecting them from inappropriate use and development;**
- (f) protecting outstanding natural features and landscapes from inappropriate use and development;**
- (g) protecting significant habitat of trout and salmon; and**
- (h) maintaining, and where appropriate, enhancing amenity**

values.

Principal Reasons

Sustainable management of water resources involves enabling people and communities to provide for their wellbeing subject to certain constraints.

These constraints involve safeguarding the life-supporting capacity of water including associated: aquatic ecosystems, significant habitats of indigenous fauna, and areas of significant indigenous vegetation, as a basic requirement of sustainable management.

Trout and salmon are an important part of the aquatic ecosystem for many Canterbury water bodies. They can provide a valuable indicator species for the health of the system. All of their life processes are relevant, including feeding, reproduction and fish passage.

In achieving the purpose of the RM Act the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins and the protection of them from inappropriate subdivision, use and development is to be recognised and provided for as a matter of national importance. Meeting the needs of present and future generations including those of Tangata Whenua involves protecting the use of water for drinking, cultural purposes and for mahinga kai.

Existing value for providing efficient sources of drinking water includes the potential value of a water body as a future source of drinking water. This means giving priority to drinking water needs over other abstractive uses, both now, and in the future to meet the reasonably foreseeable needs of future generations.

Policy 1

Water flow, level, or allocation regimes for water bodies should be set and managed to achieve (a) to (g) of Objective 1, except that the Regional Council, in accordance with Policy 2, may set and manage water flow, level or allocation regimes that do not achieve (e) to (h) where adverse effects on the matters addressed in (e) to (h) will be remedied or mitigated.

In setting these regimes for surface water bodies particular regard should be had to:

- **natural patterns of flow or water level change;**
- **river or lake bed morphology and substrate material;**
- **bed gradient;**
- **water quality;**
- **habitat requirements; and**
- **appropriate alternative minimum flow regimes including**

*Ch. 8 Landscape, Pol. 1 to 5
Ch. 10 Beds of Rivers, Pol. 1*

mean annual low flow.

Explanation

This policy establishes two alternative approaches which may be followed when the Regional Council sets water flow, level or allocation regimes. In the first instance the aim is to set these so that they are sufficient to achieve (a) to (g) of the objective. Whether or not a higher flow is set will be determined by the subsequent application of Policy 2. The second instance, the “exception”, would apply in situations where, because of the strategic value of the resource a flow lower than that necessary to achieve (e) to (h) may be set. This should only occur where adverse effects on the matters identified in provisions (e) to (h) can be remedied or mitigated. The nature of these adverse effects should be identified in relevant regional plans, as should the general remediation or mitigation measures which may be needed to address these adverse effects. Similarly consents granted under the ‘exception’ provision should include conditions dealing with any remediation or mitigation which is necessary. In applying this exception approach, (a) to (d) of the Objective are matters which should not be compromised when setting flow, level or allocation regimes

Water flow, level and allocation regimes are regulatory regimes which will establish, amongst other things, desired minimum and maximum flows in surface water, levels in unconfined aquifers and lakes, pressures in confined aquifers and pressures and temperatures for geothermal resources. These regimes will provide a basis for determining limits to the granting of consents to abstract water and conditions on them and help determine the points at which restrictions on water use may need to be imposed.

River and lake bed morphology includes channel and bed patterns and processes which are formed by variations in river flows and water level change.

Principal Reasons

To provide a basis for ensuring that the use of water is sustainable in terms of meeting future needs and safeguarding life-supporting capacity.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (e) Surveillance and enforcement

Policy 2

Subject to Policy 1, water flow, level and allocation regimes should be set and managed with the aim of:

- (a) **enabling people and communities to maximise the wellbeing obtained from Canterbury’s water resources**

through taking account of its value both instream and out of stream; and

- (b) where appropriate enhancing the availability of water for present and future generations through increased efficiency of use, augmentation or storage.**

Explanation

Having satisfied the requirements of Policy 1 the Regional Council, in determining whether a different water flow, level or allocation regime is appropriate should take account of all of the community's present and future needs and values for water including ecological, cultural, recreational, social and economic needs and aesthetic and amenity values. For example, after a particular minimum instream flow is set within the terms of Policy 1, the Regional Council may choose to set a higher minimum flow because of a river's high recreational value. The trade-off for this may be that some of the potential economic benefits from abstraction are foregone. Alternatively, it may allocate some or all of the flow above the minimum to abstractive users such as irrigation, or to hydro-electricity generation. This may result in the community foregoing some recreational benefits. Consideration of the use of water to assimilate present and future discharges may also be necessary. The choice would be made on the basis of enabling the community as a whole to maximise its wellbeing. Enabling people and communities to maximise their wellbeing involves evaluating present and future benefits after costs have been taken into account and includes both monetary and non-monetary costs and benefits.

By requiring that this perspective be taken, the Regional Council is signalling that, having satisfied the requirements of Policy 1, it will take wider sectoral interests into account when determining appropriate water flow, level or allocation regimes. This does not necessarily mean that the Regional Council should choose between abstractive uses but simply that at the margin it will choose between instream and out of stream use.

The community should also seek to take advantage of opportunities for enhancement of the resource through efficiency gains, augmentation or storage. Some water resources may be of such special significance that no further abstraction or other modification should be allowed

Principal Reasons

Setting water flow, level, or allocation regimes involves choices about the best use of water resources. Such choices should not be made from a narrow perspective of one set of values but should take all present and future opportunities and needs into account. Having regimes set in plans will help to streamline the consents process. Use of water is important for the Canterbury economy. Irrigation is the basis of much farming activity and hydro-electricity production in the region is important to the national economy. These economic needs are in addition to the value we get from the natural water environment and our cultural and recreational needs.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (c) Encourage the preparation of iwi management plans
 - (e) Surveillance and enforcement

Policy 3

Ch. 12 Settlement, Pol. 1

Promote efficiency in the use of water.

Explanation

Efficiency involves both technical efficiency (avoidance of waste) and allocative efficiency (using water where it has greatest value). An efficient way of dealing with an existing or potential water shortage is to encourage people to undertake water conservation measures to preserve the resource. Water conservation is a way of reducing inefficient water uses without adversely affecting those who are using water efficiently.

Principal Reasons

Efficient use of water enables existing and future needs to be more readily met and may enable instream requirements to be more readily provided for.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (d) Information provision
 - (e) Surveillance and enforcement

Policy 4

- (a) **In relation to stream and river flows, water level fluctuations, natural character and cultural and amenity values, to investigate and provide for water bodies which should be sustained as far as possible in their natural state.**
- (a) **Water flow, level, or allocation regimes will be established where needed to resolve competing demands for the quantities of water in Canterbury's water bodies with priority given to the following water resources:**
 - **Ashburton River and Catchment**
 - **Christchurch-West Melton Groundwater.**
 - **Lake Ellesmere (Te Waihora), Lake Forsyth (Wairewa),**

and their tributaries and associated groundwater.

- **Opihi River and Catchment.**
- **Waimakariri River and Catchment.**
- **Waipara and Kowai Rivers and catchments (in North Canterbury) and associated groundwater systems.**

Explanation

Policy 4(a) recognises that there are a number of water bodies that have high natural character and recreational use or potential. It may be desirable to sustain the natural characteristics of these water bodies. The Regional Council considers that an investigation is needed to identify these water bodies.

Policy 4(b) recognises that there is a commitment by the Regional Council to undertake resource investigations and prepare regional plan provisions for the above water resources. Target dates for the investigations to be completed have been set as follows:

- | | |
|--|------|
| • Christchurch-West Melton Groundwater | 1996 |
| • Opihi River | 1994 |
| • Waimakariri River | 1995 |
| • Ashburton River | 1996 |
| • Waipara River | 1997 |
| • Lake Ellesmere/Lake Forsyth | 1995 |

Principal Reasons

The Regional Council does not have the resources or the need to simultaneously or immediately establish standards for all water resources. The priorities above are based on the Regional Council's assessment of community needs for the establishment of standards through plan provisions.

Methods

1. The method used or to be used by the Regional Council is:

- (a) Regional plans

Policy 5

Where a water flow, level, or allocation regime for a water body has not been specified, the granting of a permit for the taking, use, damming or diversion of water should not preclude the reasonable exercise of an existing resource consent to take, use, dam or divert water; except with the agreement of the holder of that existing consent.

Explanation

Taking, use, damming or diversion of water should not prevent existing uses for a water body unless the taking, use, damming or diversion is already authorised by a water permit, is provided for through water flow, level, or allocation regimes set for the water body, or is accepted by consent holders who would be precluded from reasonably exercising their consents.

This policy does not mean that a consent authority should not give proper consideration to the other effects of granting the consent including effects on the environment or on other users of the water who may be adversely affected.

Principal Reasons

To ensure that significant effects on authorised existing uses for a water body only occurs through the process of establishing water flow, level or allocation regimes which can incorporate community values for the water body. A precautionary approach should be taken in the absence of specific provisions in a plan or adequate information. However, it would be unreasonable to put barriers in the way of an agreement if the affected consent holders are able to be satisfied.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents

Policy 6

In considering a permit to take water, a consent authority should, as part of the requirements of section 104 of the RM Act, consider the need to:

- (a) specify maximum permitted water usage over specific time periods as well as maximum abstraction rates;**
- (b) be based on actual and reasonable water needs;**
- (c) provide for existing water permit holders to have priority for the term of their permits;**
- (d) specify the priority to be given to the permit in the event of restrictions being imposed; and**
- (e) provide mechanisms to reduce or suspend abstractions during periods of low water flows or levels.**

Explanation

Many present water permits have a common expiry date at which time they may be reconsidered and have different conditions imposed. Some conditions placed on the existing permits may also be reviewed if provided

for in the permit, (section 128 of the RM Act) or if rules relating to minimum water quality standards or maximum or minimum levels or flows or rules of use of water have been made operative in a regional plan. Permits that expire are not automatically re-granted and a new permit must be applied for. A new permit may be subject to different restrictions and the quantity of water allocated may change.

Principal Reasons

To deal with problems with existing water allocations which at present include over-allocation of the resource, inadequately specified water permits and the need to facilitate transfers of water permits to more efficient uses.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents

Policy 7

Priority for taking of water should be given to reasonable domestic requirements and for reasonable requirements of an individual's animals for drinking water. For this policy reasonable domestic requirements should be interpreted as that required for drinking and cooking, and for hygiene purposes.

Explanation

The policy provides for basic human and animal needs to be met before other abstractive uses.

Principal Reasons

To ensure that other abstractive uses do not pre-empt basic needs which should be protected to achieve the purpose of the RM Act.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents

Issue 2

Land uses can affect water flows and levels in water bodies and consequently have adverse or beneficial effects on the values held for those water bodies, for example, by preventing runoff or intercepting rainfall.

Objective 2

Ch. 6 Tangata Whenua, Obj. 1
Ch. 8 Landscape, Obj. 1,3
Ch. 10 Beds of Rivers, Obj. 1

Enable present and future generations to gain cultural, social, recreational, economic and other benefits from use of land where it affects the flows and levels of Canterbury's water bodies while:

- (a) safeguarding their existing value for efficiently providing sources of drinking water for people;**
- (b) safeguarding the life-supporting capacity of the water, including its associated: aquatic ecosystems, significant habitats of indigenous fauna and areas of significant indigenous vegetation;**
- (c) safeguarding their existing value for providing mahinga kai for Tangata Whenua;**
- (d) protecting wahi tapu and other wahi taonga of value to Tangata Whenua;**
- (e) preserving the natural character of lakes and rivers and protecting them from inappropriate use and development;**
- (f) protecting outstanding natural features and landscapes from inappropriate use and development;**
- (g) protecting the significant habitat of trout and salmon; and**
- (h) maintaining, and where appropriate, enhancing amenity values.**

Principal Reasons

Sustainable management of water resources involves enabling people and communities to provide for their wellbeing subject to certain constraints.

These constraints involve safeguarding the life-supporting capacity of water including associated: aquatic ecosystems, significant habitats of indigenous fauna, and areas of significant indigenous vegetation as a basic requirement of sustainable management. Meeting the needs of present and future generations including those of Tangata Whenua involves protecting the use of water for drinking, cultural purposes and for mahinga kai.

Policy 8

Ch. 10 Beds of Rivers, Pol. 1
Ch. 12 Settlement, Pol. 2

Land use should not have the effect of reducing levels and flows to below those necessary to achieve Objective 2 or set as part of a water flow and level regime for a water body having

particular regard to existing uses of that water body.

Explanation

Some land use changes may intercept water and lead to lower water levels in water bodies, affecting their instream uses. This should not necessarily extend to controlling land use to enable abstractions to take place or to reduce the restrictions placed on such abstractors.

Principal Reasons

Some land uses have similar effects to direct abstraction or damming or diverting of water and should be integrated into the process of managing water allocations where this is necessary to protect instream values.

The linkages between land use and water retention are sufficiently understood to recognise that conflicts on the availability of water occur now and will occur in the future. The policy provides for those linkages to be defined and long term planning done to take account of the interests of various groups within the community. However, it is still appropriate that basic drinking water needs and certain cultural and ecological requirements be met.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (d) Information provision
 - (e) Surveillance and enforcement

Issue 3

Land uses, and discharges of contaminants into water or onto or into land, can adversely affect water bodies and coastal waters including: their ecological value; their use by present and future generations; and their recreational, cultural, social, economic, health and other values to the Canterbury community. Point source discharges can also compromise the cultural relationship of Tangata Whenua who value water for its wahi tapu, wahi taonga and mahinga kai.

Objective 3

Ch. 6 Tangata Whenua, Obj. 1
Ch. 8 Landscape, Obj. 1,3
Ch. 10 Beds of Rivers, Obj. 1
Ch. 11 Coastal Env., Obj. 1

Enable present and future generations to gain cultural, social, recreational, economic, health and other benefits from the water quality in Canterbury's water bodies and coastal waters, while:

- (a) **safeguarding the existing value of water bodies for efficiently providing sources of drinking water for people;**
- (b) **safeguarding the life-supporting capacity of the water,**

- including its associated: aquatic ecosystems, significant habitats of indigenous fauna and areas of significant indigenous vegetation;
- (c) safeguarding their existing value for providing mahinga kai for Tangata Whenua;
 - (d) protecting wahi tapu and other wahi taonga of value to Tangata Whenua;
 - (e) preserving the natural character of lakes and rivers and protecting them from inappropriate use and development;
 - (f) protecting outstanding natural features and landscapes from inappropriate use and development;
 - (g) protecting significant habitat of trout and salmon; and
 - (h) maintaining, and where appropriate, enhancing amenity values.

Principal Reasons

Sustainable management of water resources involves enabling people and communities to provide for their wellbeing subject to certain constraints.

These constraints involve safeguarding the life-supporting capacity of water including associated: aquatic ecosystems, significant habitats of indigenous fauna, and areas of significant indigenous vegetation as a basic requirement of sustainable management. Meeting the needs of present and future generations including those of Tangata Whenua involves protecting the use of water for drinking and cultural purposes and for mahinga kai.

Policy 9

To manage point and non-point source discharge and set water quality conditions and standards and terms in plans, and conditions on resource consents, that achieve (a) to (h) of Objective 3. Adverse effects of discharges on existing water quality should be avoided, remedied or mitigated and, where appropriate, degraded water quality should be enhanced.

Explanation

This establishes a minimum standard for regulation of water resources. Protection may be set at a higher but not a lower level below which their basic values for these purposes are compromised. Safeguarding life-supporting capacity involves protecting the aquatic ecosystem, the significant habitats of indigenous fauna, and areas of significant indigenous vegetation to maintain their ecological health in accordance with Objective 3.

Trout and salmon are an important part of the aquatic ecosystem for many Canterbury water bodies. They can provide a valuable indicator species

*Ch. 7 Soils, Pol. 4
Ch. 8 Landscape, Pol. 1 to 5
Ch. 10 Beds of Rivers, Pol. 1
Ch. 11 Coast Env. Pol. 1
Ch. 12 Settlement, Pol. 2*

for the health of the system. All of their life processes are relevant, including feeding, reproduction and fish passage.

Existing value for providing efficient sources of drinking water includes the potential value of a water body as a future source of drinking water. This means giving priority to such needs, both now, and in the future to meet the reasonably foreseeable needs of future generations.

Principal Reasons

To provide a basis for ensuring that the use of water is sustainable in terms of meeting future needs and safeguarding life-supporting capacity.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (c) Encourage the preparation of iwi management plans
 - (e) Surveillance and enforcement

Policy 10

- (a) **In relation to water quality, natural character and cultural and amenity values, to investigate and provide for water bodies which should be sustained as far as possible in their natural state.**
- (b) **Progressively improve degraded water bodies and degraded coastal waters. To achieve this, water quality standards should be established where needed to resolve competing demands for Canterbury's water bodies and coastal waters. Over the next ten years priority for standard setting should be given to the following water resources:**
 - **Ashburton River and Catchment.**
 - **Christchurch-West Melton Groundwater.**
 - **Lake Ellesmere (Te Waihora), Lake Forsyth (Wairewa), and their tributaries and associated groundwater.**
 - **Opihi River and Catchment.**
 - **Waimakariri River and Catchment.**
 - **Partially enclosed degraded coastal waters and coastal waters where there is high water contact recreation.**

Ch. 8 Landscape, Pol. 1
Ch. 11 Coast Env., Pol. 2
Ch. 10 Beds of Rivers, Pol. 2,3

Explanation

Policy 10(a) recognises that there are a number of water bodies that have high natural character and recreational use or potential. It may be desirable to sustain the natural characteristics of these water bodies. The Regional Council considers that an investigation is needed to identify these water bodies.

In Policy 10(b) the Regional Council has identified the above water resources as having priority for upgrading of water quality. The programme of work to implement the policy will require the setting of water quality standards in regional plans for degraded water bodies or degraded coastal waters. The programme should investigate the impacts of point and non-point sources of contamination including urban stormwater discharges, sewage discharges from unsewered townships and stock grazing, on water quality and methods for avoiding, remedying and mitigating these. The programme should be developed in consultation with the community. In the case of coastal water, rules must be set within seven years of the gazetting of the New Zealand Coastal Policy Statement.

This is a commitment by the Regional Council to undertake resource investigations and prepare regional plan provisions for the above water resources. Target dates for the investigations to be completed have been set as follows:

- Christchurch-West Melton Groundwater 1996
- Opihi River 1994
- Waimakariri River 1995
- Ashburton River 1996
- Lake Ellesmere and Lake Forsyth 1995

Partially enclosed coastal waters include harbours, bays and estuaries.

Principal Reasons

To help achieve enhanced water quality to sustain the potential of natural resources to meet the needs of the present community and the reasonably foreseeable needs of future generations.

The Regional Council does not have the resources or the need to simultaneously or immediately establish standards for all water resources. The priorities above are based on the Regional Council's assessment of community needs for the establishment of standards through plan provisions. Ten years is the practical life of the Regional Policy Statement.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents

- (c) Encourage the preparation of iwi management plans
- (d) Information provision

Policy 11

*Ch. 7 Soils, Pol. 2b, 3a, 3b, 4b
Ch. 10 Beds of Rivers, Pol. 3*

Promote land use practices which maintain and where appropriate enhance water quality.

Explanation

Such land use practices include: not over-grazing in areas where soil may wash into streams as a result; keeping stock clear of stream margins; retaining and enhancing riparian vegetation; and not storing hazardous substances where they could contaminate water bodies or coastal waters.

Promotion involves changing people's perceptions, behaviour and attitudes as well as providing information about effects of activities on water quality and ways to avoid, remedy or mitigate adverse effects.

Principal Reasons

Management of direct discharges and control of land use is not sufficient to deal with actual and potential contamination problems.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (d) Information provision

Policy 12

*Ch. 17 Haz. Substances,
Pol.2,3
Ch. 18 Solid, Haz. Waste, Pol.3*

Activities which could result in a release of hazardous substances should not be located in areas where water resources are vulnerable to contamination unless adequate precautionary measures are implemented to avoid that contamination.

Explanation

Activities such as the storage or use of hazardous substances without adequate precautionary measures should not be carried out close to surface water bodies, coastal water or above unconfined aquifers.

Principal Reasons

Illegal or accidental discharges or discharges which occur as a result of normal use of hazardous substances may have long lasting effects. They cannot be prevented through enforcement of discharge controls alone.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (d) Information provision
 - (e) Surveillance and enforcement
2. District/city councils in the preparation, variation, change or review of district plans, and where particular responsibilities are specified for hazardous substances in Policy 1 of Chapter 17 of this Regional Policy Statement, through the exercise of their functions, should consider district plan provisions that control the effects of the use, development, or protection of land for the purpose of the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances on water quality.

Policy 13

Where numerical or narrative water quality standards for a contaminant have not been specified for a water body or coastal water, the granting of a consent for point source discharges of the contaminant into the water body or the coastal water should not preclude existing reasonable uses of the water body or the coastal water.

Explanation

Discharges should only be allowed, where after reasonable mixing they do not prevent existing uses of the water body or the coastal water unless such discharges already occur and are authorised by an existing discharge consent or are provided for through the water quality standards set for the water body or the coastal water through a regional plan, including a regional coastal environment plan. Water quality is determined by the presence or absence of contaminants and their concentrations. New discharges include discharges for which a discharge permit has expired.

An existing reasonable use would include the exercise of a permit to discharge, or to take, use or divert water, and would include recreational uses of the water. This policy does not mean that a consent authority should not give proper consideration to the other effects of granting the consent including effects on the environment or on other users of the water who may be adversely affected.

Principal Reasons

To ensure that if there is to be any significant further contamination of water bodies or coastal water through discharges it only occurs through the process of setting water quality standards which can incorporate community values for the water body. A precautionary approach should be taken in the absence of a plan or adequate information.

Methods

1. The methods used or to be used by the Regional Council are:
 - (b) Resource consents
 - (c) Encourage the preparation of iwi management plans
 - (e) Surveillance and enforcement

Policy 14

Where a resource consent is for an activity which involves mixing of water from different water bodies, information on the effects of the activity on the environment should include effects of the mixing on the cultural values of Tangata Whenua.

Explanation

Mixing of water from different water bodies may have adverse effects on the cultural values of Tangata Whenua.

Principal Reasons

To ensure that resource consents are considered in the light of any such adverse effects.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (c) Encourage the preparation of iwi management plans

9.5 Methods**1. Regional Council**

The methods used or to be used by the Regional Council are:

(a) Regional plans

Regional plans may make provision for any matter relating to the use, development, or protection of any natural or physical resources for which the Regional Council has responsibility under the RM Act, including the control of:

- (i) taking, using, damming, or diverting of any water in the region
- (ii) the quantity, level, and flow of water in any water body, including:
 - the setting of any maximum or minimum levels or flows of water

- the control of the range, or rate of change, of levels or flows of water
- (iii) discharges of contaminants into or onto land, air, or water, and discharges of water into water
- (iv) use of land for the purpose of:
- the maintenance and enhancement of the quality of water in water bodies and coastal water
 - the maintenance of the quantity of water in water bodies and coastal water
 - the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances.

Provisions in regional plans including the Regional Coastal Environment Plan, will set water quality standards, define minimum levels of water quality, set minimum water levels and flows and establish land use controls to protect water values. They may include codes of practice established for industries or activities (e.g. Forestry), and may adopt provisions contained in an Iwi Management Plan. They may provide for enhancement of water quality and enhancement of water availability through storage or augmentation. They may establish appropriate economic instruments and set timeframes for existing consent holders to comply with new rules.

The process of preparing plan provisions will involve:

- (i) defining the special characteristics and values associated with the water body and their significance to the community, and the criteria that are indicators as to the sustainability of these values and the resource itself.
- (ii) recognising and providing for the relationship of Tangata Whenua with water resources including identifying the opportunities for transfer of powers.
- (iii) establishing the critical levels in terms of quality and quantity of flow, and timing of flow to sustain the life-supporting capacity, and the other identified values.
- (iv) predicting the effects of discharges and activities on water ecosystems, and allowing standards to be defined as necessary to ensure the sustainable management of the water body or the coastal water.
- (v) where necessary, establishing water flow and level regimes and water quality standards taking into account the views of the communities who have an interest in the water body or the coastal water.
- (vi) Giving consideration to provisions that encourage efficient use of water, enable transfers of water permits, involve the use of economic instruments and enable possible transfers of functions.

Establishing priorities will involve identifying: water resources of high quality and high value where water quality or quantity needs to be preserved and protected as far as possible in their natural state, water resources of high value but degraded where it is necessary to improve water quality, and water resources of low value.

Permits to abstract water should be able to be transferred within areas specified in a regional plan under conditions such that other water values are not compromised or where the adverse effects are remedied or mitigated.

Transfer of water permits is able to occur now without the need to transfer land at the same time but such transfers require resource consents. The concern of the Regional Council in providing for such transfers in a plan should be with any adverse effects on other water users (including those within irrigation schemes) or instream values.

Economic instruments such as providing financial incentives and requiring a financial contribution or bonds as a condition of a discharge consent may be applied to achieve water management objectives. They are not a form of general revenue gathering for the Regional Council. There are separate provisions in the RM Act to recover administrative and other costs.

A financial contribution may be in the form of money, or land and would be required as a condition of a resource consent. Such a contribution would be made for purposes specified in a plan and to offset the adverse effects of the discharge. Discharges would still have to meet any water quality standards set for the water body. It could include in part or in whole measures negotiated between applicants and potential objectors. The amount of financial contribution and the basis for its determination needs to be specified in a regional plan and would depend on the degree of adverse effect and the extent to which measures are taken to reduce or treat the contaminants.

A contribution from local authorities (and central government) towards environmental enhancement may be appropriate where a development can provide community benefits as well as meeting the needs of the developer.

A local authority may transfer functions, powers or duties to another public authority. Public authorities include iwi authorities, local authorities, statutory authorities and joint committees of local authorities. The responsibility for the making of rules cannot be transferred.

Transfers could include monitoring duties, granting of consents and enforcement of rules made under a plan.

Such transfers must comply with the requirements of section 33 of the RM Act that include consultation and whether the authority to which the transfer is made is the appropriate community of interest, is able to undertake the task more efficiently and has the technical or special capability or expertise.

Principal Reasons

Standards and land use controls can only be set through a plan. A Regional Coastal Plan is required by statute. Consultation with Ministers of the Crown, local authorities, Tangata Whenua and others is required by statute when preparing a plan.

Lack of transferability can act as a constraint on efficient water use.

Economic Instruments help ensure that polluters compensate for environmental damage and help ensure that developments contain measures to enhance the environment as well as simply meeting minimum environmental standards.

A transfer of powers may be an appropriate method to better achieve the objectives of this Regional Policy Statement.

(b) Resource consents

Water permits will be used to allocate water and to control the adverse effects of taking, use, damming and diverting water. They will establish conditions under which abstractions may be

restricted. Where there is a plan, water allocation may be up to the quantities and abstraction rates allowed by the setting of control regimes for in-stream flows and aquifer levels and pressures.

Discharges can be authorised by a discharge permit. Water permits and discharge permits may be granted with conditions that avoid, remedy, or mitigate adverse effects on the environment and ensure the consent complies with any standards or terms set in a regional plan.

Applicants for permits to abstract water should be required to establish that the amount of water sought will be needed for reasonable use, and that the water is able to be abstracted and applied.

The test of reasonable use requires a test of technical efficiency of water use in the particular circumstances of the applicant. It would not extend, for example, to such measures as not allowing border dyke irrigation and requiring spray irrigation, but is simply a test that water is needed for the purpose intended and that the proposed abstraction method will yield the quantities sought.

Support will be given to the involvement of water user groups. They can play a valuable role in rostering water use and suggesting solutions to water management issues locally.

The Regional Council will facilitate management of the resource at the local level by liaising with the users and maintaining a close contact to ensure Regional Council policies are sensible, understood and implemented fairly.

The Regional Council will also consult with the appropriate User Group when considering the implementation of restrictions, any policy change, new policy or major consent application affecting water resources.

Principal Reasons

Water permits are necessary to enable water to be used and where there is a need to allocate available water for which there are competing demands or environmental effects. There may also be a limit to the volume of water available.

Discharge permits are required for direct discharges where there is no provision for such discharges to be permitted in a regional plan.

Providing for actual water use rather than the speculative holding of a resource consent enables water to be available for use rather than being locked up or subject to unnecessary restrictions. Efficiency of water use is also to be achieved if possible through market mechanisms.

Uniformly imposed restrictions do not recognise the needs of individuals for water at particular times. Allowing users to group together to avoid restrictions helps ensure water is used where it has most value.

(c) Encourage the preparation of iwi management plans

Iwi management plans are non-statutory documents that have been prepared by Tangata Whenua. The Regional Council, in preparing regional plans, must have regard to iwi management plans. By agreement with the Regional Council all or part of an iwi management plan, for example, dealing with wahi tapu or wahi taonga, may be incorporated into a regional plan. The development of the regional plan would be subject to the public consultation processes set out in the RM Act. The Regional Council, by agreement with Tangata Whenua, recognises that there is an opportunity for this to occur.

Iwi management plans can provide mechanisms for implementing aspects of policy, for example: the process for managing the discovery of koiwi tangata; how any powers transferred will be

discharged; and the joint management of sites and/or resources. They can also be a source of information that aids, but does not replace, consultation with Tangata Whenua during regional plan preparation or consideration of consents.

The Regional Council will encourage runanga to prepare iwi management plans and if requested, will provide advice to aid their formulation.

Principal Reasons

Reference to iwi management plans assist the understanding of Tangata Whenua perspectives, and provides an appropriate method to achieve certain environmental policies.

(d) Information provision

The Regional Council will provide information on ecological and other values for water and the need to protect water from contamination, and on ways to avoid this. It should encourage the adoption of technologies and practices which minimise the production and the direct and indirect discharge of contaminants which adversely affect water. This will involve including avoidance of water pollution in an environmental education strategy, promoting community sewage treatment schemes or other treatment schemes that reduce or eliminate contaminants from waste discharges, encouraging planting of riparian strips, protecting and maintaining wetlands and promoting enhancement of water quality. Codes of practice, where these have been developed, should be included.

The Regional Council will:

- (i) provide information on water permits and the overall availability of water.
- (ii) encourage water conservation by households, farmers and industry, including household water metering and water charges by water supply agencies where necessary.
- (iii) promote the environmental benefits obtained from rivers and streams.
- (iv) give advice on efficient abstraction and irrigation procedures and ways to avoid adverse environmental effects.
- (v) provide information on ways to recycle water and to reuse water that would otherwise need to be disposed of.

Principal Reasons

Public education and information is necessary to deal with or prevent accidental or incidental contamination and to help engender a caring attitude toward water.

Lack of public knowledge of water scarcity may lead to waste or inefficient use. Information on who holds what water permits will assist in monitoring and enforcement and in water permits being transferred on a temporary or permanent basis in order to increase the efficiency of water use.

(e) Surveillance and enforcement

This involves detection of illegal discharges and the enforcement of laws and rules against such discharges and consent conditions. Stormwater discharges will need particular attention because of their potential to carry silt and road contaminants into water bodies and coastal waters.

Metering or other forms of measurement of abstractions should occur where it is needed to enable the Regional Council to undertake the tasks of monitoring and enforcing restrictions on water use.

Enhancement of water quality and quantity can be undertaken, for example using financial contributions imposed as a consent condition. Local authorities should maintain and enhance the environment when undertaking works and services (e.g. flood protection, gravel removal, vegetation clearance) in river and lake beds and in riparian areas. Local authorities will be involved in the clean up of contaminated sites and providing riparian protection and enhancement. The Regional Council will continue to maintain a pollution hotline and pollution incident response team to manage and respond to pollution incidents.

Principal Reasons

Surveillance and enforcement are needed to ensure compliance.

Metering of abstractions may be necessary to ensure compliance with water permit conditions. Metering will also provide information on the resource and the effects of its use.

To provide a basis for water quality and quantity maintenance and enhancement through consent conditions. To ensure that works and services near water resources take environmental values into account. The community may need to clean up contaminated sites if no enforcement action can be taken (e.g. those responsible cannot be found) or if a rapid response is required.

2. District plan provisions

District/city councils in the preparation, variation, change or review of district plans, and where particular responsibilities are specified for hazardous substances in Policy 1 of Chapter 17 of this Regional Policy Statement, through the exercise of their functions, should consider district plan provisions that control the effects of the use, development, or protection of land for the purpose of the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances on water quality.

Principal Reasons

District/city councils have responsibilities stated in this Regional Policy Statement for developing objectives, policies and rules relating to the control of the use of land for the prevention or mitigation of any adverse effects of the storage, use, disposal or transportation of hazardous substances.

9.6 Environmental Results Anticipated

Implementation of the above policies and methods is expected to have the following environmental results:

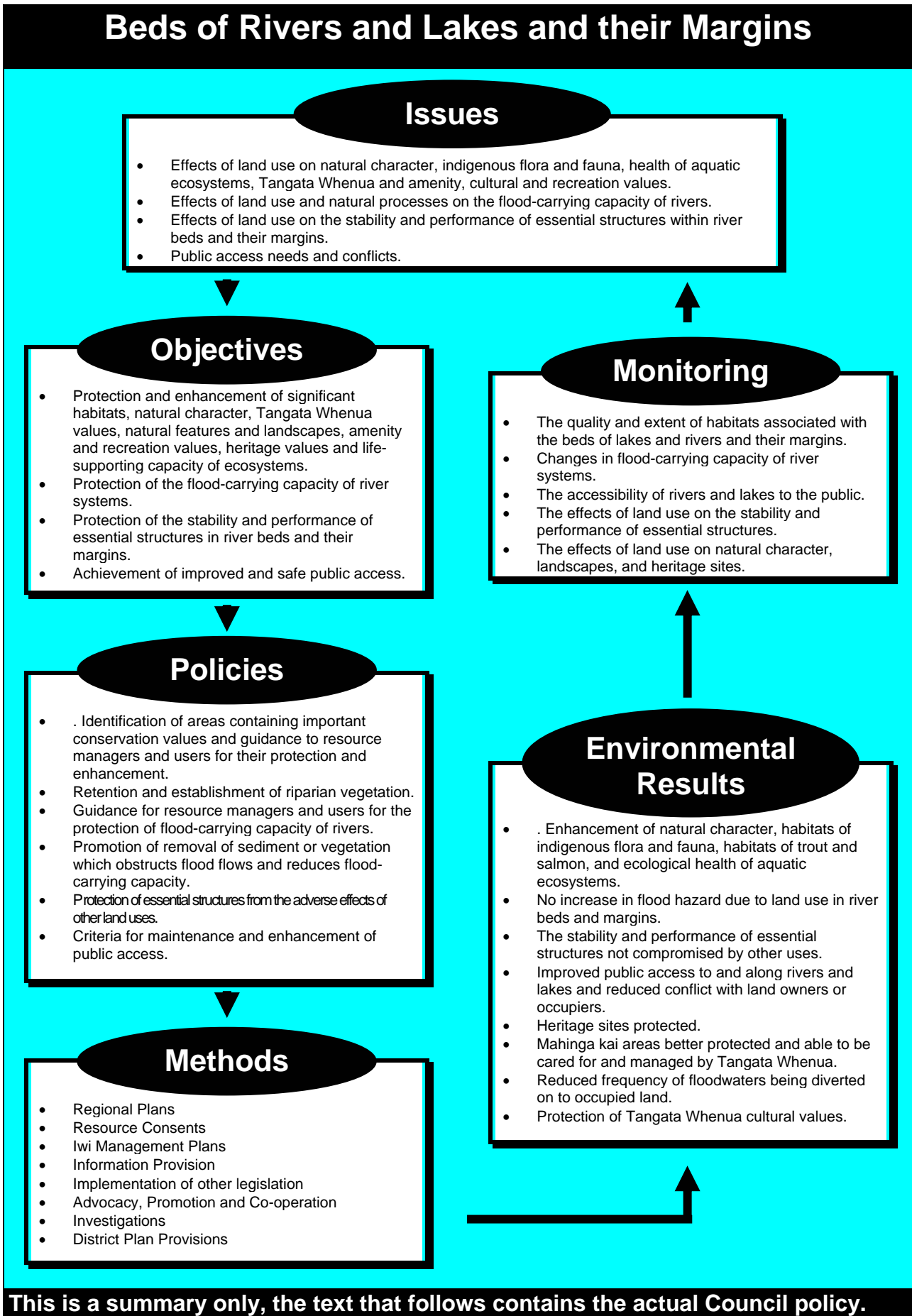
- (1) Adequate and safe sources of drinking water supplies for Canterbury people.
- (2) Protection of the life-supporting capacity of water resources, including the health and diversity of their ecosystems.
- (3) Protection of areas of mahinga kai and water values of cultural significance to Tangata Whenua.
- (4) Efficient use, and better availability, of abstracted water.
- (5) Greater benefits from the use, development and protection of Canterbury's water bodies.

- (6) Maintenance of water quality and quantity to the standards and flow and level regimes set for water bodies and coastal water.
- (7) Maintenance of the health, integrity and value of groundwater aquifers, including water quality, spring flows and associated wetlands and ecosystems.
- (8) A progressive improvement in the quality of degraded water bodies.

9.7 Monitoring Effectiveness

For water the following indicators should be monitored to assess the suitability and effectiveness of this part of the Regional Policy Statement, and any need for it to be reviewed:

- (1) The presence and concentrations of contaminants in water bodies and coastal water, and their effects.
- (2) Water body flows and levels (including rates of flow, pressures, and for geothermal water, temperatures).
- (3) The health of flora and fauna, and availability and quality of mahinga kai in water bodies, coastal water and their surrounds.
- (4) Trends in total abstraction of water relative to water availability.
- (5) Incidents reported to the Regional Council relating to water quantity and quality.
- (6) Trends in compliance with conditions on resource consents and on permitted activities.





10. Beds of Rivers and Lakes and their Margins

10.1 Introduction

(a) Natural and human values and processes

Lakes and rivers and their margins are vital elements of the Canterbury landscape and important habitats for indigenous flora and fauna. Some bird species are distinctive to the region, for example: crested grebe, black stilt, black fronted tern, black billed gull, and wrybill plover. Mountain streams provide habitat for whio (mountain duck). Coastal lakes in particular provide an important habitat for migratory bird species. Lake Ellesmere (Te Waihora) is recognised by conservation agencies as a wetland of international importance.

River systems provide birds and fish with essential pathways between the coast and inland habitats, and provide a highly valued trout, whitebait and salmon fishery.

Lakes and rivers and their wetland margins moderate the effects of floods through their storage and transportation of water and sediment. Wetland margins sustain low flows in rivers and streams in their storage and slow release of water.

Canterbury has the best examples of braided rivers in New Zealand. The Rakaia, is considered to be an internationally important example. The broad mobile gravel beds of braided rivers support invertebrates, fish and birds which are particularly adapted to these conditions. National Water Conservation Orders have been placed on the Rakaia and Ahuriri Rivers to protect their ecological values.

Non-braided waterways and coastal lakes and ponds support remnants of native vegetation and provide significant habitats for native fish, including whitebait.

Rivers are dynamic natural systems. Their form and consequently their behaviour are subject to change in response to the erosion, transportation and deposition of sediment. They have a tendency to seek new flow paths during floods. Vegetation in the beds and on the margins can markedly affect the way in which they transport water and sediment.

The riparian zone, extending across the bank and margin of a river or lake, is the area of interaction between terrestrial and freshwater ecosystems. It provides a buffer for effects between land and river or lake processes. Riparian vegetation can be important for mitigating the effects of non-point source discharges, maintaining the stability of shorelines and stream banks, wildlife habitat and the natural character of rivers and lakes.

Many people have a special attachment to lakes and rivers and their margins. Tangata Whenua hold both a practical and spiritual relationship with them through their wahi tapu, wahi taonga and mahinga kai. Lakes and rivers and their margins are highly valued for their amenity, landscape and recreation values. Sites of heritage value are present as well.

The natural character of lakes and rivers is an important component of the Canterbury landscape. Natural character is not static and expresses the interactions of natural features and processes which form and maintain them.

Elements of natural character include:

- the general absence of man-made structures or works.
- hydrology and geomorphic functioning expressed by, for example, the rise and fall of rivers and lakes, sediment transport, changing bed patterns, and the open expanse of shingle in braided rivers.
- the predominance of natural sounds and smells.
- the predominance of natural land forms, indigenous ecosystems, or indigenous flora and fauna.

Various land tenure types are represented. In some areas the beds and margins are vested in the Crown. Substantial areas are owned by the Regional Council or reserved for river management purposes. However, much of the land is private property, or is subject to the *ad medium filum aquae* principle, by which it can be inferred that certain rights of a riparian land owner or occupier are extended to the centre of any river or lake bounding their property. Farming is the most common economic land use on the margins of rivers and lakes.

There is a high public expectation that access to and along lakes and rivers will be available. Recreational use of the beds and margins of rivers and lakes includes a range of activities from walking and picnicking to use of trail bikes and four-wheel-drive vehicles. The beds and margins are also used as principal access routes for mountain recreation.

Access is needed for the extraction of gravel and sand or other bed material, for the construction of flood mitigation works, and for the erection and maintenance of essential structures, such as road and rail bridges, pylons, water diversion structures, discharge structures, and dams. The Canterbury region provides a substantial proportion of New Zealand's hydro-electricity production.

Tangata Whenua require access to their mahinga kai, wahi tapu and wahi taonga.

(b) Adverse effects of natural processes and land use

Many of the natural processes, uses and values of rivers and lakes and their margins may conflict with each other. The beds of braided rivers, in particular, are the focus of many land use activities, for example: gravel excavation, recreation, flood control works. Some activities or uses of beds and margins of rivers and lakes may not be compatible and may lead to adverse effects on the environment including pollution, interruption of river flow, loss or disruption of wildlife or habitat, and loss of amenity values and natural character.

These conflicts are expressed in detail as issues in 10.2 below.

(c) Regional and territorial responsibilities

The responsibility for the management of beds and margins of rivers and lakes involves the complementary roles of the Regional Council, territorial authorities and other management agencies. The Regional Council's functions apply to the whole region while territorial authorities may cover all or only part of a catchment. A set of objectives and policies is required in the Regional Policy Statement to ensure a consistent approach to achieve the integrated management of beds and margins throughout the region.

There is a range of activities within the beds of rivers and lakes which can only proceed if provided for by a rule in a regional plan or a resource consent for example: erection of structures, mechanical disturbance of the bed, introduction of plants, depositing substances and reclamation and drainage. There are also powers to control the disturbance of vegetation and habitats, and entry to and movement across beds.

The Regional Council can also introduce controls on land use on the beds or their margins (or on any other land) for: soil conservation purposes; the maintenance and enhancement of water quality and quantity; the avoidance or mitigation of natural hazards; and the prevention of mitigation of any adverse effects related to hazardous substances.

Territorial councils are responsible for integrated management and control of the effects of the use, development or protection of any land, including the beds of rivers and lakes. They have a particularly important role in management of the margins of rivers and lakes.

The maintenance and enhancement of public access to and along rivers and lakes is a matter of national importance and is an issue that concerns both urban and rural areas. Territorial councils may make provision for public access through requirements for esplanade reserves, esplanade strips or access strips on the margins of lakes and rivers.

They are responsible for protection of the natural character of lakes and rivers and their margins and outstanding natural features and landscapes from inappropriate subdivision, use and development.

10.2 Issue Resolution

Issue 1

With respect to land use activities within water bodies, their beds and margins:

(a) Damage to the natural character of lakes and rivers, habitats of indigenous flora and fauna and trout and salmon, the health of aquatic ecosystems, the quality or extent of and access to mahinga kai, wahi tapu and wahi taonga, or heritage sites due to:

(i) the effects of drainage works on wetland margins;

Ch. 8 Landscape, Iss. 1

(ii) land uses which modify riparian vegetation;

(iii) degraded water quality from contaminant discharges;

Ch. 9 Water, Iss. 3

- (iv) damming or diversion of flows, and direct destruction by construction or mining machinery;**

Ch. 9, Water, Iss. 1

- (v) the effects of management of the levels of lakes and coastal lagoons;**

Ch. 9 Water, Iss. 1

- (vi) siltation of the beds of water bodies through human induced erosion;**
- (vii) disturbance of wildlife and destruction of habitats by vehicles, watercraft, people and domestic animals, particularly grazing stock;**
- (viii) the replacement of diverse ecosystems with a narrow range of plant species in riparian plantings;**

Ch. 8 Landscape, Iss. 1

- (ix) effects of the spread and control of undesirable plants in water bodies, their beds and margins;**

Ch. 8 Landscape, Iss. 1

- (x) effects of the dumping of rubbish.**

- (b) Reduction of significant amenity values, cultural and recreation values, or natural features and landscapes including:**

- (i) the effects of dust storms associated with low lake levels (e.g. Lake Tekapo);**

Ch. 9 Water, Iss. 1

- (ii) the effects of the extraction of rock, gravel, sand or other bed material, and river works activity;**
- (iii) the presence of structures, buildings, and other land uses in disharmony with the landscape;**

Ch. 8 Landscape, Iss. 1

- (iv) effects of the dumping of rubbish;**

- (v) the spread of undesirable plants.**

Ch. 8 Landscape, Iss. 1

Objective 1

With respect to land use and development within the beds and margins of lakes and rivers, protection, and where appropriate, enhancement of:

Ch. 8 Landscape, Obj. 1

- (a) natural character;**

Ch. 8 Landscape, Obj. 3

- (b) significant habitats of indigenous flora and fauna;**

Ch. 8 Landscape, Obj. 2

- (c) significant natural features and landscapes;**

Ch. 6 Tangata Whenua, Obj. 1

- (d) mahinga kai areas, wahi tapu, and wahi taonga, and Tangata Whenua access to these;**

- (e) habitat values of braided river beds;**

- (f) significant amenity and recreation values;**

- (g) heritage values;**

- (h) significant habitats of trout and salmon;**

- (i) life-supporting capacity (health) of aquatic and riparian**

ecosystems.**Principal Reasons**

These values are being progressively degraded and many may be lost altogether if not maintained and, in some cases, enhanced.

Policy 1

Ch. 6 Tangata Whenua, Pol. 4
Ch. 8 Landscape, Meth. 1(b)
Ch. 9 Water, Obj. 1

(a) Areas within the beds of rivers and lakes and their margins containing important conservation values are to be identified. These include:

- (i) areas of natural character;**
- (ii) significant habitats of indigenous flora and fauna;**
- (iii) significant natural features and landscapes;**
- (iv) areas of mahinga kai, wahi tapu or wahi taonga (including historical artefacts, urupa, skeletal remains) and Tangata Whenua needs for access to them;**
- (v) significant amenity and recreation values;**
- (vi) significant heritage values;**
- (vii) significant habitats of trout and salmon.**

(b) Land use or development should avoid causing significant adverse effects on the conservation values contained in areas identified in Policy 1(a).

Ch. 8 Landscape, Pol 4, 5

(c) Prior to identification of areas under Policy 1(a), land use activities on the beds and margins of lakes and rivers should be undertaken at such times or in such ways that their adverse effects on the following values are avoided or mitigated:

- (i) habitats of indigenous fauna, including international migratory bird species, particularly threatened species, and species rare or endemic within Canterbury;**
- (ii) habitats or the unimpeded passage of indigenous fish;**
- (iii) areas of indigenous vegetation;**
- (iv) wetland areas;**
- (v) natural character or significant landscape values;**
- (vi) spawning habitats or the unimpeded passage of trout and salmon;**
- (vii) amenity and recreation values;**
- (viii) heritage sites;**

(ix) Tangata Whenua values.

Explanation

This is comprehensive policy bringing together provisions for the conservation values of rivers and lakes, their beds and margins.

- Policy 1(a) - Provides guidance to resource managers and research into conservation values.
- Policy 1(b) - Provides guidance to resource managers and users that protection of conservation values is a priority.
- Policy 1(c) - Provides interim standards for guidance of resource managers and users, prior to the preparation of regional plans and other means which implement Policy 1(a). A precautionary approach should be taken until important areas and values are identified. The timing of land use activities will be an important factor for avoiding or mitigating adverse effects on wildlife values. For example, avoiding the nesting season for bird species and spawning times for fish.

Many potential adverse effects can be avoided or mitigated by changing the way in which activities or works are undertaken in the bed and margins of waterbodies. Means of achieving this may include:

- limiting the number of fords across active channels.
- limiting artificial patterns and the depth of excavations to reflect existing bed and channel patterns.
- grading and re-contouring excavation, storage, and working areas after the work has been completed.
- for protection works in areas of high landscape value, using rock of a similar type, coloration or texture to that of the bed or margin of the waterbody.

Examples of land use activities which may adversely affect these values include:

- (1) the erection of structures;
- (2) channelling or diversion of flows, or any excavation or filling;
- (3) any deposition of materials, including rubbish;
- (4) excavation of gravel and sand or other bed material;
- (5) the planting or removal of vegetation;
- (6) livestock farming;
- (7) the operation of vehicles and machinery;
- (8) the application of chemicals.

Principal Reasons

- Policy 1(a) - There is a need to identify important values so that they may be protected, and that unnecessary intervention in land use on minor matters be avoided.
- Policy 1(b) - To ensure action to protect conservation values.
- Policy 1(c) - To provide for particularly important values which could be compromised, and to provide interim guidance to territorial authorities preparing district plans.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (c) Encourage the preparation of iwi management plans
 - (d) Information provision
 - (e) Implementation of other legislation
 - (f) Advocacy, Promotion and Co-operation
 - (g) Investigations
2. District/city councils in the preparation, variation, change or review of district plans through the exercise of their functions should consider:
 - (a) provisions to avoid significant adverse effects of land use (including development or subdivision) on the margins of rivers or lakes which contain important conservation values. Prior to the identification of these areas, to include provisions to avoid or mitigate any adverse effects on the values listed in Policy 1(c);
 - (b) promoting the protection of areas containing important conservation values.

Policy 2

The areas identified in Policy 1(a) and 1(c) should be enhanced where:

- (a) they exist in a degraded state and enhancement will achieve long-term improvement; and**
- (b) for areas with important ecological values this will:**
 - (i) contribute to the indigenous biodiversity of that area, particularly for ecosystem types that are threatened or under-represented in protected areas; or**

- (ii) improve the life-supporting capacity of the indigenous ecosystems; or
- (iii) improve or establish connections between habitats and create corridors for wildlife dispersal; and
- (c) it will not reduce the flood-carrying capacity of a river; and
- (d) it will not cause adverse effects on the stability or performance of essential structures.

Explanation

The criteria listed provide guidance for the assessment and implementation of proposals for enhancement. In this context, enhancement will include the restoration of areas which exist in a degraded state but are still of high importance to the region, for example: open braided river habitat invaded by exotic vegetation or remnants of Canterbury Plains habitats such as dryland savannah and shrubland communities, riparian/wetland and margins grazed and trampled by stock, and lake and river bird habitats disturbed by recreational activities.

For areas with important ecological values, priority for enhancement should be given to those habitats which are currently unprotected in the region, or poorly protected and vulnerable to destruction, or under-represented in protected areas in terms of their range of diversity throughout the region. Protected areas will include reserves, covenants, heritage orders or other long-term management agreements.

Principal Reasons

Without constant review of opportunities for enhancement, resources will be progressively degraded, or left unnecessarily in a degraded state.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (c) Encourage the preparation of iwi management plans
 - (d) Information Provision
 - (e) Implementation of other legislation
 - (f) Advocacy, Promotion and Co-operation
 - (g) Investigations
2. District/city councils in the preparation, variation, change or review of district plans through the exercise of their functions should consider:

- (c) opportunities to enhance or restore areas identified in Policy 1 located along the margins of rivers and lakes.

Policy 3

Retain, and promote the establishment of, riparian vegetation particularly indigenous vegetation along the margins of rivers and lakes, to reduce the adverse effects of land use on water quality and to enhance conservation and amenity values.

Explanation

The riparian zone is a transitional area between land and water and has the ability to act as a buffer between land and water processes. The management of riparian vegetation will be fundamental to this buffering capacity as well as to maintaining the conservation and amenity values of the area.

Principal Reasons

To enable the integrated management of the beds and margins of rivers and lakes for the purposes of:

- (a) improving water quality;
- (b) soil conservation and the protection of bank stability;
- (c) enhancing the life-supporting capacity of aquatic ecosystems;
- (d) enhancing indigenous habitats of rivers and lakes including the extension of wildlife corridors linking areas of habitat for indigenous fauna; and
- (e) protection and enhancement of amenity values.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource Consents
 - (c) Encourage the preparation of iwi management plans
 - (d) Information Provision
 - (e) Implementation of other legislation
 - (f) Advocacy, Promotion and Co-operation
 - (g) Investigations
2. District/city councils in the preparation, variation, change or review of district plans through the exercise of their functions should consider:
 - (d) provisions to retain and protect existing riparian vegetation;

Ch. 7 Soils, Pol. 2
Ch. 8 Landscape, Pol. 1
Ch. 9 Water, Pol. 11

- (e) promoting the planting of riparian vegetation;
- (f) the provision of buffer zones to avoid or mitigate the adverse effects of land uses adjacent to rivers and lakes;
- (g) the establishment of esplanade reserves, esplanade strips or access strips to maintain and enhance water quality, conservation and amenity values.

Issue 2

Reduced flood-carrying capacity of rivers due to:

- (a) the effects of land use on any riparian vegetation which contributes positively to flood-carrying capacity;
- (b) the accumulation of aquatic and terrestrial plants, and bed material within the beds of rivers which may obstruct water flows;
- (c) the effects of tree planting, the deposition of materials, gravel and sand excavation, earthworks, and erection of buildings and structures within the beds and margins of rivers on flood flows; and
- (d) the effects of land use activities on the stability or performance of flood mitigation works.

Ch. 16 Nat. Hazards, Iss. 1

Objective 2

*Ch. 16 Nat. Hazards, Obj. 1
Ch. 6 Tangata Whenua, Obj. 1*

Protect the flood-carrying capacity of rivers from the adverse effects of land use within the beds and margins of rivers, or the obstruction of waterways by the accumulation of bed material and vegetation.

Principal Reasons

To avoid flood damage to flood plain assets, and the potential adverse effects of uncoordinated response to that hazard.

Policy 4

Ch. 16 Nat. Hazards, Pol. 4

Land use within beds and margins of rivers should be undertaken in such a way that any adverse effects on the following values are avoided or mitigated:

- (i) the free passage of floodwaters within the beds; and
- (ii) the contribution of vegetation or structures to the control of flood flows or the control of erosion.

Explanation

Provides guidance to resource managers and users on particular land uses which may adversely affect flood-carrying capacity.

Examples of land use activities likely to adversely affect these values include:

- (1) the erection of buildings or structures;
- (2) excavation or filling;
- (3) any deposition of materials, including rubbish;
- (4) excavation of gravel and sand or other bed material;
- (5) the planting of trees;
- (6) the removal of vegetation;
- (7) livestock farming;
- (8) the operation of vehicles and machinery.

Principal Reasons

To ensure management is focused on activities which require oversight.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (c) Encourage the preparation of iwi management plans
 - (d) Information Provision
 - (e) Implementation of other legislation
2. District/city councils in the preparation, variation, change or review of district plans through the exercise of their functions should consider:
 - (h) controls to avoid or mitigate adverse effects of land use (including development or subdivision) on flood control structures and the flood-carrying capacity of rivers.

Policy 5

Ch. 16 Nat. Hazards, Pol. 4

Subject to Policy 1, the removal of accumulated vegetation and/or bed material should be promoted where it has reduced the flood-carrying capacity of rivers.

Explanation

Provides guidance to resource managers and users on the positive aspects of removal of vegetation and bed material.

Principal Reasons

To enable lost flood-carrying capacity to be restored.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (c) Encourage the preparation of iwi management plans
 - (d) Information provision
 - (e) Implementation of other legislation
 - (f) Advocacy, Promotion and Co-operation
 - (g) Investigations

Issue 3

Land use activities causing adverse effects on the stability or performance of essential structures within river beds and their margins.

Adverse effects include:

- (a) undermining or scouring of banks or structures;
- (b) diversion of water flows;
- (c) impeding the flow regime of a river;
- (d) uncovering or damaging a buried structure; and
- (e) deposition or excavation of bed material.

Essential structures include bridges, fords, pylons, pipeline crossings, structures for the diversion and conveyance and discharge of water, and dams.

Objective 3

Ch. 6 Tangata Whenua, Obj. 1

Protection of the stability and performance of essential structures from the adverse effects of land use within the beds and margins of rivers.

Principal Reasons

To protect the private and public interest which could be severely disrupted by failure of these structures.

Policy 6

Land use activities within the beds and margins of rivers should be undertaken in such a way that any adverse effects on the stability or performance of essential structures are avoided.

Explanation

Provides guidance to resource managers and users on the need for protection of essential structures.

Principal Reasons

The legitimate interests served by essential structures could otherwise be unreasonably compromised by consideration of other values.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (d) Information provision
 - (g) Investigations
2. District/city councils in the preparation, variation, change or review of district plans through the exercise of their functions should consider:
 - (i) controls to ensure the protection of essential structures located on the margins of rivers.

Issue 4

Public access needs and conflicts arising from:

- (a) restrictions on public access to and along rivers and lakes including:
 - (i) inadequate provision for access;
 - (ii) denial of access along legal roads and public rights of way by land owners or occupiers;
- (b) infringement of private property rights by people seeking access;
- (c) lack of opportunity for Tangata Whenua to exercise kaitiakitanga.

Objective 4

Ch. 6 Tangata Whenua, Obj. 1
Ch. 11 Coastal Env, Obj. 2

Achieve improved and safe public access to and along rivers and lakes and their margins, to enhance recreational opportunities and the ability of Tangata Whenua to exercise kaitiakitanga, where it will not lead to activities which could:

- (a) adversely affect values identified in Objective 1;
- (b) compromise the stability and performance of flood control and other essential structures;
- (c) cause conflicts with activities of land owners or occupiers.

Principal Reasons

Public access to rivers and lakes is a matter of national importance provided that conservation values and essential structures which are important to the general community are not adversely affected.

Recreational groups in particular experience constraints to access in some areas. The major source of resistance by land owners or occupiers is the potential for infringement of their private property rights. Increased access availability, providing better information on existing access opportunities, and siting new access routes to reflect the needs of both the public and land owners or occupiers will reduce such conflicts. Access to sites of wahi tapu, wahi taonga and mahinga kai is of cultural significance to Tangata Whenua and should be provided for wherever appropriate.

Policy 7

Ch. 6 Tangata Whenua, Pol. 5
Ch. 11 Coastal Env, Pol. 3

Maintain and enhance public access to and along rivers and lakes and their margins for the enjoyment of their recreation and amenity values and for Tangata Whenua to exercise kaitiakitanga, except where restrictions are necessary to:

- (a) safeguard the conservation values identified in Policy 1;**
- (b) protect the stability or performance of flood control and other essential structures;**
- (c) avoid conflicts with activities of land owners or occupiers ;**
- (d) protect public safety.**

Explanation

The principle embodied in the Policy is to maintain and enhance public access to areas with cultural, recreational and amenity values while recognising that at certain times and at particular locations, restrictions may be necessary. The circumstances when restrictions would apply are listed in the Policy.

Types of access will need to vary to meet the needs of the community. Existing public access along legal roads and public rights of way adjacent to rivers and lakes should be maintained and protected. In providing for section 6(d) of the RM Act, there should not be any reduction of public access opportunities to and along rivers and lakes in Canterbury. In the event of any legal access being removed for some reason, for example river erosion, alternative legal access would need to be sought as a replacement. New opportunities for public access should be sought with particular emphasis on those areas which are important to the region for their cultural, recreation or other amenity values, and where links can be established between isolated areas.

Interference with the activities of land owners or occupiers could be minimised with better identification of existing legal public access. Local authorities when negotiating new opportunities for public access across private land, must recognise the rights of land owners or occupiers to carry out activities on their own land. Public access should be enhanced so as to avoid interference with these activities and to minimise conflicts between the public and land owners or occupiers.

Principal Reasons

The maintenance and enhancement of public access to and along rivers and lakes is a matter of national importance. This will be achieved most effectively by the integration of the management of the beds and margins of rivers and lakes. The Policy provides for a consistent approach to be applied throughout the region.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional plans
 - (b) Resource consents
 - (c) Encourage the preparation of iwi management plans
 - (d) Information Provision
 - (e) Implementation of other legislation
 - (f) Advocacy, Promotion and Co-operation
 - (g) Investigations
2. District/city councils in the preparation, variation, change or review of district plans through the exercise of their functions should consider:
 - (j) provisions to maintain and enhance public access to and along the beds and margins of rivers and lakes for the enjoyment of their recreational and amenity values, and for Tangata Whenua to exercise kaitiakitanga. Provisions could include establishing esplanade reserves, esplanade strips, access strips or acquisition of reserves, and negotiating agreements or covenants with land owners or occupiers.

10.3 Methods

1. Regional Council

The methods used or to be used by the Regional Council are:

(a) Regional plans

Regional plans may make provision for any matter relating to the use, development, or protection of any natural and physical resources for which the Regional Council has responsibility under the RM Act, including the control of land for the purpose of soil conservation, the maintenance and enhancement of the quality of water in water bodies and coastal water, the maintenance of the quantity of water in water bodies and coastal water, and the avoidance or mitigation of natural hazards.

Provisions in regional plans, such as the Natural Resources Regional Plan, which is currently in preparation, will contain specific objectives, policies and methods, including rules, to achieve the integrated management of river and lake beds and their margins. In addition, regional plans may include objectives and policies, but not rules, for any actual or potential adverse effects of any use, development, or protection of land which are of regional significance. When preparing regional plans the Regional Council may adopt provisions contained in an Iwi Management Plan.

The matters that regional plans will address include:

- (i) the control of uses including the excavation of gravel and the disturbance of vegetation within river and lake beds and their margins for the purpose of soil conservation, the maintenance of water quality, and for the avoidance or mitigation of natural hazards;
- (ii) the identification of significant habitats of indigenous flora and fauna within the beds of rivers and lakes;
- (iii) recognising and providing for the relationship of Tangata Whenua with the beds and margins of rivers and lakes;
- (iv) the protection, maintenance and establishment of riparian vegetation for water quality, soil conservation, and flood avoidance or mitigation purposes;
- (v) the maintenance and enhancement of the flood-carrying capacity of rivers;
- (vi) controls to ensure the protection of essential structures located in the beds of rivers;
- (vii) monitoring programmes to provide information on trends in use and effects of use of river and lake beds and their margins;
- (viii) consideration of the use of economic instruments, performance standards, codes of practice or financial contributions;
- (ix) enabling the management of plant and animal pests within the beds of rivers and lakes.

At the time the Regional Council makes a regional plan operative, it will consider the transfer of powers where this would improve the integrated management of the beds and margins of rivers and lakes.

Principal Reasons

Only through regional plans can the Regional Council predetermine its policy implementation by regulatory means.

(b) Resource consents

The Regional Council is a consent authority for some coastal permits, water permits, discharge permits, and for land use consents in relation to the use of beds of rivers and lakes.

The objectives and policies relating to the protection of conservation values, flood-carrying capacity, essential structures and provision of public access must all be taken into account when setting conditions on resource consents. These conditions will apply to the continuation of existing activities as well as the consideration of new consents.

When considering an application for a resource consent within the beds and margins of rivers and lakes the Regional Council will consider where appropriate:

- (i) conditions to recognise and provide for the protection or enhancement of areas containing important conservation values;
- (ii) conditions to ensure that wherever possible activities will be undertaken so as to cause the least disturbance to aquatic ecosystems or any indigenous flora and fauna;
- (iii) conditions to maintain or enhance public access to and along rivers and lakes.

Principal Reasons

Resource consents processes must have regard to the Regional Policy Statement.

(c) Encourage the preparation of iwi management plans

Iwi management plans are non-statutory documents which have been prepared by Tangata Whenua. The Regional Council, in preparing regional plans, must have regard to iwi management plans. By agreement with the Regional Council all or part of an iwi management plan, for example, dealing with wahi tapu or wahi taonga, may be incorporated into a regional plan. The development of the regional plan would be subject to the public consultation processes set out in the RM Act. The Regional Council, by agreement with Tangata Whenua, recognises that there is opportunity for this to occur.

Iwi management plans can provide mechanisms for implementing aspects of policy, for example: the process for managing the discovery of koiwi tangata; how any powers transferred will be discharged; and the joint management of sites and/or resources. They can also be a source of information which aids, but does not replace, consultation with Tangata Whenua during regional plan preparation or consideration of consents.

The Regional Council will encourage runanga to prepare iwi management plans and, if requested, will provide advice to aid their formulation.

Principal Reason

Reference to iwi management plans assists the understanding of Tangata Whenua perspectives, and can provide an appropriate method to achieve certain environmental policies.

(d) Information provision

The Regional Council, with the assistance of outside specialists where appropriate, will ensure that information is made available to individuals and the community on the values and use of rivers and lake beds and their margins by:

- (i) publishing information on the conservation, recreational and cultural values of river and lake beds and their margins;
- (ii) providing information to persons who wish to undertake activities in the beds of rivers and lakes so as to minimise or avoid adverse effects. This will include maintaining a set of environmental guidelines for river engineering works;
- (iii) providing information to land owners or occupiers who live adjacent to rivers and lakes, on planting and restoring riparian vegetation particularly indigenous vegetation.

Principal Reasons

Providing information gives people a better understanding of the resource concerns and therefore a greater chance of responsible use of resources.

(e) Implementation of other legislation

In addition to the RM Act, the Regional Council also has functions and powers under other legislation which relate to the management of beds and margins of rivers and lakes in the region. These include:

- (i) Waimakariri River Improvement Act 1922
- (ii) Ashley River Improvement Act 1925
- (iii) Soil Conservation and Rivers Control Act 1941
- (iv) South Canterbury Catchment Board Act 1946
- (v) Kaikoura River Board Validating Act 1953
- (vi) Reserves Act 1977
- (vii) Biosecurity Act 1993

Principal Reasons

Activities under this legislation are often compatible with resource management objectives and should be recognised.

(f) Advocacy, promotion and co-operation

In promoting the sustainable management of natural and physical resources the Regional Council will, with regard to the management of the beds and margins of rivers and lakes:

- (i) foster co-operation with territorial authorities and other management agencies to achieve the integrated management of resources and activities in the beds and margins of rivers and lakes;
- (ii) advocate, as appropriate, for improved public access to and along rivers and lakes through such instruments as esplanade reserves, esplanade strips or access strips, or through agreements or covenants with land owners or occupiers under New Zealand Walkways Act 1990, Queen Elizabeth the Second National Trust Act 1977, Historic Places Act 1993;
- (iii) promote the advantages of maintaining or establishing riparian vegetation;
- (iv) co-operate with land care and forestry organisations, environmental and recreational groups and the New Zealand Defence Force to prepare codes of conduct for people undertaking activities on the beds and margins of lakes and rivers, in order to minimise the adverse effects of land use, including recreational use, on instream values, water quality, riparian vegetation and other users.

Principal Reasons

Co-operative effort is the best means for environmental enhancement. Regulation only achieves minimum standards.

(g) Investigations

The Regional Council will undertake investigations to:

- (i) identify areas with important conservation values;

- (ii) identify monitoring indicators for assessing the effects of land use on the beds and margins of rivers and lakes, water quality and aquatic ecosystems, and on the stability or performance of essential structures;
- (iii) establish the relationship between riparian margins and the management of the beds of rivers and lakes, for mitigating the effects of non-point source discharges and the protection of indigenous flora and fauna;
- (iv) determine which land use practices minimise adverse effects on water quality and promote soil conservation;
- (v) identify patterns of public usage of rivers and lakes within the region.

Principal Reasons

To provide information on, or assessment of, effects of land use on the values of rivers and lakes, their beds and margins.

2. District plan provisions

Territorial authorities, in the preparation of district plans and resource consent conditions, are responsible for control of the subdivision of land and control of the actual or potential effects of the use, development or protection of land, and the control of activities on the surface of lakes and rivers.

District/city councils in the preparation, variation, change or review of district plans through the exercise of their functions should consider:

- (a) provisions to avoid significant adverse effects of land use (including development or subdivision) on the margins of rivers or lakes which contain important conservation values. Prior to the identification of these areas, to include provisions to avoid or mitigate any adverse effects on the values listed in Policy 1(c);
- (b) promoting the protection of areas containing important conservation values;
- (c) opportunities to enhance or restore areas identified in Policy 1 located along the margins of rivers and lakes;
- (d) provisions to retain and protect existing riparian vegetation;
- (e) promoting the planting of riparian vegetation;
- (f) the provision of buffer zones to avoid or mitigate the adverse effects of land uses adjacent to rivers and lakes;
- (g) the establishment of esplanade reserves, esplanade strips or access strips to maintain and enhance water quality, conservation and amenity values;
- (h) controls to avoid or mitigate adverse effects of land use (including development or subdivision) on flood control structures and the flood-carrying capacity of rivers;
- (i) controls to ensure the protection of essential structures located on the margins of rivers;
- (j) provisions to maintain and enhance public access to and along the beds and margins of rivers and lakes for the enjoyment of their recreational and amenity values, and for Tangata Whenua to exercise kaitiakitanga. Provisions could include establishing esplanade reserves,

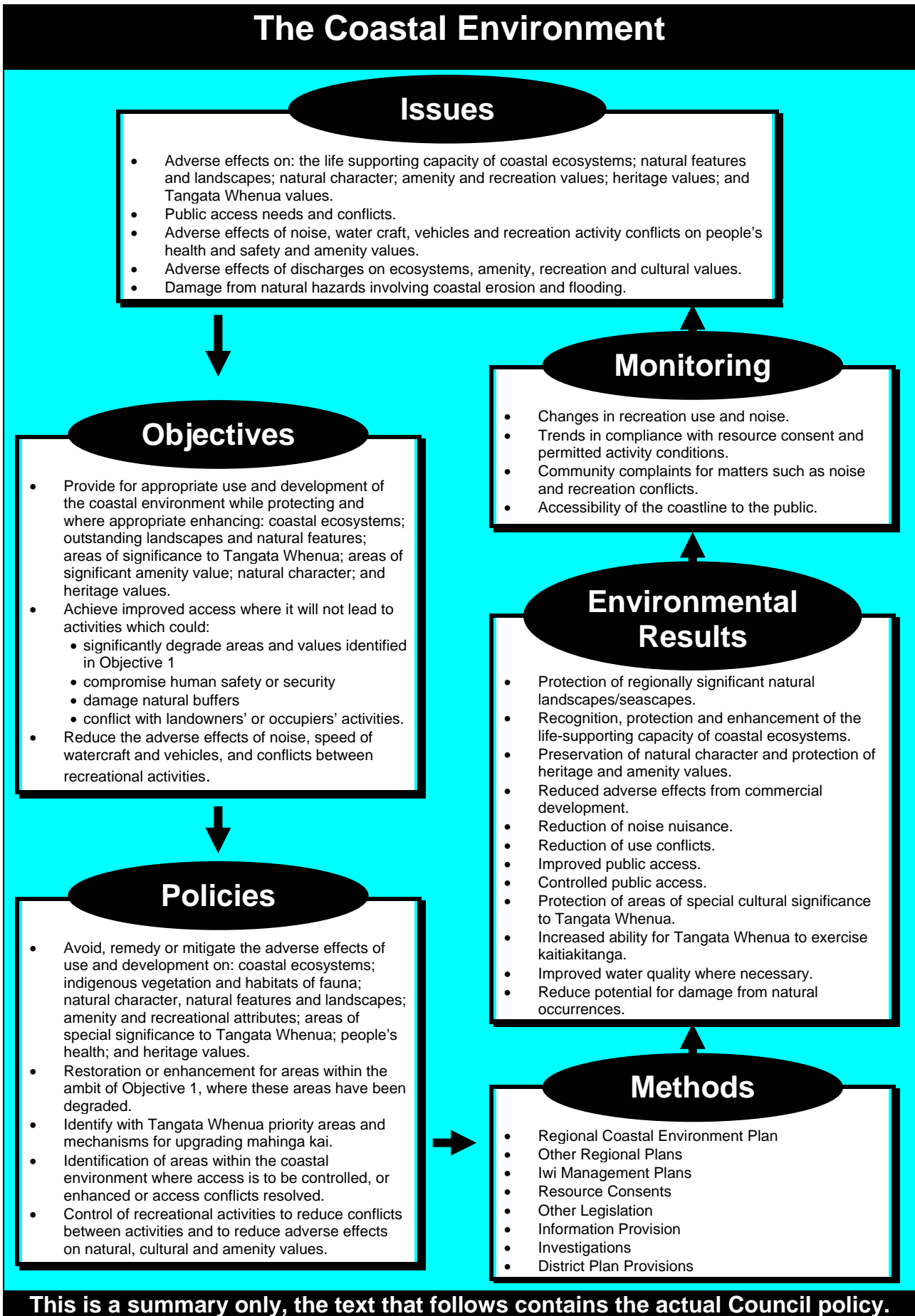
esplanade strips, access strips or acquisition of reserves, and negotiating agreements or covenants with land owners or occupiers.

10.4 Environmental Results Anticipated

- (1) Enhancement of natural character, habitats of indigenous flora and fauna, habitats of trout and salmon, and ecological health of aquatic ecosystems.
- (2) No increase in flood hazard due to land use in river beds and margins.
- (3) The stability and performance of essential structures not compromised by other uses.
- (4) Improved public access to and along rivers and lakes and reduced conflicts with land owners or occupiers.
- (5) Heritage sites protected.
- (6) Mahinga kai areas better protected and able to be cared for and managed by Tangata Whenua.
- (7) Reduced frequency of floodwaters being diverted on to occupied land.
- (8) Protection of Tangata Whenua cultural values.

10.5 Monitoring Effectiveness

- (1) The quality and extent of habitats associated with the beds of lakes and rivers and their margins.
- (2) Changes in flood-carrying capacity of river systems.
- (3) The accessibility of rivers and lakes to the public.
- (4) The effects of land use on the stability and performance of essential structures.
- (5) The effects of land use on natural character, landscapes, and heritage sites.





11. The Coastal Environment

11.1 Introduction

Canterbury's coast has spectacular variety and scenery. Coastal lagoons and estuaries are often associated with shifting river mouths, and some are of international significance for wildlife. There are rocky platforms, eroding sea cliffs, sheltered bays, sweeping sandy Pegasus Bay and the gravel beaches between Banks Peninsula and Timaru.

The Kaikoura coastline, the North Canterbury coastal landform, Kaitorete Spit and the indented coastline of Banks Peninsula are strong images of Canterbury.

Canterbury has one of the few stretches of coastline in New Zealand where marine mammals are easily accessible, for example, whales, dolphins and seals near Kaikoura. The shoreline also supports a wide variety of intertidal plant and animal communities. Relatively small areas of native vegetation exist in pockets along the coast. Kaitorete Spit contains one of the largest remaining populations of native pingao used in the traditional weaving of Tangata Whenua. The chain of coastal wetlands and water bodies for example: Wainono Lagoon, Lake Ellesmere (Te Waihora), Brooklands Lagoon, the estuary of the Avon and Heathcote Rivers, and Ashley Estuary provide important areas for wildlife.

The preservation of the natural character of the Canterbury coast, and its protection from inappropriate subdivision, use and development is a matter of national importance. Elements of natural character within the coastal environment include:

- natural landscapes, seascapes and landforms.
- indigenous vegetation and fauna, and their associated habitat.
- indigenous ecosystem productivity and biotic patterns, and biological diversity.
- natural substrate composition.
- dynamic processes and features arising from the natural movement of sediments, water and air.
- natural water and air quality, sounds and smell.

The operation of the ports of Lyttelton and Timaru are essential to the region's economic wellbeing. Certain aspects of port operations can have an adverse effect on the coastal environment, for example: effects of coal dust from stockpiles at Lyttelton, storage of high risk hazardous materials, dredging of navigation channels and dumping of spoil, and conflicts over recreation activities. The development of Timaru port has caused significant changes to the character of the coast and contributed to offsite erosion problems at Washdyke as well as infilling

of Caroline Bay. In places such as the Kaikoura coastline and north of Timaru the main road and rail transport links for the South Island run close to the sea and are vulnerable to storm damage and erosion. The effects of the maintenance and protection of these vital links are an issue for these areas.

Continuing discharges of raw and partially treated sewage into coastal waters may conflict with community values, especially those of Tangata Whenua. Discharges of industrial waste and stormwater also cause public concern. The main sewer, stormwater and industrial waste outfalls are located on the coast at Lyttelton, Akaroa, Timaru, Pareora and the Avon- Heathcote Estuary.

Coastal hazards include coastal erosion, sea level rise, flooding and tsunamis. To a lesser degree windblown sand from dunes can be a hazard to property. Some water bodies are artificially opened to the sea to prevent flooding of land adjacent to them, for example, Lake Ellesmere (Te Waihora) and Lake Forsyth (Wairewa).

The RM Act has introduced an administrative boundary- Mean High Water Springs - to define the coastal marine area (see Glossary). It is mandatory for the Regional Council to prepare a Regional Coastal Plan for the coastal marine area. However, the Canterbury Regional Council recognises that many issues occur across the land/water interface of the coastal marine area (e.g. coastal erosion) and has decided to prepare a wider plan called the “Regional Coastal Environment Plan” to cover these issues and to achieve policy compatibility between the region and districts. This is a mechanism for providing integration of resource management across the administrative boundary. Those parts of the Plan which deal with the area seaward of mean high water springs (the coastal marine area) have to be approved by the Minister of Conservation.

The Minister of Conservation was also responsible for producing a New Zealand Coastal Policy Statement which guides the preparation of the Regional Coastal Environment Plan and for defining Restricted Coastal Activities within the coastal marine area. These activities are of such a scale and effect that the Minister reserves a right to make a final decision on any coastal permit.

The coast provides a source of kai moana (sea food) and water provides spiritual fulfilment to all Tangata Whenua. They, like many other people in the region, see the coast as an integral part of the whole environment reaching from the mountains to the sea and do not look at coastal issues in isolation from other environmental issues. The coast for Tangata Whenua, has always played a significant role in the lives of their ancestors, and the present generation, and will continue to be important for future generations. Their system of traditional rights to, and attitudes towards natural resources has evolved over time. For Tangata Whenua, the natural resources of their area or rohe are a statement of identity.

The Waitangi Tribunal has declared that Ngai Tahu have an exclusive Treaty right to the sea fisheries surrounding the whole of their rohe to a distance of “12 miles or so there being no waiver or agreement by them to surrender such right”. For them, the wellbeing of the fisheries is inseparable from the well-being of the coast. Ngai Tahu are kaitiaki (physical and spiritual guardians) of the Canterbury coastal environment which includes the harbours and linking water systems. Ngai Tahu believe that they must fulfil their responsibilities as kaitiaki to ensure the preservation and wise use of natural resources.

11.2 Issue Resolution

Issue 1

Within the coastal environment, adverse effects on:

- (a) the life-supporting capacity of coastal ecosystems including areas of significant indigenous vegetation and significant habitats of indigenous fauna (e.g. marine mammals, coastal lagoon ecosystems, mahinga kai areas).
- (b) outstanding landscapes and natural features (e.g. Kaikoura scenic corridor, Banks Peninsula, Kaitorete Spit).
- (c) natural character.
- (d) amenity values, including recreational attributes.
- (e) areas of special cultural significance¹ to Tangata Whenua, for example: wahi tapu, urupa, tauranga waka and mahinga kai.
- (f) heritage values.

From human activity or actions within or inland of it, including:

- (i) rivers discharging contaminants into the coastal marine area.
- (ii) damming or gravel extraction causing changes in the nature or quantity of sediment transported to the coast by rivers, for example Waitaki River.

Ch. 10 Beds of Rivers, Iss. (1),(b)(ii)

- (iii) point source discharges and non point source run-off into the coastal marine area, for example, bays of Banks Peninsula.

Ch. 9 Water, Iss. 3

- (iv) harbour dredging and spoil dumping.
- (v) reclamations.
- (vi) port operations (Timaru, Lyttelton, Akaroa, Kaikoura).
- (vii) mining of beach deposits (including sand and shells).
- (viii) structures (e.g. jetties).
- (ix) agricultural run-off into coastal waterways and water bodies.

Objective 1

*Ch. 8 Landscape, Obj. 1,2, 3, 4,
Policies 1, 3, 4, 5
Ch. 6 Tangata Whenua, Obj. 1*

Provide for appropriate use and development of the coastal environment while protecting and where appropriate enhancing:

- (a) life-supporting capacity of coastal ecosystems including:
 - (i) any area within the intertidal or subtidal zone that contains unique, rare, distinctive or representative

¹ “Special cultural significance” has been defined as areas for which Maori have claimed or recognised a special relationship throughout the generations - High Court judgement, in Royal Forest and Bird Protection Society versus Habgood (1987) 12 NZTPA 76.

- marine life or habitats;
 - (ii) areas used by marine mammals as breeding, feeding or haul out sites;
 - (iii) breeding, roosting or feeding areas of indigenous bird species;
 - (iv) any area including adequate buffer zones, that contains locally, regionally, nationally or internationally significant ecosystems, habitat types (e.g. coastal lakes, wetlands lagoons, estuaries) vegetation or individual species;
- (b) outstanding landscapes and natural features including:
- (i) historic, archaeological and geo-preservation sites of importance;
 - (ii) coastal landforms and landscapes, submerged platforms and seascapes that are regionally, nationally or internationally representative or unique;
- (c) areas of special significance identified in consultation with Tangata Whenua including wahi tapu, urupa, tauranga waka and mahinga kai;
- (d) areas of significant amenity value, including recreational attributes;
- (e) natural character (including associated natural processes) of the coastal environment;
- (f) heritage values.

Principal Reasons

An integrated approach across the land/sea interface is needed to protect coastal ecosystems. This is the basis of sustainable management.

Policy 1

To avoid, remedy or mitigate, to an extent not inconsistent with the New Zealand Coastal Policy Statement, the direct and indirect adverse effects of land uses or activities and new or additional uses, development or protection inland of or within the coastal marine area where, either singly or cumulatively they would significantly affect:

- (a) the life-supporting capacity of coastal ecosystems and the natural processes which sustain them;
- (b) areas of significant indigenous vegetation and significant habitats of indigenous fauna;
- (c) natural character (including associated natural processes), outstanding natural features and

*Ch. 8 Landscape Pol.3,4, 5
Ch. 6 Tangata Whenua, Pol. 4
Ch. 7 Soils, Pol. 2,4*

- landscapes;**
- (d) amenity and recreational attributes;**
- (e) areas of special significance to Tangata Whenua;**
- (f) people's health;**
- (g) heritage values of sites, buildings, places or areas.**

Explanation

The coastal marine area does not exist in isolation from the rest of the land/water system. For example, adverse effects on the coastal ecosystems can arise from contaminant discharges to rivers landward of the coast or from accelerated erosion inland of the coast resulting in excessive amounts of silt entering coastal waters. A further example of this linkage would be damming or gravel extraction which significantly reduces the rate of sediment being supplied to the coast by a river.

Inappropriate subdivision, use and development may prevent the inland migration of natural features resulting from dynamic coastal processes (including sea level rise). This may require setbacks from these features.

Activities such as marine farming and ports can have direct effects by occupying a specific area and reducing recreation opportunities and access to sheltered waters. They can also adversely affect areas of high conservation and cultural values (e.g. marine farming can reduce mahinga kai by restricting access). Adverse effects within the coastal environment may also arise from the following:

- (i) discharges of contaminants or waste;
- (ii) siltation;
- (iii) alterations to water flows or levels or sediment supply;
- (iv) activities generating odour or noise;
- (v) recreational activities on land and water;
- (vi) modification of landform or clearance, modification or disturbance of indigenous vegetation or habitat;
- (vii) structures, or reclamations;
- (viii) dredging, dumping or removal of sand, shingle or shell, or other materials;
- (ix) the inappropriate location, form, scale, texture or colour of an activity or structure.

Principal Reasons

Effective and sustainable management of the coastal marine area requires integration with the land and river systems that are linked to the coast. There is a need for protection of important values of the coastal environment while accommodating appropriate use and development.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional Coastal Environment Plan
 - (b) Other Regional plans
 - (c) Encourage the preparation of iwi management plans
 - (d) Resource consents
 - (f) Information provision
 - (g) Investigations
2. District/city councils in the preparation, variation, change or review of their district plans, through the exercise of their functions outside the coastal marine area should consider:
 - (a) including provisions in their district plans to give effect to Policy 1.

Policy 2

Ch. 6 Tangata Whenua, Pol 4

- (a) **Restoration or enhancement should be considered for areas within the ambit of Objective 1, where these areas have been degraded.**
- (b) **Identify in consultation with Tangata Whenua priority areas and mechanisms for upgrading mahinga kai and other sites of cultural value.**

Explanation

Human activity past and present has degraded some areas which are highly valued (even in their degraded state) even though there has been a loss of amenity. Consideration should be given to restoration where there is strong community support to do so.

The Canterbury coast has always been a source of mahinga kai for Tangata Whenua. There has been loss of mahinga kai due to habitat degradation caused by a number of activities including run-off containing pollutants or sediments from the adjacent land, sewage and industrial discharges. There may be opportunities for targeting priority areas, particularly where there is a reasonable likelihood of meeting water quality standards for shellfish for human consumption.

Principal Reasons

To improve the quality of the environment and improve amenity and other values.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional Coastal Environment Plan

- (b) Other Regional plans
 - (c) Encourage the preparation of iwi management plans
 - (d) Resource consents
 - (f) Information provision
 - (g) Investigations
2. District /City Councils in the preparation, variation, change or review of their district plans, through the exercise of their functions outside the coastal marine area should consider:
- (b) including provisions in their district plans to give effect to Policy 2 (a).

Issue 2

Public access needs to and along the coastal marine area and conflicts arising from:

- (a) restrictions on public access including:**
 - (i) inadequate provision for access;**
 - (ii) denial of access along legal roads and public rights of way by landowners or occupiers ; and**
 - (iii) lack of opportunity for Tangata Whenua to exercise kaitiakitanga;**
- (b) infringement of private property rights by people seeking access;**
- (c) adverse effects caused by public access on:**
 - (i) ecological values, for example, bird nesting**
 - (ii) sites of cultural significance to Tangata Whenua**
 - (iii) sand dune stability**
 - (iv) amenity values**
 - (v) other recreationalists**
 - (vi) natural character**
- (d) lack of appropriate levels of services (e.g. toilets, car parking)**

Objective 2

Ch. 6 Tangata Whenua, Obj. 1
Ch. 10 Beds of Rivers, Obj. 4

Achieve improved access to and along the coastal marine area to enhance recreational opportunities and the ability of Tangata Whenua to exercise kaitiakitanga, where it will not lead to activities which could:

- (a) significantly degrade areas and values identified in objective 1.**
- (b) compromise human safety or security.**
- (c) damage natural buffers to coastal erosion.**
- (d) conflict with landowners or occupiers activities.**

Principal Reasons

Improved access should not compromise other values. Varying standards of access including access to wahi tapu, wahi taonga and mahinga kai should be considered to reflect community needs and those of Tangata Whenua .

Policy 3

Ch. 10 Beds of Rivers, Pol.7
Ch. 6 Tangata Whenua, Pol. 5

The Regional Council and territorial authorities should identify areas within the coastal environment where:

- (a) it is preferable that access be controlled or not be improved to protect the areas and values identified in Objective 1 and public safety.**
- (b) access is to be enhanced to increase recreation opportunities and for Tangata Whenua to exercise kaitiakitanga.**
- (c) access should be controlled to prevent those areas becoming more susceptible to coastal erosion.**
- (d) access should be resolved with the landowner or occupier to avoid conflict with their activities.**

Explanation

Loss of traditional easements has prevented Tangata Whenua from gaining access to mahinga kai on the coast. Elsewhere paper roads are not always available for access to recreational areas and access needs to be resolved with landowners or occupiers. Provision of access is principally a territorial authority function but, because of its importance within the region, the Regional Council should help facilitate the investigations identified in the policy.

Standards of access may need to vary to provide for a range of recreational opportunities. There are valued areas where access can take place but with a range of safeguards such as restricting vehicle access to protect sand dune vegetation and wildlife breeding areas. Areas of spiritual and cultural concern for Tangata Whenua such as wahi tapu and mahinga kai may

require access controls including the recognition of non-statutory mechanisms such as placing of a rahui (a temporary prohibition of use) to ensure maintenance and protection of certain resources. An example of another non-statutory control would be advice on avoiding an area during the breeding period of certain birds.

Principal Reasons

Maintenance and enhancement of public access to and along the coastal marine area is a matter of national importance in the RM Act.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional Coastal Environment Plan
 - (b) Other Regional plans
 - (c) Encourage the preparation of iwi management plans
 - (d) Resource consents
 - (f) Information provision
 - (g) Investigations
2. District/city councils in the preparation, variation, change or review of their district plans, through the exercise of their functions outside the coastal marine area should consider:
 - (c) including provisions in their district plans to give effect to Policy 3.

Issue 3

The adverse effects of noise, speed of watercraft or vehicles, and conflicts between recreational activities on people's health, safety, amenity and other values in the coastal environment.

Objective 3

Ch. 6 Tangata Whenua, Obj. 1

Within the coastal environment reduce the adverse effects of noise, speed of watercraft and vehicles, and conflicts between recreational activities.

Principal Reasons

Reduce conflict between recreational uses and the adverse effects on adjacent areas and amenity values.

Policy 4

To control recreational activities to reduce the adverse effects of noise, speed of watercraft and vehicles and conflict between different forms of recreation within areas of intensive

recreational use and where recreational uses conflict with natural character, wildlife, cultural and amenity values, including Avon-Heathcote Estuary, Sumner Bay, South Brighton, Lyttelton and Akaroa Harbours, Brooklands Lagoon, Caroline Bay and beach and dune systems..

Explanation

In the areas identified a range of passive and active recreational pursuits take place which require some degree of control if safety and enjoyment are to be ensured. In addition where there are high conservation and cultural values some recreational activities are incompatible. Noise can also reduce amenity values for residents adjacent to recreational areas.

The areas of our coastline which are accessible for water related recreation are limited and therefore activities are concentrated in small areas. This can result in conflicts between uses and between them and the protection of people's health and maintenance of amenity, cultural and other values.

Principal Reasons

To respond to public concerns about conflict between recreational uses, noise and protection of valued qualities in the coastal environment.

Methods

1. The methods used or to be used by the Regional Council are:
 - (a) Regional Coastal Environment Plan
 - (e) Other legislation
 - (f) Information provision
2. District/city councils in the preparation, variation, change or review of their district plans, through the exercise of their functions outside the coastal marine area should consider:
 - (d) including provisions in their district plans to give effect to Policy 4.

Issue 4

Discharges, both point and non-point source, and both landward of the coastal marine area or within it, which adversely affect the life-supporting capacity of marine ecosystems, amenity, recreational and cultural values.

The above Issue has been dealt with in Chapter 9 by Policies 9 and 11.

Issue 5

Natural occurrences, such as coastal erosion, and salt water inundation, have the potential to interact with assets (including human lives) placed within their reach. Such occurrences, are more frequent or more severe at certain places along the

coast. Climate change may also cause a rise in sea level. Structures, or their protective barriers can often have an adverse effect on coastal processes, which may include worsening the incidence of natural hazard or natural occurrences elsewhere, for example, by trapping sediment moving along the coast, the port at Timaru has increased coastal erosion at Washdyke.

The above Issue has been dealt with in Chapter 16, Natural Hazards.

11.3 Methods

1. Regional Council

The methods used or to be used by the Regional Council are:

(a) Regional Coastal Environment Plan

A Regional Coastal Plan is mandatory. The Regional Council will prepare a Regional Coastal Environment Plan because it provides for integration of resource management issues across the land/water interface of the coast. This will encompass the Regional Coastal Plan and meet the provisions of the New Zealand Coastal Policy Statement and the policies above. Preparation of the Regional Coastal Environment Plan is provided for in section 64(2) of the RM Act.

This plan will include provisions for:

- (a) identification of:
 - (i) hazardous locations in the coastal marine environment.
 - (ii) parts of the coastal marine area including heritage areas, for protection and use.
- (b) development of:
 - (i) appropriate rules or environmental standards, including water quality classes, which activities must comply with.
 - (ii) rules or other strategies for dealing with issues which extend beyond the coastal marine area, including coastal hazards.
- (c) promotion and education, including preparation of appropriate educational pamphlets (e.g. on coastal hazards).
- (d) supplying information on coastal hazards to territorial authorities to assist their planning functions.

Consideration will be given to the use of economic instruments in the form of financial contributions as money, land or works, or any combination required as a condition of a resource consent.

At the time this plan becomes operative the Regional Council will consider whether transfers of functions, powers or duties to another public authority is appropriate in terms of section 33 of the RM Act.

Principal Reasons

An integrated approach across the sea/land interface is needed. Economic instruments help to provide compensation for adverse effects and to apportion the true costs of activities. Transfers of powers can aid efficiency in service delivery.

(b) Other regional plans

Provisions in regional plans will contain specific objectives, policies and methods, including rules, where necessary, to promote the integrated management of the coastal marine area and the coastal environment. Regional Plans should contain provisions which recognise the interrelationships between catchment resource issues and the coast. They will provide additional methods to complement the Regional Coastal Environment Plan. These plans must also be consistent with the New Zealand Coastal Policy Statement.

Principal Reasons

An integrated approach across the sea/land interface is needed.

Only through regional plans can the Regional Council determine its policy implementation by regulatory means.

(c) Encourage the preparation of iwi management plans

Iwi management plans are non-statutory documents which can be prepared by Tangata Whenua. The Regional Council, in preparing regional plans, must have regard to iwi management plans. By agreement with the Regional Council all or part of an iwi management plan, for example, dealing with wahi tapu or wahi taonga, may be incorporated into a regional plan. The development of the regional plan would be subject to the public consultation processes set out in the RM Act. The Regional Council, by agreement with Tangata Whenua, recognises that there is opportunity for this to occur.

Iwi management plans can provide mechanisms for implementing aspects of policy, for example: the process for managing the discovery of koiwi tangata, how any powers transferred will be discharged, the joint management of sites and/or resources. They can also be a source of information which aids, but does not replace, consultation with Tangata Whenua during regional plan preparation or consideration of consents.

The Regional Council will encourage runanga to prepare iwi management plans and if requested, will provide advice to aid their formulation.

Principal Reasons

Reference to iwi management plans assists the understanding of Tangata Whenua perspectives and can provide an appropriate method to achieve certain environmental policies.

(d) Resource consents

The Regional Council is the consent authority for use and development occurring within the coastal marine area and also for consents in relation to soil conservation, and the use of the beds of lakes and rivers.

Principal Reasons

To minimise the adverse effects of activities through conditions on consents and controlling the presence of activities. When considering applications for resource consents regard must be had to the Regional Policy Statement.

(e) Other legislation

There are a number of other Acts that will be used as appropriate to give effect to the above policies, for example bylaws under the Harbours Act 1950. The Conservation Management Strategy prepared by the Department of Conservation will indicate that Department's programme for the coastal environment.

Principal Reasons

Not all the powers needed are available under the RM Act

(f) Information provision

The Regional Council will ensure that information is made available to individuals and the community by:

- (i) publishing information on the principles of integrated management;
- (ii) publishing information on the coastal environment and the maintenance and conservation of its natural, heritage and cultural values, flora and fauna, the maintenance and enhancement of access, and appropriate land use practices and conservation issues;
- (iii) providing information to persons wishing to carry out activities in the coastal marine area; and
- (iv) providing information on coastal hazards so that potential damage can be avoided.

Principal Reasons

Providing information gives people a better idea of the resource concerns and therefore a better appreciation of the responsible use of resources.

(g) Investigations

The Regional Council will undertake the following investigations to guide future policies for the management of the coastal marine area and the coastal environment:

- (i) Identification of areas for improvement and/or control of access.
- (ii) Identification of areas for different types of recreation to reduce conflicts.
- (iii) Identification of other areas of significant cultural, heritage or conservation value.
- (iv) Identification of significant ecological processes in the coastal marine area and potential adverse effects of use and development on them.
- (v) Identification of features contributing to the "natural character" of the Canterbury coast.

Principal Reasons

To provide information on factors that will assist in the future planning for the coast.

2. District plan provisions

District/city councils in the preparation, variation, change or review of their district plans, through the exercise of their functions outside the coastal marine area should consider:

- (a) including provisions in their district plans to give effect to Policy 1.
- (b) including provisions in their district plans to give effect to Policy 2 (a).
- (c) including provisions in their district plans to give effect to Policy 3.
- (d) including provisions in their district plans to give effect to Policy 4.

11.4 Environmental Results Anticipated

- (1) Protection of regionally significant natural landscapes/seascapes of Kaikoura, North Canterbury coastal landforms, Banks Peninsula and Kaitorete Spit-Lake Ellesmere (Waihora).
- (2) Recognition, protection and enhancement of the life-supporting capacity of coastal ecosystems, including mahinga kai.
- (3) Preservation of natural character and protection of heritage and amenity values.
- (4) Reduced adverse effects on the environment from commercial development (e.g. port operations at Lyttelton and Timaru).
- (5) Reduction of noise nuisance in the coastal area.
- (6) Reduction of use conflicts in the coastal environment.
- (7) Improved public access where this is desirable.
- (8) Controlled public access where this is required.
- (9) Protection of areas of special cultural significance to Tangata Whenua.
- (10) Increased ability for Tangata Whenua to exercise kaitiakitanga.
- (11) Improved water quality where this is necessary.
- (12) Reduced potential for damage from natural occurrences such as sea-water inundation.

11.5 Monitoring Effectiveness

- (1) Changes in recreational use and noise.
- (2) Trends in compliance with resource consent and permitted activity conditions.
- (3) Community complaints for matters such as noise and recreation conflicts.
- (4) Accessibility of the coastline to the public.

