PART 3: SIGNIFICANT RESOURCE MANAGEMENT ISSUES IN TASMAN DISTRICT

4.0 TANGATA WHENUA INTERESTS

Whaia te iti kahurangi,
Ki te tuohu koe,
Me he maunga teitei.

Seek ye the treasures of your heart,
If you should bow your head,
Let it be to a lofty mountain.

4.1 Introduction

There have been many centuries of Maori settlement in Tasman District, particularly in areas with easy water access and fertile soils. There are six tangata whenua iwi, or Maori tribes with ancestral occupation rights, or rights by conquest, over areas or rohe in the District. These iwi are Ngati Rarua, Ngati Tama and Te Atiawa in Golden Bay and Tasman Bay, Ngati Koata and Ngati Kuia in eastern parts of Tasman Bay, and Poutini Kai Tahu in the south of the District. Ngati Apa preceded the former four iwi, and prior to Ngati Apa occupation, Ngati Tumatakokiri were tangata whenua. Ngati Kuia has remained tangata whenua in the area since earliest Maori occupation.

Today, Maori hold scattered areas of ancestral land, while most lands have passed into Crown or Pakeha ownership. Some areas have been retained in continuous Maori ownership. Many sites or areas are of value for their traditional or spiritual significance. These are wahi tapu. Many Maori in the District have associations with iwi who are not tangata whenua in the District.

Maori hold strong cultural and spiritual beliefs over the use and management of natural resources. Both long-standing occupation and use of these resources, and the affirmation of these interests and entitlements by the Treaty of Waitangi provide an important context for resource management in the District through the actions of the Council and the community at large. There is a growing awareness in the community of Maori interests, particularly regarding land, water and coastal resources.

Under the Resource Management Act the Council has a number of responsibilities and obligations towards Maori, over and above the general responsibilities in dealing with the interests of the community. These obligations are to be fulfilled through Council's resource management decision-making. They are:

(i) to recognise and provide for traditional Maori interests in their ancestral lands, water, wahi tapu and other taonga;

(ii) to take into account the principles of the Treaty of Waitangi;

(iii) to have particular regard to the concept of kaitiatikanga;

(iv) to consult with the tangata whenua of the District in the preparation of all resource management plans; and

(v) to have regard to any relevant planning document recognised by an iwi authority affected by any resource management plan.

The Council acknowledges the special place of Maori in the community through their long-standing connections with and use of natural resources. The philosophy and principles of Maori (wanata, kaupapa) in the management of resources are closely aligned with concepts in the Resource Management Act. These perspectives also have a spiritual dimension for Maori. The mauri, or the essential lifeforce, and wairua, or spiritual essence, of natural and physical resources, whether living or inanimate; the oneness of the natural and physical environment with the spiritual beings, Rangi and Papa and their uri, and with tupuna or ancestors, and through all these things, with present day Maori themselves, are part of the kaupapa Maori to be understood and respected in pursuing sustainable resource management.

Retention by tangata whenua of tino rangatiratanga or traditional full tribal authority over key natural resources is recognised under the Treaty of Waitangi. Despite the development of government or kawanatanga, including statutory laws, such provision may be pursued under the Resource Management Act through a range of measures.

The matters that have been identified by Council and iwi as being of resource management significance in the District can be summarised as:

(i) the development of an ongoing relationship between tangata whenua iwi and Council concerning matters of resource management significance;

(ii) providing for and giving effect to the interests of tangata whenua iwi concerning the sustainable management of resources, including lands, waters, the coast, wahi tapu and other taonga;

(iii) ensuring that opportunities for commercial resource development interests of Maori are able to be pursued consistent with sustainable resource management.

4.2 Developing Relationships between the Tangata Whenua and Council

The Maori community belonging to tangata whenua iwi is not numerous in the District. There has been a recent history of contact between Council and iwi and consultation on particular matters. However, processes for communication to secure agreed approaches on resource management issues are still developing. There is a commitment to periodic dialogue through meetings between appropriate representatives of Council and the tangata whenua, convened at the initiative of either party. The Act has clear obligations on Council to consult on resource management policy issues and to see that its resource management decisions and actions account for tangata whenua interests as protected by the Treaty of Waitangi.

Council needs to consider in relation to the Treaty of Waitangi how sharing of responsibilities for the management of resources could develop. This need arises from the balancing of Council interests in government for resource management (kawanatanga), with the interests of the tangata whenua in exercising traditional authority (tino rangatiratanga) over traditionally valued and used resources. These interests extend beyond ancestral lands held by iwi.

There are a range of ways whereby communication between Council and the tangata whenua may develop into a role for tangata whenua in resource management. These ways include:

(i) meetings of representatives of iwi and Council and exchange of spoken or written views;

(ii) use of staff or officers to promote good communication;

(iii) representation of iwi on Council committees;

(iv) establishment and delegation to an appropriate iwi consultative committee, the authority to:

  (i) recommend resource management actions to Council;
  (ii) decide on certain resource management matters;

(v) transfer to appropriate iwi authority, the authority to:

  (i) recommend to the Council any matter for decision;
  (ii) carry out appropriate functions, powers or duties concerning resource management.

Council is concerned to see that the style of consultation followed and whatever relationship develops from that consultation, sits comfortably with both the tangata whenua iwi and with Council itself. The relationship which evolves between iwi and Council in Tasman District need not conform with ideas or practices developed elsewhere in the country.

Policy 4.1

The Council will pursue a process of consultation and participation in resource management between itself and the tangata whenua of the District.

EXPLANATION AND REASONS:

Council needs to consult iwi and incorporate tangata whenua interests in its resource management decision-making. Iwi have traditional values and rights concerning natural resources safeguarded by the Treaty of Waitangi. There are opportunities for iwi to pursue kaitiakitanga or stewardship of resources under Council control. It is important that Council and iwi develop a process of interaction that is acceptable for both parties.

METHODS OF IMPLEMENTATION:

(i) Council will continue to develop with tangata whenua iwi a process of consultation and negotiation on resource management interests and issues.

(ii) Council will establish in consultation with iwi, the appropriate potential for iwi representation, or delegation or transfer to iwi, concerning resource management responsibilities.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Increased incorporation in resource management decisions of tangata whenua kaupapa and tikanga (principles and practices).

(ii) Enhanced likelihood of sustainable management results.

PERFORMANCE MONITORING INDICATORS:

(i) Satisfaction of tangata whenua with nature of process of consultation and with results.

(ii) Satisfaction of Council with nature of process of consultation and with results.

(iii) Evidence of enhanced relationship between tangata whenua and Council.

Addresses Issue 4.2.

4.3 Environmental Management Kaupapa and Tikanga

Maori hold many traditional philosophical views or principles concerning the management of the natural environment. Arising from such kaupapa are traditional practices and customs, or tikanga. These views and practices are both cultural and spiritual in nature. It is impossible to convey in a few English words the depth and variety of kaupapa Maori for environmental management, and associated tikanga Maori. A few key perspectives are particularly significant in relation to resource management today.

The concept of the mauri or spiritual essence of all things in the environment, is a key part of the single or unitary view of the natural world. From this concept flows the fundamental need to support and sustain the mauri in using all natural resources.

All natural environments - lands, waters, and the coast - are of great significance in the traditional Maori view of the world. Water is considered to be a basic essence of life to Maori. Water is part of all things, so its mauri is of great binding force amongst life and physical processes. Water has spiritual significance to Maori in relation to the creation of the environment, as expressed through Maori mythology. Through the creation process, many forms of water were generated. Each has a distinct mauri, and each form of water had distinctly separate uses or values, or was held to be tapu for those purposes. Keeping separate these forms of water was considered essential. Water held a source of food, and was used for drinking, bathing and for healing practices. Thus the concept of contamination includes to Maori, abhorrence of the mixing of human and other wastes with water, particularly water that could be used for food gathering or drinking. Tangata whenua held their mana whenua and mana moana (power or authority over land and water), spiritually given through their ancestry, to control these resources through a range of practices to sustain the mauri of waters. Specific water bodies were regarded as taonga or treasures of the tangata whenua.

Restoration and enhancement of the life-supporting capacity of waters, and avoidance or mitigation of all forms of water contamination are directives under the Act fully in accord with Maori kaupapa perspectives.

Land or whenua is the origin of all Maori self-identity, both in cultural and spiritual terms. Whenua also means placenta, indicating both physical and spiritual sustenance provided by areas of ancestral land. Land provided home, forest and food resources, and became bound together with an iwi's sense of identity.

The coast provided an immensely important source of food or kaimoana for Maori. Still today the mana of iwi is closely tied to their ability to secure kaimoana for hui, tangi and other significant occasions. Traditional seafood collecting grounds are known as mahinga kai or mahinga mataitai.

An intricate system of customary practices or tikanga governs all uses of land, water, and coastal resources. In addition to maintaining water bodies as tapu for certain purposes, the Maori used the practice of rahui or imposing a ban or prohibition on the use of areas for collection of food. Rahui was an important means of conserving supplies or stocks of food and other resources, in order to sustain the mauri and so protect future uses.

Many traditional or spiritual associations with specific places developed great significance for Maori. These are wahi tapu or sacred places. These too have mauri and the mana of tangata whenua relies on special knowledge of their existence and significance. Protection of the physical and spiritual integrity of wahi tapu is a significant aspect of Maori kaupapa. Sites of former occupation by Maori as revealed by archaeological investigations naturally have significance also, and many are regarded as wahi tapu.

Tangata whenua were the custodians or kaitiaki of areas or valued resources. Mana was enhanced through successful ownership and management of areas of natural resources.

Traditional Maori kaupapa concerning the environment and its management has much in common with the sustainable management principles of the Resource Management Act. It is significant that

many traditional values and perspectives according to Maori are also shared by many people in the wider community. To this extent, current Maori concerns about protection of freshwater and coastal resources from contamination or over-use are not uniquely Maori issues. They are matters of public concern where tangata whenua have added their significant cultural perspective, and Council must take heed of these concerns through the strong directives in the Act.

Policy 4.2

Council will seek protection of wahi tapu, water, ancestral lands, sites, coastal resources and other taonga from disturbance or contamination in a manner consistent with tangata whenua kaupapa and tikanga while acknowledging the significance of private interests in land and other resource users.

EXPLANATION AND REASONS:

Both the Act and kaupapa Maori require the management of land, water and coastal resources so as to sustain the life-supporting capacity of these resources. The Act also directs the protective management of sites or places of traditional or spiritual significance to tangata whenua. There is a need for such management to recognise the importance of the interests of landowners.

METHODS OF IMPLEMENTATION:

(i) The Council will develop appropriate policies and carry out methods including rules, investigations and reporting, and advocacy for sustainable practices, in all resource management plans, to ensure such protection.

(ii) Council will consult with and be guided by the tangata whenua in the development and implementation of these policies, including pursuit of appropriate methods of specified or otherwise assured protection of wahi tapu and archaeological sites.

(iii) Council will consult and will encourage tangata whenua also to consult with any landowner or resource user in circumstances where tangata whenua interests may affect, or be affected by, a use of land or other resource.

(iv) Council will consider appropriate delegations or transfers of responsibilities to tangata whenua for such protective management.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Enhanced quality of water and coastal resources in relation to tangata whenua and general community expectations.

(ii) Reduced risk of damage to values associated with wahi tapu or archaeological sites.

PERFORMANCE MONITORING INDICATORS:

(i) Rate of change of quality of water and coastal resources in relation to expressed tangata whenua expectations.

(ii) Incidence of abuse or damage to values associated with wahi tapu, natural resources or areas regarded as significant taonga by the tangata whenua.

Addresses Issue 4.3.

4.4 Commercial Interests of Iwi

There are a number of situations in the District where iwi or iwi-based organisations seek to develop land, water or coastal resources in a commercial manner. Sometimes these commercial aspirations face constraints imposed by a combination of history or the availability of resources. Two such situations have particular resource management significance for iwi.

In the Motueka/Riwaka Plains and Moutere areas of the District, iwi-based organisations own or administer large tracts of land, largely through perpetual leasehold arrangements. Legislation constrains the ability of the Maori lessors to manage the leases. Since the creation of such lands as Maori reserved land, the Maori owners have had no direct influence in its management and have simply been recipients of nominal rents. The establishment of trust boards and incorporations such as Wakatu Incorporation and the former Whakarewa School Trust Board to administer the lease arrangements did little to free up the direct control by iwi of their ancestral lands. The leaseholders or lessees were able to develop such lands for variety of productive purposes. Water rights have been held by some lessees for such purposes and give significant value to the lands concerned. In some situations, no water permit exists in relation to particular parcels of land. The concern of the two iwi organisations, Wakatu Incorporation and now the Ngati Rarua-Atiawa Iwi Trust, is that there is no legal connection between land ownership and the holding of a consent to take or use water for production on that land. A lessee might not use the current water permit and have it lapse or be cancelled. If this happened, the available water could be reallocated by Council. Alternatively the lessee could seek to transfer the permit for exercise at another site away from the Maori reserved lands and for private financial gain. Where no water permit is held by anyone in relation to particular lands, it might be difficult for the Incorporation or the Trust to hold new permits necessary to irrigate all such lands, because they would be unable to exercise them directly. In all these cases, the Maori lands concerned might suffer reduced authorised access to water for commercial crop production. The Council can seek to ensure through planning policy and decisions on water rights, including transfers of water permits from site to site, that opportunities for access to water for such lands remain, either through water permits or through water allocation provisions. This issue is particularly significant for Maori land under perpetual leasehold tenure. With privately held land there is a single holder of both land and access to water.

A further issue of commercial significance is the provision of opportunities for coastal resource development through aquaculture. Commercial fishing opportunities for Maori have been provided for under the Maori Fisheries Act 1989, the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 and the Fisheries Amendment Act (No.2) 1992, by the government, in recognition of entitlements to fisheries resources acknowledged by the Treaty of Waitangi and preserved by former provisions of the Fisheries Act 1983. But opportunity to use coastal space for aquaculture in Golden Bay and Tasman Bay has been significantly limited through prohibitions made under marine farming legislation in 1984 and in force until Council's Regional Coastal Plan is operative. The concern of iwi is that they have interests in areas of coastal space for commercial aquaculture and seek to have areas of space allocated to them. Certain areas of the coast in Golden Bay of traditional significance to tangata whenua are excluded from use for aquaculture and may become maitaitai reserves or taiapure, under Fisheries Regulations. However, iwi seek some certainty in the provision of new opportunities for use of coastal space for commercial aquaculture purposes.

In the issues described, tangata whenua have a legitimate expectation that Council resource management policy will not disadvantage commercial interests of iwi compared with other commercial interests, in publicly administered resources such as water or coastal space. It is appropriate also for Council to consider the need for taking actions that ensure access to such resources for tangata whenua if there is a significant likelihood of disadvantage resulting, despite such policies. Tangata whenua entitlements to traditionally used resources such as land, water and the coast that were confirmed by the Treaty of Waitangi, have been substantially diminished by laws and the development of New Zealand since the signing of the Treaty. One key principle of the Treaty of Waitangi derived by the Courts and the Waitangi Tribunal is that of adequate protection of Maori in the use of their resources, to the fullest extent practicable. The Council as a statutory agent of the Crown, has an implicit obligation to anticipate and respond to situations where a degree of protection of iwi interests is necessary. Such protection could properly extend to commercial as well as non-

commercial interests. Clearly, a careful appraisal of all relevant considerations would be essential before such initiatives were to be taken by Council.

Policy 4.3

The Council will ensure that tangata whenua interests in commercial uses of land, air, water and the coast are not disadvantaged relative to others, and will consider provision for access to such resources where necessary and appropriate.

EXPLANATION AND REASONS:

Opportunities for the tangata whenua to develop resources now under public administration may be constrained by historical or other circumstances. The Treaty of Waitangi means that actions may need to be taken by Council to ensure that resource use opportunities can be taken up by the tangata whenua.

METHODS OF IMPLEMENTATION:

(i) In developing resource management plans, the Council will consider the need to provide for equality of opportunity between commercial interests of iwi and other commercial interests.

(ii) Where situations require it, Council will also consider the need to provide any additional protection of such interests so that they may be effectively and appropriately realised.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) No material disadvantage to tangata whenua in realising their interests in water or the coast by reason of explicit Council policy.

(ii) Successful uptake by iwi of commercial uses of water and the coast.

PERFORMANCE MONITORING INDICATORS:

(i) Degree of satisfaction of the tangata whenua in resource management plans in relation to access to water and the coast.

(ii) Degree of satisfaction of Council in its provision for active protection of iwi interests in water and the coast.

Addresses Issue 4.4

5.0 URBAN DEVELOPMENT

5.1 Introduction

The District contains over thirty small urban settlements in a rural setting - only two towns, Motueka and Richmond, have populations of over 5000. The physical locations and urban development issues are quite varied. Most settlements are coastal, and many have historic heritage features. Urban populations are increasing at a significant rate in Motueka and Richmond and in many smaller settlements in the Waimea area and in Golden Bay. A few of the inland towns including Tapawera and Murchison have slightly declined in numbers in recent years. This section deals with the following urban development issues:

(i) Allocating the use of high quality lands adjacent to urban areas;

(ii) Managing natural hazard risks to urban growth;

(iii) Water allocation for urban growth;

(iv) Cross-boundary conflicts between adjacent urban and rural areas;

(v) Urban expansion in areas of natural coastal character;

(vi) Managing urban transport systems and urban development.

(vii) Maintenance and enhancement of the quality of the urban environment.

5.2 Urban Development Issues

Issue 5.1

ALLOCATION OF HIGH QUALITY PERIURBAN LANDS

Urban expansion onto adjacent areas of highly productive soils in some parts of the District has resulted in their irreversible loss. Horticulture is a significant economic activity in Tasman District and areas of highly versatile land for horticultural or other high value uses are limited. These areas are adjacent to the significant urban centres of Richmond, Motueka and Takaka. Where there is continuing urban growth, especially in centres adjoining areas of high quality soils, a means of sustaining the potential of the land resource to meet the needs of future urban dwellers and horticulturalists has to be found. This may require a slowing of growth on the urban fringe by encouraging more medium density development in the core of the major centres, or by containing peripheral growth. Continued peripheral growth may divert public funds needed to upgrade existing infrastructure.

The principal benefit of containment of urban boundaries in Richmond, Motueka and other centres is that existing investment in horticulture can continue and the supply of limited horticultural land is not diminished. Also, extension of service infrastructure to fringe areas is not required. Containment could itself encourage the more efficient use of present urban space such as through multi-unit housing in some settlements where there is un-met demand. But if no additional land is provided on the fringe there will be more demand for resubdivision of existing lots and there are likely to be costs in upgrading existing services to cope with the increased demand. The cost of new sections is also likely to rise through scarcity of sections. Resubdivision, if not carefully managed, can cause a loss of amenity values such as large sections with trees and older dwellings. However, some people may perceive a loss of lifestyle choice if a continued supply of suburban sections is not provided.

Addressed by Objectives 5.1, 6.1 and Policies 5.1, 6.1.
Related issue is Issue 6.1.

Issue 5.2

NATURAL HAZARDS TO URBAN DEVELOPMENT

Continued urban development brings pressure to develop less physically suitable land, especially if there is also a pressure to protect high quality soils. The District is especially susceptible to the natural hazards of flooding, land instability, coastal erosion, and earthquake shaking. Urban development should be discouraged from such areas. Global sea level rise will exacerbate existing problems of coastal erosion in the District. There is a need to identify areas at risk from flooding, instability, erosion and earthquake shaking hazards. The issue is then the levels of risk reduction that should be imposed on urban development, by avoiding or restricting development in such areas. High levels of reduced risk would mean community expenditure in structural protection or in restricting urban development of hazard-prone areas. Alternatively, lower levels of risk reduction would allow individuals to develop in areas at risk but with mitigation measures being required where practicable.

Addressed by Objectives 5.2, 11.1 and Policies 5.2, 11.1, 11.2, 11.3, 11.4
Related issues are Issues 11.1, 11.2, 11.3, 11.4.

Issue 5.3

WATER ALLOCATION FOR URBAN GROWTH

Increased urban population growth is placing increased demands on finite underground water supplies. Provision of an adequate supply of water will enable urban areas to continue to grow. In Motueka, access to water is restricted through limited reticulation and shallow well extraction. In Richmond, the quality of the groundwater supply could be improved. However, the water resource must be allocated to all significant uses, and within the sustainable limits of the resource. There is a need to allocate an appropriate amount of available water for residential and industrial purposes. As well, horticultural demands need to be considered. Unless restricted, continued urban growth will require further allocation of available water. Investigating alternative supplies and producing education material for the public on the need to use the limited water resource efficiently, are further ways of resolving this issue.

Addressed by Objectives 5.3, 7.1 and Policies 5.3, 7.2, 7.3, 7.5.
Related issue is 7.1.

Issue 5.4

URBAN/RURAL BOUNDARY CONFLICTS

The District is an important horticultural area and conflicts often arise on the urban boundary between urban activities and the adverse effects of rural activities such as agrichemical spraying; smoke nuisance and contamination from domestic fires and burning of farming, orchard, forestry or industrial waste; operating bird scarers and hail guns; planted shelter belts; and stock farming such as piggeries. This issue also extends throughout rural areas where there are cross-boundary conflicts between rural properties.

Similar conflicts may occur with some industries, the effects of which may be acceptable in a rural location but not in an urban area. That is, either the amenity of the urban neighbourhood of the industry would be reduced, or the industry be required to meet urban environmental performance standards.

Addressed by Objectives 5.2, 6.3 and Policies 5.4, 6.2.
Related issue is Issue 6.4.

Issue 5.5

COASTAL DEVELOPMENT

Coastal land is in demand for residential and tourist developments. Some coastal land in Golden Bay, Abel Tasman, Kaiteriteri, Mapua-Ruby Bay is a highly valued landscape and recreational resource for residents and visitors to the District. Special landscapes and natural areas need identification and protection from the effects of urban settlement encroachment and rural-residential development.

Addressed by Objectives 5.2, 9.6 and Policies 5.5, 9.7.
Related issue is Issue 9.7.

Issue 5.6

EFFECTS OF LAND TRANSPORT ACTIVITIES AND URBAN DEVELOPMENT ON EACH OTHER

The current land transport system is a roading network in urban and rural areas, maintained to standards in accord with expected traffic usage. Most use of this system is by private vehicles. Major

routes carry high proportions of heavy vehicles as well. The use of roads generates noise, emissions, use of fossil fuel, and creates traffic safety risks and sometimes traffic congestion. The reliance on roads for private vehicle use continues and reinforces the pattern of roading extension and roading maintenance, with continued high public expenditure. This pattern influences the progressive form of urban development, including its extent and location and the area of urban land physically covered by roads. Urban development can create adverse effects on the efficiency and safety of the roading network. Changes in traffic flow resulting from redevelopment and redistribution of land use activities in urban areas, ribbon development (as at Wakefield and Motueka), sporadic residential properties (as at Hope, Riwaka and Motupipi), and the need to construct urban by-pass routes, demonstrate some of these adverse effects. Other ways of delivering transport services to the community besides providing roads for private vehicle usage include provision for pedestrian and cycle traffic, and support for urban passenger transport services. The issue is how to provide for a mix of transport services to avoid or minimise the adverse effects of roads and their current uses on urban development, and how to manage urban growth to maintain the efficiency and safety of roads.

Addressed by Objectives 5.4, 12.2 and Policies 5.6, 5.7, 12.5.
Related issue is Issue 12.3.

Issue 5.7

MAINTENANCE AND ENHANCEMENT OF THE QUALITY OF THE URBAN ENVIRONMENT

Growth of the District's main urban centres brings new residential, commercial and industrial activities. Business areas including main retail streets require upgrading and enhancement of pedestrian facilities and attractions. Commercial and small site industrial areas can share many features in common with residential areas in order to blend and attract new businesses. Industrial development with relatively large site requirements has visual, noise, heavy traffic and other environmental effects that require avoiding, remedying or mitigating through land allocation, buffering and performance standard setting. All areas of urban development require an appropriate standard of provision of network utility services to enhance convenience, safety, communications and other generally essential amenity values. The location and form of such services may generate space, visual, land disturbance and other adverse effects that also require management. Funding for environmental enhancement measures must be apportioned between land subdividers and developers, and the community at large through the Council.

Issues arise in deciding how much and in what way, private developers should pay towards improvements, as well as in establishing the environmental performance requirements for urban activities. Different people may benefit from requirements or improvements in different parts of urban centres. Within the residential areas the benefits of environmental enhancement are primarily for those who live there. In the main commercial areas and the main access routes, the benefits are to all those using these areas, including tourists.

The smaller communities may provide retail, health, educational and other services, some degree of employment for the resident labour force, a social centre for the local community, and a prime location for contractors and other businesses directly associated with agricultural and forestry production. Many small towns have areas with historical character or other amenity features. In allowing development in small settlements, care must be taken to ensure that the essential character of the town is maintained.

Existing as well as new urban activities can degrade the physical qualities of the urban environment, through the effects of traffic, air contamination from smoke and other emissions including noise, and visual appearance. There is a need for such adverse effects to be managed through siting, design and other performance requirements.

Addressed by Objective 5.5 and Policy 5.7.

5.3 Urban Development Objectives

Objective 5.1

Avoidance of the loss through urban development, of the potential of land having high productive value to meet the needs of future generations.

REASONS:

Allocation of periurban land for urban expansion rather than for high value production activities is an irreversible community cost. Urban expansion should minimise the extent of encroachment onto land with such qualities unless there are significant community benefits.

Addresses Issues 5.1, 6.1; achieved by Policies 5.1, 6.1.

Objective 5.2

Avoidance, remedying or mitigation of the adverse effects arising from urban development locating or expanding in:

(i) hazard-prone areas; and

(ii) coastal areas; and

(iii) areas where the amenity standards of adjacent rural activities would not be accepted in an urban context; and

(iv) areas of natural character, outstanding natural features and landscapes, significant indigenous vegetation or fauna, or other heritage values; and

(v) Wetlands, lakes, rivers, and their margins.

REASONS:

Urban development can create adverse effects for individuals and communities when certain locations are chosen. These include risks from natural hazards, compromising the natural character of coastal areas, and boundary conflicts with adjacent intensive rural land uses. Such effects need to be avoided, remedied or mitigated to an appropriate degree.

Addresses Issues 5.2, 5.4, 5.5, 6.3; achieved by Policies 5.2, 5.4, 5.5, 6.3.
Related objectives are Objectives 9.6, 11.1.

Objective 5.3

Urban development that is consistent with the limited availability of water for all abstractive purposes.

REASONS:

Continued urban growth needs an adequate supply of water for residential and industrial purposes. But limits to water availability may require efficient use of water including conservation measures, alternative supplies, or restrictions on urban growth in order to sustain the supply.

Addresses Issues 5.3, 7.1; achieved by Policies 5.3, 7.2, 7.3, 7.5.

Objective 5.4

A safe and efficient urban transport system.

REASONS:

Both urban activities and road networks interact and can create problems of efficiency and safety, particularly in expansion of urban areas. Reliance on the roading network can use up space, extend urban areas and can overlook other ways of establishing a safe and efficient transport system. There is a need to ensure appropriate interactions between urban form and location and the transport system that services urban areas.

Addresses Issues 5.6, 12.3; achieved by Policies 5.6, 5.7, 12.5.

Objective 5.5

Maintenance and enhancement of urban environmental quality, including amenity values and the character of small towns.

REASONS:

Amenities are sought by the community in all areas of the urban environment, including improvements to existing areas such as business areas. Enhancing the appearance and design of buildings and adjacent spaces, as well as avoiding, remedying or mitigating any adverse effects of their uses, are important in urban environmental quality.

Addresses Issues 5.7; achieved by Policy 5.7.

Objective 5.6

Avoidance, remedying or mitigation of the adverse effects of the form and location of urban development on efficient transmission and use of all forms of energy.

REASONS:

Urban areas are areas of human activity where energy transmission and use is concentrated and which place demands on the means of generating energy. The location and form of urban areas can have a significant effect on the cost of generating and transmitting energy and the efficiency of energy use in the community.

Addresses Issues 5.7, 12.2; achieved by Policies 5.1, 5.7, 12.2.

5.4 Urban Development Policies and Methods

Policy 5.1

Council will avoid the loss of land of high productive value in allowing for further urban development, while having regard to:

(i) the efficient use of resources including land, infrastructure, and energy;

(ii) the quality of the urban environment including:

(a) access to services;

(b) water and air quality;

(c) amenity values.

EXPLANATION AND REASONS:

The main urban areas of Motueka, Richmond and Takaka as well as some smaller settlements are located on fertile plains that also have a favourable climate for biological production. Such land is a finite resource and urban development is encroaching onto it. High value production in the Tasman District is a major contributor to the national and regional economy and existing operations are likely to be displaced by continued urban development unless it is contained.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications to establish locational limits to urban areas.

(ii) The Council will develop service provision plans and will provide for private contributions to services in the District Plan, to manage the rate and locational extent of utility services including roads, water supply, sewerage and stormwater extensions.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Foreclosure of the historical trend of urban encroachment on high quality lands.

(ii) Urban infill and consolidation and progressive rationalisation of utility service networks within defined urban areas.

PERFORMANCE MONITORING INDICATORS:

(i) Pattern of urban expansion over time in relation to:

(a) historical urban boundaries; and

(b) area of high quality land not occupied by urban land uses.

Implements Objectives 5.1, 6.1, to address Issues 5.1, 6.1.
Related policies are Policies 5.4, 5.7, 12.2.

Policy 5.2

The Council will avoid locating new urban development in areas subject to natural hazards, except that extensions in areas that are so subject may be allowed provided adequate mitigation measures are undertaken.

EXPLANATION AND REASONS:

There are community benefits in avoiding or limiting human occupation of hazard-prone areas as both public and private assets may be put at risk through such occupation. In some situations it may be appropriate to allow individuals to occupy areas at risk provided that such risks may be mitigated to an adequate standard and that no significant public costs are likely to be incurred in cleanup after hazard events.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications to:

(a) provide for urban activities away from areas subject to natural hazards, after investigating the nature and extent of natural hazard risks; and

(b) specify the requirements and standards for risk reduction in areas subject to natural hazards where development is or will be allowed.

(ii) The Council will provide to the public information on the nature and extent of natural hazard risks.

(iii) The Council will limit provision of publicly funded utility services in areas subject to natural hazards to an extent consistent with risk reduction measures that have been or will be carried out.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduction in likelihood of damage to private and community urban assets in the District.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence of damage from hazard events affecting new urban areas.

Implements Objectives 5.2, 11.1, to address Issues 5.2, 8.1, 11.1, 11.2, 11.3, 11.4.
Related policies are Policies 8.1, 11.1, 11.2, 11.3, 11.4.

Policy 5.3

Council will allocate sufficient water for urban development that incorporates water conservation measures, consistent with the provision for other abstractive uses, while maintaining instream and life-support values of available water resources.

EXPLANATION AND REASONS:

The availability of fresh water is limited and urban supply uses compete with other productive uses of the water. It is necessary for community wellbeing to have adequate water for urban development, but sustainable management of available water may require limits to be placed on urban growth, unless more efficient use of urban water or alternative supplies raise such limits.

METHODS OF IMPLEMENTATION:

(i) The Council will develop allocation policies and rules in regional plans for water management for the Waimea catchment and the Motueka/Riwaka Plains and make decisions on resource consent applications to establish water supply limits for urban and other abstractive uses, including irrigation, that incorporate requirements for efficient use of such supplies.

(ii) The Council will develop water supply service plans, including conservation measures, to address urban expansion requirements.

(iii) The Council will provide educational programmes to avoid wastage of water.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Urban expansion consistent with enhanced water conservation measures and sustainable supply of water for urban, irrigation and natural ecosystem needs.

PERFORMANCE MONITORING INDICATORS:

(i) Adverse effects of providing water supplies to new urban development on irrigation and other abstractive uses, and instream and life support values of relevant water resources.

Implements Objectives 5.3, 7.2, to address Issues 5.3, 7.1.
Related policies are Policies 7.2, 7.3, 7.4.

Policy 5.4

The Council will avoid, remedy or mitigate adverse effects across property boundaries, especially between urban and rural land use or development, including effects of:

(i) noise;

(ii) odour;

(iii) shelter-belts (microclimate and biological effects);

(iv) contaminant discharges;

(v) fire risk.

EXPLANATION AND REASONS:

A number of predominantly intensive rural land use activities may create adverse effects for adjacent residential or community activities on the urban fringe. Examples of these conflicts are shading from shelterbelts, agrichemical spray drift, offensive odours, noise and fire hazard from flammable vegetation. Certain urban activities in rural areas may also generate adverse boundary effects for adjacent properties. Emissions from the burning of wastes occur from both urban and rural activities. The Council seeks to manage the adverse effects where neighbour or community conflicts are likely.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in regional and district plans and make decisions on resource consent applications to:

(a) establish environmental performance standards for limiting the effects of agrichemical spray discharges, planted shelterbelts, noise, emissions from burning, offensive odours from stock farming and other significant cross-boundary effects; and

(b) require locational buffers between adjacent rural and urban activities or appropriate locations for specified urban activities within rural areas; and

(c) require where necessary, buffers around national parks, reserves, and land administered and held under the Conservation Act 1987 and listed in the First

Schedule of that Act, and other areas of significant natural and heritage value, to mitigate adverse effects from activities on adjoining land; and

(d) have regard to existing rural activities and their standards of effects management in implementing (a), (b) and (c) above.

(ii) The Council will provide information on land management methods that avoid, remedy or mitigate adverse effects across property boundaries.

(iii) The Council will promote good practices in the carrying out of specified rural activities that may generate adverse effects across property boundaries for adjacent urban and rural areas.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduction in extent, incidence and severity of adverse cross-boundary effects of rural activities on adjacent urban communities, and urban activities in rural areas.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed and reported incidence of conflicts across periurban property boundaries.

Implements Objectives 5.2, 6.3, to address Issues 5.4, 6.4.
Related policies are Policy 6.2, 6.4.

Policy 5.5

The Council will protect the natural character of the coastal environment from adverse effects of further urban development, including effects on:

(a) natural features and landscapes, such as headlands, cliffs and the margins of estuaries;

(b) habitats such as estuaries and wetlands;

(c) ecosystems, especially those including rare or endangered species or communities;

(d) natural processes, such as spit formation;

(e) water and air quality;

having regard to the:

(i) rarity and representativeness;
(ii) vulnerability or resilience;
(iii) coherence and intactness;
(iv) interdependence; and
(v) scientific, cultural, historic or amenity value;

of such features, landscapes, habitats, ecosystems, processes and values.

EXPLANATION AND REASONS:

The Act requires the preservation of the coast's natural character and its protection from inappropriate development. Coastal land is a finite resource and an important tourism and recreation resource. There is a continuing demand for residential development on coastal land, but the appropriateness of new urban development must be carefully examined in relation to natural values.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications to contain and manage the effects of any further urban development of coastal areas.

(ii) The Council will promote the protection of the natural values of the coast and require reserves to be set aside as necessary or negotiate with the land owners to purchase.

(iii) The Council will develop policies and rules in the Regional Coastal Plan and make decisions on resource consent applications to protect natural areas of foreshore or seabed consistent with provisions in its District Plan.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Protection of key areas of natural character adjacent to existing coastal settlement areas.

(ii) Containment of the extent of coastal settlements.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence of further urban development adjacent to natural areas on the coast.

(ii) Extent of natural areas on the coast formally protected.

Implements Objectives 5.2, 9.6, to address Issues 5.5, 9.7.
Related policy is Policy 9.7.

Policy 5.6

Council will avoid, remedy, or mitigate the adverse effects of:

(i) urban development on the safe and efficient operation of land transport resources, including effects on:

(a) their accessibility;

(b) principal road corridors;

(c) alternative modes of transport; and

(ii) the provision and operation of the land transport system on:

(a) the amenity, convenience, health and safety of people in urban communities;

(b) the health of ecosystems; and

(c) the quality of air, water and soil resources.

EXPLANATION AND REASONS:

Urban development and its accompanying land transport network need to be co-ordinated to avoid, remedy or mitigate adverse effects on each other. Urban expansion may create adverse effects for land transport networks by reducing opportunities for efficient, accessible and safe use of roads, footpaths, walkways, or cycleways. It is also necessary to ensure that extensions to roading networks avoid or minimise interference with the safety and convenience of residential neighbourhoods.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications that provide for:

(a) appropriate location, form, and layout of urban expansion, including the establishment and retention of distinct edges to urban areas, particularly where there are principal land transport corridors;

(b) appropriate standards of design for roads, accessways, footpaths, walkways and cycleways;

(c) appropriate financial contributions from developers towards land transport services;

(d) evaluation of gains and losses where urban expansion or transport systems may affect natural features or ecosystems.

(ii) Council will provide for roading and other urban transport networks in a manner consistent with its Regional Land Transport Strategy.

(iii) Council will investigate the scope for better provision for public passenger transport in and between urban areas.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Provision of safe, efficient and accessible networks for urban transport users in urban expansions or redevelopments.

(ii) Avoidance or mitigation of unsafe or inconvenient living environments in existing and new urban areas, arising from transport networks.

PERFORMANCE MONITORING INDICATORS:

(i) Reported satisfaction of urban residents with land transport network performance.

(ii) Surveyed changes in travel time, roadside noise, incidence of accidents in urban areas.

(iii) Changes in availability of a choice of urban transport modes.

(iv) Reduction in pollution from vehicle emissions.

Implements Objectives 5.4, 12.4, to address Issues 5.6, 12.3.
Related policy is Policy 12.5.

Policy 5.7

Council will seek to enhance urban environmental quality, having regard to:

(i) the design and appearance of buildings and spaces;

(ii) vegetation and open space;

(iii) heritage sites and values;

(iv) pedestrian facilities and traffic management;

(v) noise levels and air quality;

(vi) the relationship between the urban area and the values of its adjoining landscapes.

EXPLANATION AND REASONS:

The many generally small urban centres in the District provide a choice of urban lifestyles and contain many urban features of amenity or heritage value, including community and other services as well as historic character. The Council seeks to protect and enhance urban amenities following urban upgrading or expansion, to maximise the attractions of towns for residential, business and tourist activity while at the same time maintaining the special and unique character of these communities and their environs. The Council also seeks to avoid, remedy or mitigate adverse effects on the physical qualities of towns, such as noise, air contamination, traffic and visual effects.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications to require appropriate standards of environmental performance, amenity and network utility service provision, buildings and open spaces in urban development or redevelopment, including financial contributions to be made by developers.

(ii) Council will consider providing funds to help maintain heritage buildings and sites.

(iii) Council will provide material to promote recognition, protection and enhancement of the amenity and aesthetic values of the towns of the District.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Continued retention and enhancement of existing services and amenities in the District's small towns and main urban centres.

PERFORMANCE MONITORING INDICATORS:

(i) Extent of retention of existing businesses, heritage buildings, town populations.

(ii) Surveyed satisfaction of town residents with quality of amenities and services.

Implements Objective 5.5, to address Issue 5.7.
Related policy is Policy 12.5.

6.0 LAND RESOURCES

6.1 Introduction

Tasman District has an area of 966,500 hectares of land that does not include foreshore or seabed. Most of this area is hilly or mountainous; over 60 percent is land in the national conservation estate (conservation areas or national parks). In physiographic terms, the District consists of:

(i) mountains in the south, west and east;

(ii) upland hills of Moutere Gravel between Motueka and Waimea Rivers;

(iii) lowland valleys and plains of the coastal margins of both Tasman and Golden Bays, including the Waimea, Moutere and Motueka Plains and the Takaka and Aorere River Plains.

Significant land use activities on rural land not in Crown ownership include pastoral farming, forestry and horticulture. Soils in the District are generally poorly fertile, leached hill soils, except for more fertile alluvial soils of the plains and valleys. Land of high productive value comprises approximately 5 percent of the District's land area.

In its simplest terms, the land resource of the District constitutes space for human activities, and contains productive soils and sites, minerals and natural habitats, and supports a variety of natural and modified physical and biological processes. The District's pattern of natural areas, human settlements, farms and forests constitutes an extremely valuable location and landscape for living, production and recreation by both residents and visitors.

The Act allows the Council to consider and address in the Tasman Regional Policy Statement, issues relating to:

(i) the effects of any use, development or protection of land which are of regional significance;

(ii) the control of land use for the purposes of soil conservation, water management, natural hazards or hazardous substances management.

Since the Council is both a regional council and a district council, matters of "regional significance" are identical to matters of "district significance". This allows many significant land resource management issues to be dealt with by the Tasman Regional Policy Statement, as well as by the Council's District and Regional Plans.

The Council's views on the meaning of significant issues are given in Section 1.3 on page 7 of the Tasman Regional Policy Statement.

The following is a summary of land resource issues addressed in this section of the Tasman Regional Policy Statement. Aspects of many of these issues are also water, river, contamination or hazards issues that are addressed in other sections of the Tasman Regional Policy Statement.

(i) There is limited land in the District of high quality or value for biological production. It is subject to increasing demand from a wide variety of competing land uses.

(ii) There is a need to manage the subdivision of rural land so that progressive fragmentation of land for biological production or other activities is an efficient and sustainable use of the land's production potential.

(iii) The District's areas of indigenous vegetation, including indigenous riparian vegetation, provide habitats for indigenous plants and animals and may contribute to soil conservation

and water quality maintenance, and to natural landscapes in the District. These areas may have significant amenity, heritage and other cultural values. Their protection and enhancement is important but can conflict with the productive uses of such lands in private ownership.

(iv) Some effects of rural activities are potentially significant on adjacent rural land users or on the environment. Particular cross-boundary conflicts include the effects of shelter belts, agrichemical spray drift, noise from bird and hail control systems and offensive odours.

(v) Contaminant discharges from many rural activities have a potentially adverse cumulative effect on water quality for supply or life-support purposes, as well as on soil quality. While direct or point sources of contaminants can be readily identified and controlled, indirect or diffuse discharges are more difficult to identify or manage.

(vi) Significant reduction in surface water and groundwater availability can occur through plantings and growth of tall vegetation cover.

(vii) Soil erosion and resultant sedimentation in water bodies occurs naturally but can be accelerated or caused by soil or vegetation disturbance in farming, forestry, mining and urban earthworks activities. Soil damage or loss resulting from land disturbance activities may have significant adverse effects on downstream resources, properties or assets or on the long term productivity of the land.

(viii) There are significant animal and plant pests in the District. The risk of spread of bovine tuberculosis by possums in presently clean areas (for example, Golden Bay), and the control of TB infected possums in other areas (for example, Murchison) is a concern. Plant pests include Johnson Grass, Nassella Tussock, Old Man's Beard and other weeds, particularly in some areas.

(vii) The margins of waterbodies (riparian lands) provide access to the river, often have significant natural values and serve as a buffer between land use activities and river processes, for conservation, recreation and flood protection purposes. The Act requires margins to be managed, particularly for all these purposes, and often there may be conflicts between any of these values and use of riparian margins for stock or crop production, or mineral extraction.

(viii) Mineral resources are of economic importance in the region. Their accessibility may be affected by other land uses. Extraction and processing of minerals are likely to have adverse effects which need to be managed.

6.2 Land Resource Issues

Issue 6.1

SUSTAINING THE HIGH QUALITY LAND RESOURCE

Land has a number of natural and physical features which are in various combinations and conditions throughout the District.

These features include:

(i) type of soil;

(ii) soil's physical characteristics including soil depth, inherent fertility, structure;

(iii) drainage;

(iv) topography;

(v) climatic features:

- (a) ground temperatures;
- (b) sunshine hours;
- (c) frost incidence and severity;

(vi) effects of nearby landforms;

(vii) naturally occurring soil moisture or water availability for irrigation.

These features contribute to the land's inherent or existing productive value. A very small proportion of the District's land resource can be described as having a high inherent productive value where its natural and physical features are such that they provide optimum conditions in the district for plant or animal production. Such lands may also be suited to a range of land uses that are not associated with plant or animal production, such as residential or urban uses. Other lands in the District may also have inherent productive value, but because they are limited in respect of any of the above natural or physical features, their productive value is not high although it may still be significant.

The history of settlement has meant that most service centres and arterial roads are located close to lands with high productive values. While this is a locational advantage for the productive use of these lands, it may continue the demand for non-productive activities such as urban expansion or large site residential uses.

The classification system for productive land in the Tasman District has assessed 5.4% of the area of the District as being versatile or very versatile. These areas are contained within current floodplains or low terraces adjacent to the Waimea, Moutere, Motueka, Riwaka, Takaka and Aorere rivers. This land has few limitations and is suited to a wide variety of primary productive or other high value activities including horticulture, stock or crop farming, plantation forestry or farm forestry, mineral extraction where minerals may be found, rural-residential, residential, other urban activities, recreation and amenity activities. Risks or limitations for these activities may include flooding risk and limited water availability. In most cases competing uses of this land are mutually exclusive and many activities may result in the irreversible loss or compromise of the area for productive purposes. This can arise through covering of soil by structures, roads, or damage to the soil by earthworks, or by the cumulative effects of land fragmentation where economic as well as physical availability of the land area is progressively restricted.

Where no Council action is taken, competing demands and limited availability of such land areas may force the value of the land to higher levels and pressure for intensive land use will develop. Demand for activities to be allowed on high quality land is likely to continue and intensify in the future. While

the social benefits of productive activities may be similar to benefits from non-productive activities, the irreversible loss of the production values of this land will be a long term community cost.

Addressed by Objectives 5.1, 6.1 and Policies 5.1, 6.1.
Related issues are Issues 5.1, 6.2.

Issue 6.2

MANAGEMENT OF THE ADVERSE EFFECTS OF LAND FRAGMENTATION

Land fragmentation is the increase over time in the number of separately developed properties within any area. This arises through successive subdivisions of land to form new land parcels, and associated land development activities such as the establishment of buildings and roads.

Subdivision can be regarded as an event or decision that is a prerequisite to the carrying out of a range of land use activities. Because of this, the effects of rural subdivision and the effects of subsequent land use activities, including effects of changes to land use, can be considered together.

Rural land fragmentation may allow more intensive use of rural land, with more efficient use of some sites for soil-based production activities or other activities, with resulting economic and social benefits. However, there is a range of likely adverse effects of rural land fragmentation. These effects may result from a specific subdivision, or they may be cumulative in nature, particularly where subdivision brings about changes in land use activities or an increase in the intensity of land use over an area.

As land parcels become smaller in size and new buildings, roads and other utility services are established, a cumulative reduction in the range and scale of soil-based production opportunities is likely to result. The productivity of each new site may be maintained or even enhanced with management effort. However, because of:

(i) decreasing area available for production on each new site through increasing physical coverage of part of the area by structures or other areas unavailable for production activities; and

(ii) decreasing size of each new site, creating increasing limitations to realising the productive versatility of that site;

there is an irreversible cumulative reduction in the productive versatility of particular rural areas, or the District at large. This cumulative effect may not be significant in those rural areas of the District having modest or limited inherent versatility. However, the cumulative effect is significant in areas with high productive versatility. In such areas, growth in the number of small sites as separately developed properties, progressively reduces the opportunities for people to carry out a range of soil-based production activities.

There is a need to maintain a range of rural property sizes to allow for continued access to land for a range of productive land uses.

Key pressures for increasing land fragmentation are increased interest in rural "lifestyle" residential living, particularly in areas relatively close to urban settlements, and the economic incentive for existing rural property owners to subdivide their land.

Values of rural land other than its productive value may also be adversely affected by land fragmentation, and these values include:

(i) Natural ecosystem values, including the presence of remnant indigenous vegetation and habitats.

(ii) Visual landscape qualities such as open space, and other amenity values or rural lands.

(iii) The character of rural areas derived from such attributes as open space, and the density, scale, pattern and form of buildings, roads and utility structures, productive activity and absence of signs.

(iv) Historical and cultural heritage sites or areas.

(v) Natural hazard risks to development including flooding, slope instability and erosion.

(vi) Vulnerability of adjacent water bodies including streams and groundwater, to contamination from rural development activities.

As well, other adverse effects of land fragmentation include:

(i) Increased need for utility services, including road access or road upgrading, reticulated water supplies, and wastewater and stormwater disposal and improved urban facilities including recreation, community and commercial facilities. The provision of such services generates adverse traffic generation or other amenity affects and adverse effects on the land resource features or values listed above, or financial costs for the community where such services are not easily provided or able to be funded by the land subdivision or development itself;

(ii) Increased demand for water for domestic or production uses from surface water or groundwater that may not be sustainably available.

(iii) Increased likelihood and intensity of adverse cross-boundary effects such as shading, exposure to spray drift, noise and smells.

Continued intensification through successive rural subdivision and development may result in rural "infill" or urbanisation of rural land. In situations where the effects of extensions to existing urban areas, or creation of rural-residential (low density or large site residential) areas or new urban areas can be sustainably managed, these results may be appropriate and desirable.

However, in other situations, it can be difficult to identify the point at which cumulative adverse effects of rural land fragmentation may become significant, as individual subdivisions and developments may have limited adverse effects on their own. There is a need for Council to be cautious in managing such cumulative effects particularly when they are irreversible, and to identify, where possible, the thresholds for significant adverse effects on land resource features and values, other resources and the amenity values of rural areas.

There is inadequate knowledge of past trends in the fragmentation of productive land in the District, and there is a need to better understand these and likely future trends in the growth of rural properties, and cumulative effects on productive and other land resource values.

Addressed by Objectives 6.1, 6.3 and Policies 6.1, 6.2
Related issues are Issues 5.1, 6.1.

Issue 6.3

PROTECTION AND ENHANCEMENT OF SIGNIFICANT INDIGENOUS VEGETATION, PLANT AND ANIMAL HABITATS, AND NATURAL AND HERITAGE FEATURES IN THE DISTRICT

Indigenous vegetation in the District is largely restricted to public conservation lands. Areas of indigenous lowland forest and indigenous wetland vegetation, both freshwater and coastal, have been largely destroyed since European settlement. Remaining areas support habitats for wildlife and plant communities and many are considered to have significant natural biological and heritage values as

sanctuary, buffer or remnant representative areas of indigenous ecosystems. Indigenous vegetation in some areas may also provide protection against erosion. Indigenous riparian vegetation also has significant value in supporting indigenous and exotic freshwater fish and other wildlife and has landscape and amenity values.

The Forests Act 1949 requires the harvesting and milling of all indigenous timber to be approved by the Minister of Forests under a sustainable forest management plan or permit. This requirement may protect the timber values of some forests but does not prevent the destruction or removal of forest for firewood or for conversion to other land uses. The sustainable forest management requirements of the Forests Act also make the removal of indigenous trees approved under that Act subject to authorisation under the Resource Management Act 1991.

The New Zealand Forests Accord is a voluntary agreement of major forest industry interests and conservation organisations signed in 1991 that may limit interest in indigenous forest clearance for new forest plantings.

Other areas of land, although modified, may be significant natural features, including mountains, karst and coastal landforms. Again, many of these areas are within public conservation lands. Land disturbance and plantations on steep or visually prominent lands may significantly detract from the area's visual or landscape value. Similar issues of conflict exist between land owner rights and the perceptual values of existing natural landscapes. There is also the potential for similar issues to occur with the utilisation of mineral deposits in the District.

The Forests Act 1949 provides for the milling of all indigenous forest or export of indigenous timber to be approved by the Ministry of Forestry under a sustainable forest management plan. This requirement may protect some forests but does not prevent the destruction or removal of forest for firewood or for conversion to other land uses. The New Zealand Forests Accord is a voluntary agreement of major forest industry interests and conservation organisations signed in 1991 that may limit interest in indigenous forest clearance for new forest plantings.

The District is richly endowed with historical, archaeological and other cultural heritage sites and areas. While such resources are protected under the Historic Places Act 1993, both natural processes and a variety of disturbances through land development may damage or destroy such sites. A range of methods may be needed to avoid, remedy or mitigate these risks.

Addressed by Objectives 6.2, 8.2, 8.4, 9.5, 9.6 and Policies 6.3, 7.4, 8.2.
Related issues are Issues 6.9, 7.2, 8.2, 9.6.

Issue 6.4

MANAGEMENT OF THE ADVERSE EFFECTS OF RURAL LAND USE ACTIVITIES ACROSS PROPERTY BOUNDARIES

There are some rural activities which will nearly always have undesirable physical effects associated with them that develop or extend across property boundaries. In many cases, the activity will be intimately linked to the land use, and while effects can be mitigated, there may still be some impact. For example, noise and smell from piggeries cannot be avoided completely. Conflicts may develop through adjacent land activities changing to result in specific adverse effects for one property owner in particular. There is a conflict between farms that use agrichemicals and properties, including organic farms, where people wish to avoid exposure to agrichemicals. Contaminant discharges arise from a variety of activities and include on-site effluent disposal, fertiliser use, dust and smoke. Such discharges can also cause undesirable effects across property boundaries.

An aspect of this issue is the potential intensification of conflicts through properties becoming owned by people who have limited awareness of or tolerance to such adverse effects, commonly as former town dwellers residing in rural areas as a lifestyle change. This suggests a heightened need for conflict resolution, rather than necessarily different standards for mitigating such effects.

The following are considered to be significant rural cross-boundary effects in the District:

1. Shelter Belts

Shelter belts are primarily established to provide protection from wind for sensitive crops. Most often shelter belts consist of tree species, particularly poplar, willow, casuarina, alders and eucalyptus, though mechanical structures (posts and shelter cloth) are not uncommon. The extent of shelter belts, particularly in the intensive horticultural areas of the Waimea Plains, Motueka and Golden Bay has markedly increased in relatively recent times. They ensure optimum conditions for the production of horticultural crops such as kiwifruit, apples and berryfruit. They are also useful in limiting or attenuating agrichemical spray drift from horticultural activities onto adjoining land. There are, however, several adverse effects on adjacent land users associated with tree shelter belts including:

(i) shading on adjoining horticultural crops and properties;
(ii) aggravating incidence of frost;
(iii) leaf fall on adjoining properties;
(iv) growth of roots into and branches over adjoining properties and consequent need for pruning;
(v) effect of some tree species on stock health in adjoining properties;
(vi) access difficulties for pruning by owner;
(vii) limiting visibility for motorists;
(viii) traffic hazards from icing on roads caused by shading from shelter belts.

Some of these adverse effects may also be created by plantation forests growing adjacent to certain other rural activities.

2. Spray Drift

Spraying agrichemicals to control unwanted fungi, insects and vegetation is a common and widespread activity in association with horticulture or land preparation for farming or forestry. There is, however, increasing concern about the use of sprays resulting in spray drift onto neighbouring properties. Particular concerns relate to residential properties, schools, organic properties and public areas such as roads.

3. Noise

Noise may arise from a variety of rural activities including use of machinery, tractors, aircraft, etc. Horticultural activities such as bird scaring and hail guns have a potentially significant effect on the environment through generation of loud noise at regular intervals. Both practices, particularly bird scarers, are becoming commonplace with horticultural development. Hail guns are relatively recent and both activities are becoming very important in protecting high value crops. In some instances, they provide the only viable type of protection, especially when alternatives such as insurance are not reasonably available.

Mining, quarrying and land modification also have the potential to generate significant noise.

4. Odour

Some rural activities can result in offensive odours. Intensive pig farming can have considerable impact, as can some dairy farm activities. Good management through good practice, rules and guidelines can mitigate effects but not totally remove them.

Addressed by Objective 6.3 and Policies 6.2, 6.4.
Related issues are Issues 5.4, 6.2.

Issue 6.5

MANAGEMENT OF THE ADVERSE EFFECTS OF CONTAMINANTS ARISING FROM LAND USE ACTIVITIES, ON WATER AND SOIL QUALITY

Run-off from urban and rural land can become contaminated by bacteria, nutrients, sediment and chemicals. Run-off may affect surface water quality and in some areas, groundwater can also become contaminated through percolation of water from overlying land or recharge areas. The cumulative effect of such diffuse discharges can be significant. Both consumptive and instream uses of water may be adversely affected by degraded water quality. Soil quality may be affected by contamination by agrichemical residues.

Activities that may give rise to significant contaminant loads include effluent discharges from grazing stock, fertilizer application, agrichemical use, and land disturbance operations causing increased sedimentation. Management of riparian margins of water bodies may provide appropriate mitigation of such contaminant effects, but requires the support of landowners and may limit riparian land use opportunities.

Addressed by Objectives 6.3, 7.3, 9.6, 10.1, 10.2 and Policies 6.5, 9.7, 9.8, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.8.
Related issues are Issues 7.2, 9.8, 10.1, 10.2, 10.3, 10.4, 10.5.

Issue 6.6

SOIL DAMAGE OR LOSS AND SEDIMENTATION ARISING FROM LAND USE IN FARMING, FORESTRY, MINERAL EXTRACTION OR CONSTRUCTION ACTIVITIES

A variety of soil or vegetation disturbance activities carried out for farming, plantation forestry, mineral extraction or other purposes may have the potential to cause or aggravate processes of structural damage or loss of soil. Soil erosion may significantly degrade productive values of land, and the resulting deposition of sediment in water bodies may have significant adverse effects on downstream water quality for supply or aquatic life-support purposes. Erosion may visually scar the landscape. Sedimentation may alter stream channel characteristics so as to lessen channel stability and aggravate flood risk in certain situations, causing damage to built assets or floodplain lands.

Particular terrains or types of land in the District are at greater risk than others from natural erosion rates, because of geological, topographic and geotechnical features. Disturbances of soil or vegetation can significantly aggravate that potential soil movement. Steep, weathered slopes of Separation Point Granite extending from Glenhope in the south, north-east to the Abel Tasman National Park on the western side of the Motueka River are high risk areas. Access tracks and associated earthworks are risky activities in this terrain.

In the karst systems of the marble and limestone areas of the District, rain will travel rapidly and vertically down into the underground drainage systems. Any exposure of soil in karst systems can result in rapid soil erosion and sediment movement into the cave systems. The effects of sedimentation, in addition to loss of the soil resource, include:

(i) destruction of habitats of cave fauna;
(ii) increased flooding in upper caves as silt levels rise;
(iii) burial or destruction of bone deposits.

This deposited soil will subsequently be worked from the cave systems in later floods and affect quality in downstream water bodies.

Knowledge and acceptance of the significance of soil erosion and sedimentation is variable amongst land users, because many of the effects of disturbance activities develop off-site from individual

properties or are cumulative in nature. Their adverse consequences may not be apparent for many years.

Soil damage may also occur through a range of land use activities, for example, soil structural damage through compaction by machinery or inappropriate cultivation techniques, soil loss through over-grazing or land use activities which may be unsustainable in the longer term because of soil nutrient or erosion limitations. Effects are often only on-site and may affect the life-supporting capacity of the soil. The current knowledge about the extent and nature of these effects in the District is limited. There is, however, some information about some land use practices which indicates methods of avoiding adverse effects on the soil resource.

Addressed by Objective 6.4 and Policy 6.5.
Related issues are Issues 7.2, 8.5, 9.7, 10.3.

Issue 6.7

MANAGEMENT OF SIGNIFICANT ANIMAL AND PLANT PEST PROBLEMS

The District is at risk in a variety of ways from a range of animal pests. In particular, the spread of tuberculosis infected possums and other potential carriers of the disease from areas of indigenous vegetation into farm lands, creates the risk of stock disease and significant economic loss. In addition, possums cause potentially significant damage to native vegetation, largely in conservation areas, with adverse effects on wildlife and other conservation values. Other animal pests include the two species of introduced wasp, where severe infestations in indigenous forests cause significant adverse effects on indigenous wildlife through their competition for food sources. Wasps are also a nuisance risk in settled areas.

A variety of plant pests or noxious plants have been identified and control programmes have been long standing, with eradication possible for some species. Old Man's Beard in particular is a climber that suffocates host vegetation and has infested riparian vegetation and indigenous cover in many areas of the District, particularly along the Motueka and Waimea Rivers and tributaries. Limited growth of Johnson grass has been discovered near Motueka recently. Nassella Tussock is also present in the District.

New opportunities exist under the Biosecurity Act 1993 to reassess the nature and significance of local pest problems, and in consultation with land owners and interested agencies, formulate strategies for their effective management, in conjunction with the resolution of appropriate funding arrangements.

Addressed by Objective 6.5 and Policy 6.6.

Issue 6.8

RIPARIAN LAND MANAGEMENT

Riparian land is land adjacent to river banks and so is affected by river processes including channel movement, flooding, and water and sediment movement into, down and out of rivers. Plant and animal communities on riparian lands are similarly affected by river processes and so riverine ecosystems include the interactions between the river and riparian land, plants and animals.

Riparian lands have a wide range of uses or values, each requiring consideration or protection in relation to activities with adverse effects on these lands or associated river resources.

Riparian land management involves the following issues:

Maintenance of Channel Stability and Mitigation of Flood Damage

River banks and riparian land limit the movement of floodwaters onto floodplain lands and help in maintaining a stable, efficient river channel. Banks and riparian (berm) lands need adequate protection of their surfaces where erosive forces of floodwaters may be great, either through rock protection or appropriate plantings. Such measures can help in avoiding damage to fences or crops on adjacent rural lands. However, too much riparian tree growth, especially of crack willow, can prevent efficient passage of floodwaters. In situations where riparian land functions as a floodway (land that contains flood flows), whether or not structures such as stopbanks are present, then urban activities, structures and intensive plantings need to be limited to avoid damage.

Contamination of River Waters

Land disturbances for forestry, farming, mineral extraction or other purposes can cause or aggravate the movement of sediment or debris into adjacent rivers or streams. Other land uses including septic tank use, land disposal of wastes and farming practices such as stocking, cultivation, treated effluent discharges, and application of a range of agrichemicals, including fertilisers, can result in the movement of sediment, chemical, nutrient and microbial contaminants across riparian margins and into streams or rivers. This may result in degraded water quality for fisheries, wildlife, water supply, recreational and cultural interests in river waters.

Sediment, chemical and biological contamination from these diffuse sources can be limited by managing the vegetation cover of riparian margins as well as by land use practices. Awareness and acceptance of the role of riparian vegetation and land use in limiting such contamination is variable among landowners and managers of land development operations. There are riparian land use opportunities that may be foregone as well as created by establishing or maintaining appropriately vegetated riparian margins.

A further aspect of this issue is the adverse effects of unauthorised dumping of refuse on riparian land by people who have a disregard for the values of the riverine environment and its public enjoyment.

Protection of Plant and Animal Habitats

Many riparian margins in association with adjacent rivers or streams, support significant indigenous plant and animal habitats, as well as habitats for exotic fish and waterfowl. Retention of undisturbed indigenous plant cover can enhance the riverine environment by providing shade, water temperature control and food for freshwater life. Again, issues arise in addressing where and how protection measures might be encouraged or required, and the opportunity costs of such approaches.

Open Space Recreation and Access

Many riparian margins are important as areas for public open space recreation because of their proximity to certain rivers with associated recreational values. Management of land uses on such lands may involve public ownership or at least access, limiting productive activities or structures, or establishing plantings or public facilities.

Plant and Animal Pests

Where riparian lands are kept in an undisturbed or non-productive state, they may harbour harmful animals or plants such as rabbits, possums, Old Man's Beard, gorse or broom. Such pests may require physical control or eradication as a consequence of using riparian land in those ways.

Cultural and Aesthetic Values

The natural character of undisturbed or pleasantly modified riparian settings, whether in public or private ownership, may have great visual or riverscape values and aesthetic or cultural benefits to the public. The management of riparian environments for these values may involve public control or

management considerations over areas of privately owned land with issues similar to those outlined above.

Knowledge of Riparian Values and Management Issues

The Council is able to provide for public ownership or access to key riparian areas as well as manage the adverse effects of a range of activities to maintain or enhance the many public uses or values of riparian lands. However, current knowledge in the District is severely limited concerning:

(i) the location and status of significant riparian lands for flood mitigation, contaminant management, conservation of natural habitats and features, and public recreation and access purposes;

(ii) the relationship between these lands and the current stock of riparian reserves (including esplanade reserves) and other riparian protected areas;

(iii) key riparian management concerns or issues associated with the above; and

(iv) appropriate local solutions or methods to address such issues.

Information on the above matters is scattered, incomplete, of variable quality and may not be in a form suitable for decision-making. Before appropriate approaches may be fully developed for riparian land management, there is a need to collect and evaluate information on riparian uses and values and management issues and options throughout the District.

Addressed by Objective 6.6 and Policy 6.3.
Related issues are Issues 6.3, 6.6, 7.2, 7.4, 8.1, 8.2, 10.3.

Issue 6.9

ACCESSIBILITY OF MINERAL RESOURCES

Minerals are natural, physical resources present in the District. They are locationally fixed and non-renewable, and if they are to be extracted or protected, they must be extracted (and often processed) or protected where they occur. Minerals do not exist in isolation from other resources; they may underlie outstanding landscapes, significant ecosystems, or land of high productive value.

Unlike biological resources, minerals are not likely to be damaged or destroyed by other land use activities. The principal effect of other activities on minerals is on access to them.

While the physical constraint of landform influences the accessibility of minerals, accessibility is also affected by other constraints, such as land tenure; resource management and mining legislation; management plans and strategies prepared under other legislation; environmental standards for extraction and processing activities; land value, road access, and extraction and transport costs.

Addressed by Objective 6.7 and Policy 6.2.
Related issues are Issues 6.1, 6.2, 6.3, 6.4, 6.5, 6.6.

6.3 Land Resource Objectives

Objective 6.1

Avoidance of the loss of the potential for land of productive value to meet the needs of future generations, particularly land with high productive values.

REASONS:

The production of stock and crops relies on soil and other site qualities of land, and provides significant economic support to both rural and urban communities. High quality lands are a valuable, scarce and finite resource. The irreversible loss of productive values can arise through continued land fragmentation or conversion to non-productive land uses. This loss needs to be avoided or limited.

Addresses Issues 5.1, 6.1; achieved by Policies 5.1, 6.1, 6.2.
Related objective is Objective 5.1.

Objective 6.2

Maintenance and enhancement of significant areas of indigenous vegetation, significant riparian lands, significant habitats of indigenous fauna, and significant natural, landscape, and historic features of lands.

REASONS:

Significant natural or conservation values of land contribute to natural ecological processes and provide a rich variety of scientific, heritage and amenity values. Historic resources also have heritage and amenity values. Many areas may be at risk from a variety of modifying influences in connection with land use and development. Significant values or areas need to be protected and in some circumstances, restored.

Addresses Issue 6.3; achieved by Policies 6.3, 9.6.
Related objectives are Objectives 6.7, 7.1, 8.2, 9.5, 9.6.

Objective 6.3

Avoidance, remedying, or mitigation of adverse cross-boundary effects of rural land uses on adjacent activities.

REASONS:

Some rural land uses may generate adverse effects for adjacent properties, including contaminant discharges, emissions of noise or odour, and shading. Such effects need to be managed to an appropriate degree.

Addresses Issues 5.4, 6.2, 6.4; achieved by Policies 6.2, 6.4.
Related objective is Objective 5.2.

Objective 6.4

Avoidance, remedying, or mitigation of soil loss or damage, sedimentation and other adverse effects of land uses.

REASONS:

Soil damage or loss, sediment contamination of water bodies and other adverse effects of soil or vegetation disturbance and other land use activities are significant risks to key natural resources that need to be managed through a variety of measures.

Addresses Issue 6.6; achieved by Policy 6.5.
Related objectives are Objectives 7.3, 8.2, 9.6, 10.2.

Objective 6.5

Avoidance or reduction in damage to natural ecosystems, amenity or productive values of land caused by animal or plant pests.

REASONS:

A variety of animals or plants may cause or contribute to adverse effects on the economic or ecological importance of land and associated biological resources in the District. These organisms need to be managed to avoid, remedy or mitigate such adverse effects.

Addresses Issue 6.7; achieved by Policy 6.6.

Objective 6.6

Maintenance and enhancement of flood mitigation, habitat conservation, water quality, recreational and public access values and opportunities of riparian lands.

REASONS:

Riparian margins of rivers and streams have an important range of flood mitigation, natural, recreational and other uses and values in association with adjacent rivers and streams. Public access to and along rivers is provided by riparian lands. It is important to allow opportunities to use or value riparian lands in all these ways, in addition to established productive uses of such lands.

Addresses Issues 6.3, 6.8; achieved by Policy 6.3.
Related objectives are Objectives 6.2, 7.1, 7.4, 8.1, 8.2.

Objective 6.7

Avoidance, remedying or mitigation of the adverse effect of land uses on the accessibility of mineral resources.

REASONS:

The use, development or protection of surface features of land may constrain access to mineral resources, although the constraint may be economic rather than physical obstruction or degradation of the mineral resource itself.

Addresses Issue 6.9, achieved by Policy 6.2.
Related objectives are Objectives 6.1, 6.3.

6.4 Land Resource Policies and Methods

Policy 6.1

Council will protect the inherent productive values of land from effects of activities which threaten those values, having particular regard to:

(i) the effects of land fragmentation on productive values; and

(ii) the protection of land with high inherent productive values; and

(iii) the protection of significant natural or heritage values; and

(iv) the availability of water to support productive values.

EXPLANATION AND REASONS:

The use of areas of land with productive value for activities that do not involve soil-based production (for example, increased coverage by structures and roads through residential or industrial uses) may irreversibly restrict the availability of such land for the use of its productive potential.

Rural land in the District that is not part of the national conservation estate, has a range of productive values for stocking, cropping and plantation activities. It also has value for residential and other uses, where because of the size, location or market value of the land holding, there is little incentive for productive uses to continue to be developed. Council wishes to ensure that continued productive uses of rural land result in an appropriate proportion of the area of the District remaining available for a range of productive activities on a sustainable basis. It wishes to ensure that the needs of future generations for the productive land resource will continue to be able to be met.

In particular, the land with high productive values also has high value for a range of non-productive uses (especially resource processing, industrial and residential uses) and there is considerable pressure in the District for further fragmentation of land with a high productive value, where fragmentation may allow non-productive activities to develop.

While seeking to protect the productive values of land, the Council also acknowledges that there may be productive land which has significant natural or historic values and which may need provision to be made for them.

METHODS OF IMPLEMENTATION:

(i) Council will develop policies and rules in the District Plan and make decisions on resource consent applications to:

(a) allow any activity on defined areas of land of high productive value that would not adversely affect the productive potential of the land, either by itself or through indicated cumulative effects;

(b) control the locational extent of activities that have the effect of reducing the availability of land for a range of productive purposes, to stated limits or in relation to specified areas;

(c) restrict or prohibit subdivision or use of lands with a high productive value where there is an actual or potential loss of availability of land areas resulting from such subdivision or use;

(d) where appropriate, require the amalgamation or holding in the same ownership of land title through subdivision or building consent decisions to encourage their availability for long term productive use;

(e) regulate subdivision and use of land with moderate productive quality where there is an actual or potential loss of the versatility and productivity of the land resulting from such subdivision or use; and

(f) allow subdivision or land use activities which do not rely on the productive potential of the land, on land which has little or no productive value, taking into account sustainability criteria.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Maintenance of the productive potential of land with high productive values in the District to acceptable standards of availability or access.

(ii) Continued availability of rural land for a range of productive purposes.

(iii) Heightened demand for non-productive activities on remaining rural lands.

(iv) Continued demand for rural subdivision below sustainable limits.

(v) Maintenance of significant natural or heritage values on productive lands.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed changes in use patterns of lands with high productive values.

(ii) Surveyed changes in areas or proportions of areas of land available for productive uses, incorporating monitoring of:

(a) numbers and sizes of land titles;
(b) measures of productive land availability within land titles or areas such as coverage, numbers of dwellings;
(c) actual uses of available productive areas;
(d) relative rural property values.

Implements Objective 6.1, to address Issue 6.1.
Related policies are Policies 5.1, 6.2.

Policy 6.2

The Council will ensure that subdivision and uses of land in the rural areas of the District avoid, remedy or mitigate adverse effects on:

(i) productivity and versatility of land, particularly in areas of high productive value; and

(ii) provision of services, including roading, access, water availability, wastewater treatment or disposal; and

(iii) amenity, natural and heritage values of sites, places or areas including landscape features such as karst terrain; and

(iv) accessibility of mineral resources; and

(v) socioeconomic viability of adjacent areas;

and that are not unnecessarily exposed to adverse effects from:

(a) adjacent land uses across property boundaries; and

(b) natural hazards.

EXPLANATION AND REASONS:

Council wishes to protect and maintain rural land for soil-based production activities. However, it recognises that a high demand exists for large-site residential development in rural areas, generally in close proximity to urban services, and with sufficient space and character for lifestyle choices. There is also a need for Council to ensure that other land uses including buildings, structures, plantings and land disturbance activities in the rural areas of the District avoid, remedy or mitigate adverse effects on visual amenity and heritage values. There are areas in the District where climate, soil type or topography may limit production options, but which may be desirable or appropriate for activities such as rural residential development provided the adverse effects of such development may be managed.

METHODS OF IMPLEMENTATION:

(i) The Council will investigate and monitor:

(a) The nature, distribution and significance of inherent or existing features or values of land in the District, including productivity, versatility, ecosystem, water bodies and their margins, landscapes, open space, rural character and other amenity values, historical and cultural heritage sites or areas, and natural hazard risks.

(b) The nature and distribution of rural subdivision and land use activities and the resulting pattern of properties and developments such as dwellings, other buildings and roads.

(c) The range of actual or potential adverse effects, including cumulative effects, on productive, ecosystem, landscape, amenity and heritage values of land, and hazard and contamination risks, and of infrastructure provision, and on adjacent land uses across property boundaries; arising from land fragmentation.

(ii) The Council will develop technical approaches to assessing and reporting on the nature and significance of land fragmentation processes, effects and trends.

(iii) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications to require rural subdivision and rural land use activities to avoid, remedy or mitigate adverse effects on productive values, particularly in areas with high productive values, and on ecosystem, landscape, character, amenity and heritage values, and hazard and contamination risks, of sites or areas.

(iv) The Council will promote rural subdivision and land use activities that avoid, remedy or mitigate adverse effects on productive, ecosystem, landscape, amenity, character, and heritage values, and hazard and contamination risks, by providing information and advice, and supporting voluntary codes of practice.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced conflicts from rural-residential development in inappropriate areas, particularly lands of high productive value, or lands adjacent to intensive rural activities.

(ii) Some cumulative loss of access to rural land for production activities.

(iii) Reduced adverse effects on amenity, natural or heritage values and features resulting from activities in the rural areas of the District.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed changes in areas of rural land, incorporating monitoring of:

(a) establishment of large-site residential activities;
(b) measures of availability of productive land elsewhere in the District;
(c) actual uses of rural-residential land;
(d) rural property values.

Implements Objectives 6.1, 6.2, 6.3, to address Issues 6.1, 6.2, 6.3, 6.4.
Related policies are Policies 6.1, 6.4.

Policy 6.3

The Council will:

(a) protect and enhance areas of significant indigenous vegetation, significant habitats of indigenous fauna, outstanding natural features and landscapes, and sites, areas, or features of heritage significance, and in determining significance of all such areas, habitats, landscapes, or features, the following criteria shall be applied:

(i) size of the area or feature; and

(ii) diversity of species and abundance of populations of indigenous flora and fauna; and

(iii) representativeness; and

(iv) rarity of any species of flora, fauna or of habitat type; and

(v) connectedness of habitat with other areas; and

(vi) intactness or condition of the area or feature; and

(vii) coherence, visibility, and vulnerability to change of any landscape; and

(viii) special scientific, cultural, historic, or amenity values of any site, area, or feature of heritage significance; and

(ix) recognised international, national or regional importance of any area or feature; and

in relation to all significant areas or features, the risk of adverse effects on their natural, landscape, or heritage values shall be relevant to achieving such protection; and

(b) protect and enhance the margins of wetlands, lakes and rivers for the purposes of:

(i) preserving the natural character of wetlands, lakes, rivers and their margins; and

(ii) maintaining and enhancing natural habitats, water quality and the natural functioning of the adjacent water body; and

(iii) maintaining and enhancing public access to or along the margin; and

(iv) enabling public recreational use of the margin; and

(v) maintaining channel stability and floodway efficiency of any adjacent river.

EXPLANATION AND REASONS:

Significant natural or historic values of land, including areas supporting communities of indigenous plants and animals, riparian areas, natural features and landscapes and historic sites, contribute to natural ecological processes and often have important conservation, heritage and amenity values. The Act obliges Council to provide for the preservation, protection or enhancement of significant and outstanding areas, riparian margins, habitats, features, or sites. The natural and historic resources on such areas are in private as well as public ownership and they may be at risk from destruction or modification through land use and development activities.

Riparian margins have an important range of uses and values in association with adjacent rivers and streams. Council is required to address the protection of key natural, recreational and access values of riparian land. Other management purposes of such land are also important, such as continued productive uses, and the Council needs to establish priorities for all uses of riparian land.

METHODS OF IMPLEMENTATION:

(i) The Council will in consultation with the Department of Conservation, landowners and interested community groups:

(a) investigate, monitor and generally collect information on natural and historic areas, features and values, and significant uses and values of riparian margins in the District; and

(b) assess the extent, location, significance and risks to such areas, features or values, and the options available for appropriate preservation, protection or enhancement; and

(c) establish relative priorities and sequences for the appropriate actions to secure or promote the preservation, protection or enhancement of natural and historic resources and riparian margins.

(ii) The Council will:

(a) advocate to landowners and appropriate public agencies, ways of protection or enhancement of existing or desired values, including appropriate land use practices, protective covenants, and management agreements; and

(b) provide or assist in providing financial incentives and other forms of assistance to landowners to allow or support the practical protection or enhancement of such areas, margins, features, or sites; and

(c) purchase or acquire such areas, margins, features, or sites for protective reservation, integrated with:

(i) the management of the current stock of open space reserves for natural habitat conservation, recreation or other public purposes; and

(ii) policies for esplanade provision and financial contributions in the Council's District Plan; and

(d) develop policies and rules in the District Plan and make decisions on resource consent applications, including the use of heritage orders, to require land use activities to avoid, remedy or mitigate damage or loss of:

(i) significant areas of indigenous plant and animal communities;

(ii) natural values associated with riparian margins;

(iii) outstanding natural features and landscapes, including significant geological features or sites;

(iv) historic resources, including archaeological sites and other sites of significance to Maori, and historic places of significance to European settlement of the District.

Such policies and rules should recognise the protection of indigenous forest afforded by sustainable forest management plans and permits under indigenous forest provisions of the Forests Act 1949.

(e) develop policies and rules in the District Plan and make decisions on resource consent applications that:

(i) provide for esplanade provisions and financial contributions for reserves upon subdivision or development in relation to riparian lands with high priority for natural habitat conservation, recreation or river access purposes; and

(ii) regulate activities on riparian land to avoid, remedy or mitigate adverse effects on those lands on adjacent rivers, lakes, streams or wetlands; and

(iii) require where necessary, buffers around national parks, reserves, and land administered and held under the Conservation Act 1987 and listed in the First Schedule of that Act, and other areas of significant natural and heritage value, to mitigate adverse effects from activities on adjoining land.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Increased protection or enhancement of areas, margins, features or sites with natural or historic significance or values, in accordance with priorities and commitments to effort.

PERFORMANCE MONITORING INDICATORS:

(i) Establishment of priority programmes of effort for methods of protection or enhancement as indicated in the policy.

(ii) Surveyed extent and quality of protection or enhancement of significant areas, margins, features or sites, set against established priorities or sequences for such actions.

Implements Objectives 5.2, 6.2, 6.7, to address Issues 6.3, 6.9.
Related policies are Policies 5.2, 7.4, 8.2, 9.6.

Policy 6.4

The Council will avoid, remedy or mitigate adverse effects of adjacent rural land use activities across property boundaries including effects of:

(i) noise;

(ii) odour;

(iii) contaminant discharges;

(iv) shelter belts;

(v) fire risk.

EXPLANATION AND REASONS:

A number of predominantly intensive rural land use activities may create adverse effects for other adjacent rural uses. Examples of these conflicts are shading from shelterbelts, agrichemical spray drift, offensive odours and noise from various devices. The Council seeks to manage the adverse effects where neighbour or community conflicts are likely.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in regional and district plans and make decisions on resource consent applications to:

(a) establish environmental performance standards, including containment, for avoiding, remedying or mitigating the effects of planted shelterbelts, pesticide spray drift, offensive odours and noise from devices; and

(b) require locational buffers between adjacent rural activities or appropriate locations for specified rural activities within rural areas.

(ii) The Council will provide information on appropriate land management methods and will promote good practice in the carrying out of specified rural activities that may generate adverse cross-boundary effects.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduction in extent, incident and severity of cross-boundary effects of adjacent rural activities.

PERFORMANCE MONITORING INDICATORS:

(i) Reported incidence of rural cross-boundary conflicts.

Implements Objective 6.3, to address Issue 6.2.
Related policies are Policies 5.4, 6.2.

Policy 6.5

The Council will avoid, remedy or mitigate soil damage or loss, sedimentation and other adverse effects of land use activities.

EXPLANATION AND REASONS:

A variety of soil or vegetation disturbance and other land use activities carried out for farming, plantation forestry, mineral extraction or other purposes may cause soil damage or loss, sedimentation in water bodies and associated risks for water and river resources. Management of erosion, damage and sedimentation effects of land use activities is important to sustain the quality and life-supporting capacity of soil, water and river resources.

METHODS OF IMPLEMENTATION:

(i) The Council will promote land management methods and practices that avoid, remedy or mitigate adverse erosion and sedimentation effects, by providing information and advice, supporting voluntary codes of practice for land disturbance operations, providing financial assistance for remedial works and considering recognition of approved operators in regulating land disturbances.

(ii) Council will develop policies and rules in regional and district plans and make decisions on resource consent applications that require land disturbance activities to avoid, remedy or mitigate any soil erosion or damage, sedimentation or other adverse effects or risks.

(iii) The Council will investigate and monitor effects and risks of soil erosion or damage and sedimentation arising from land use activities, and review methods of land disturbance and land use management where appropriate.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced risk of soil loss or damage, sedimentation, or other contamination of water, and damage to land and rivers arising from land disturbance activities.

(ii) Improved Council understanding of significance of land disturbance issues and of appropriate management methods.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed awareness and assessed competence of land users in land disturbance methods and practices.

(ii) Surveyed condition of lands and water bodies affected by land disturbances.

Implements Objective 6.4, to address Issue 6.6.
Related policies are Policies 6.3, 7.4, 8.2, 10.5.

Policy 6.6

The Council will seek to avoid, remedy or mitigate the adverse effects of harmful animal or plant organisms on land and water resources, animals and plants and amenity values.

EXPLANATION AND REASONS:

There are current and future risks to land and water resources, ecosystems and amenities arising from the existence or spread of a variety of animals or plants, including their carriers. Bovine tuberculosis and possums are significant animal pests or carriers and a number of weeds such as Johnson grass and Old Man's Beard have adverse economic or conservation effects. The Council will continue to direct appropriate management efforts at harmful pest organisms.

METHODS OF IMPLEMENTATION:

(i) Council will investigate and assess the significance of pest problems in the District in consultation with landowners, government agencies and other interested parties.

(ii) Subject to any assessment made under Method (i) above, the Council will prepare by 1996 a Regional Pest Management Strategy under the Biosecurity Act, including funding arrangements, to address the cost-effective and appropriate management of significant animal and plant pests.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced adverse effects and risks from a variety of harmful animal and plant organisms.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed changes in extent or numbers of specified animal or plant pests.

Implements Objective 6.5, to address Issue 6.7.

7.0 FRESH WATER RESOURCES

7.1 Introduction

This section of the Tasman Regional Policy Statement deals with fresh water resources, and all references to water in the section are references to fresh water. Coastal water is addressed in the coastal environment section of the Tasman Regional Policy Statement.

Tasman District covers the following catchments:

1. WAIMEA

This comprises the Wairoa, Lee, Roding and Wai-iti rivers and the three aquifers of the Waimea Basin. The aquifers are used for irrigation, industrial and urban water supplies. The summer water resources of the Waimea catchment are fully allocated.

2. MOUTERE

The Moutere catchment and adjacent coastal catchments from Appleby to Lower Moutere have low summer flows, and many headwater streams are dry in summer. The three deep Moutere Gravel aquifers are used for orchard irrigation within the lower Moutere valley and along the coast, and the aquifers may extend into the Waimea Basin, Motueka Plains and south to Lake Rotoiti.

3. MOTUEKA/RIWAKA

The Motueka catchment includes the Motupiko, Tadmor, Wangapeka, Baton, Stanley Brook and Dove tributaries as well as the nationally recognised Mt Arthur karst cave system. The Motueka and Riwaka rivers contain important trout fisheries. Groundwaters from the Motueka/Riwaka Plains irrigate horticultural and agricultural crops and supply domestic users from many individual bores.

There is a Draft National Water Conservation Order for the Motueka River.

4. UPPER BULLER

The Buller catchment just upstream of Lyell is within Tasman District and includes the Matiri, Gowan, Matakitaki and Lower Maruia rivers, and Lakes Rotoiti and Rotoroa. Water use is low. Discharges occur from alluvial gold mining and dairy sheds. The Buller River has important instream values.

There is a Draft National Water Conservation Order for the Buller River.

5. TAKAKA

This includes the Cobb, Anatoki and Waingaro tributaries, and coastal rivers like the Pariwhakaoho and Onekaka north of Takaka. The Takaka valley contains the major marble and limestone karst aquifers associated with Pupu Springs. Cobb power station discharges water into the Cobb River. Main users of water are dairy farms, some horticultural irrigators, and the salmon farm at Waikoropupu (Pupu Springs).

6. AORERE

The Aorere is a major river flowing through a dairy farming valley. Further to the west of the Aorere, there are several catchments flowing to the West Coast including the Patarau and Anatori rivers.

Water has a number of consumptive uses where it may be taken from a water body for any purpose. In addition, water in rivers, streams, lakes and wetlands has instream uses and values that rely on the retention of water in these water bodies.

Surface water quality in the District is generally high, particularly in the more remote upper catchment areas. Water quality tends to be lower during periods of low flow and flooding and is usually more degraded in the lower reaches of rivers.

Groundwater resources are mostly of a high quality except in some areas of the Waimea plains where elevated nitrate levels are being recorded. Localised areas of contamination may occur in association with some discharge activities.

Significant uses and values of water resources in the District are:

1. USE OF NATURAL RAINFALL FOR PLANT GROWTH

The District is endowed with generally adequate rainfall that naturally supports the growth of plants as pasture or crops (including trees) without the need for augmenting soil moisture by irrigation.

2. IRRIGATION

Spray and trickle irrigation of horticultural and agricultural crops is concentrated in the Waimea and Motueka/Riwaka Plains. Rapid development of apple orchards in the Moutere stimulated by the demand for larger sized fruit is mainly relying on water from the deep Moutere aquifers and dams. The upper Motueka area around Tapawera has been subject to recent expansion of irrigation demand.

3. PUBLIC WATER SUPPLY

Council's major reticulated supplies include the Waimea Delta supplying industrial needs and Mapua-Ruby Bay, Richmond's Lower Confined Aquifer wellfield, groundwater supplies for Hope-Brightwater, Wakefield and Redwood Valley, the Eighty-Eight Valley scheme, the Dovedale scheme extending to Upper Moutere, and several small schemes in Motueka. Motueka is one of the largest towns in New Zealand without a reticulated water supply. Private schemes supply lower Moutere and communities along the margins of the Takaka Valley. Individual wells supply domestic users in Motueka, Takaka and many rural areas; stored rainwater is also a common source in rural areas.

4. INDUSTRY

Major industrial water users are dairy factories, timber milling and processing, fruit processing, meat works, and fish processing. Many are supplied from Council reticulation.

5. FARMING

Apart from irrigation, farm uses include dairy shed washdown, fruit packing (e.g. apple washing), crop and orchard spraying and stock water.

6. MINING

Alluvial gold mining occurs mainly in the Upper Buller, Wangapeka, Anatoki and Aorere catchments, with water usually pumped from rivers and streams.

7. DISCHARGES

Point discharges comprise direct discharges into water and onto land. Main sources are dairy sheds, industry (fish, vegetable, dairy, meat processing, wineries), treated sewerage

and urban stormwater. There is a New Zealand-wide trend towards land disposal of waste, and higher standards of treatment prior to any direct discharge to surface waters. In addition, water bodies receive diffuse source discharges of sediment, nutrients, and agrichemical and microbial contaminants from land use practices of stocking, cropping, disturbances and agrichemical applications.

8. RECREATION

Water present in many rivers and streams throughout the District is used by the recreational public for visual appreciation, and activities such as swimming, canoeing, rafting and angling. The Motueka and Waimea Rivers and their main tributaries and the Upper Buller River, Aorere River and Lakes Rotoroa and Rotoiti are especially important for these uses.

9. FISHERIES

Waters of the main rivers in the District, particularly the Motueka and Riwaka rivers, support brown trout, eel and whitebait fisheries. Other native fish also are present in the freshwaters of the District.

10. WILDLIFE VALUES

The District's rivers, lakes and wetlands provide valuable habitats for wildlife including both plant and animal communities. Some reaches of rivers, particularly the more remote less contaminated or less modified habitats can be significant in terms of habitats for threatened species including such bird species as Blue Duck, and waders such as Pied Stilt and Banded Dotterel. Many rivers also have significant native fish habitats.

11. MAORI TRADITIONAL VALUES AND INTRINSIC VALUES

Water bodies and the life they support have a high degree of significance for Maori for traditional spiritual reasons. The mauri or life-essence of rivers and lakes is a value sought to be protected, in addition to food gathering, and other customary values (e.g. wahi tapu in or adjacent to rivers). The intrinsic values of rivers and lakes, identified by many non-Maori, are of similar significance: these are values placed on the water bodies for their undisturbed existence.

12. ELECTRICITY GENERATION

There are a small number of hydro-electric schemes in the District. There is further potential for rivers to provide opportunities for hydroelectric generation.

The Act allows the Council to consider and address in the Tasman Regional Policy Statement, issues concerning the management of water, including its taking, use, damming or diversion, and the discharge of contaminants into water or where contaminants might find their way into water.

Water resource issues concern water availability for abstractive or consumptive uses or for maintaining instream uses or values, or water quality for a range of uses or values. Some issues concern both these aspects of water resources, such as tangata whenua or other cultural interests in water. Tangata whenua interests in water and other natural resources are addressed generally in Section 13 of the Tasman Regional Policy Statement.

The following summarises water resource issues addressed in this section of the Tasman Regional Policy Statement. Aspects of some of these issues are also land, river or contamination issues that are addressed in other sections of the Tasman Regional Policy Statement.

The issues are:

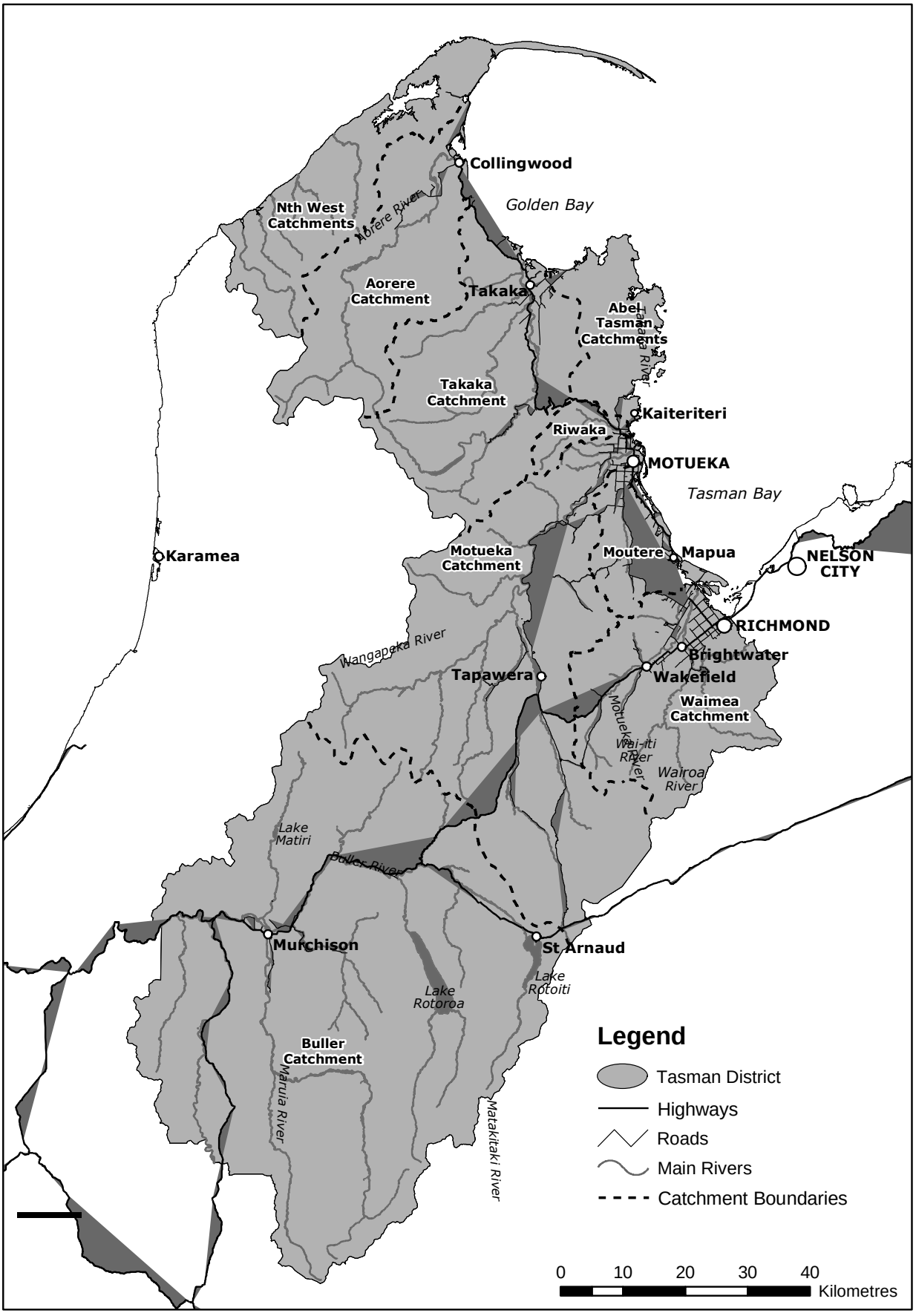
(i) water allocation, including sustainable allocation limits for water abstraction, enhancing available water by efficient water use or augmentation, administrative methods of allocation, and reservation of priority uses and values of water;

(ii) protection of natural, recreational and cultural values of water bodies.

(iii) contamination of water from point source or diffuse source discharges;

(iv) land use activities which may adversely affect water availability through irrigation demands or interception and loss of rainfall by vegetation.

Figure 7.1 - Map of River Catchments and Lakes of Tasman District



7.2 Fresh Water Resource Issues

Issue 7.1

DETERMINING THE ALLOCATION OF AVAILABLE WATER

Fresh water is a seasonally changing natural resource. Often, demand for its use is greatest when it is least available from river, stream or aquifer sources. Parts of the District face significant water shortage and allocation problems. This and the important conservation values of many of our surface waters has stimulated an equally strong interest in protecting instream flows. The availability of water of adequate quality is probably the most important water resource issue in the District, and has a long history of resource management effort.

ESTABLISHING SUSTAINABLE WATER ALLOCATION LIMITS FOR ABSTRACTIVE USES

In promoting sustainable water management under the Act, the Council is responsible for establishing sustainable limits to the allocation of water for water abstractions. The Act requires that sustainable allocation of water allows for the needs of future generations, the life supporting capacity of the water and the avoiding remedying or mitigating of adverse effects on the environment. Sustainable allocation limits for water will allow for continued use for abstractive needs and for protection and enhancement of life supporting values of water. In relation to surface waters, these are usually described as instream values and uses, such as the maintenance of healthy freshwater life and associated recreational, cultural and aesthetic needs. Reduced flows can give rise to habitat loss, increased temperature and other adverse water quality effects. Investigations are needed to define flow needs of aquatic life, recreational and other instream interests. Ways of setting sustainable allocation limits for surface waters include minimum flow regimes and maximum allocatable volumes (or flow rates).

For groundwaters, potential adverse effects which may limit the sustainable use of the aquifers include reduced water yields because of excessive watertable drawdowns, seawater intrusion, excessive induced seepage from connected surface waters, and changes in groundwater recharge or quality because of land use practices. Again, investigations into groundwaters and associated hydrological systems are essential so that sustainable allocation limits can be established. Such limits for groundwater may be set by minimum water levels and associated pumping regimes, maximum allocatable volumes (or yield rates) and minimum bore spacings.

Limits may be set in conservative or precautionary terms or may be set in response to problems. The Council needs to determine how much investigation and monitoring is necessary to support the limits to be set, and at what precise thresholds limits should be set in order to sustain a water resource. Previous experiences in water allocation in the District have indicated the difficulties facing communities and the Council when over-allocation has caused local resources to go dry. This has resulted in problems in reducing authorised and actual usage to restore the resource to a more sustainable level of allocation.

ENHANCING THE AVAILABILITY OF WATER

As the sustainable allocation limits for water resources are approached, the need to enhance the available water becomes more critical. There are three possible responses to limited water availability:

(i) use the existing resource more efficiently; or

(ii) bring in more water from elsewhere (augmentation of the existing resource);

(iii) reduce or limit the demand for existing water resources.

There are several aspects to this issue. The first is how much effort to devote to each of these responses, and secondly, how to promote each course of action.

Methods of promoting efficient use of water include:

(i) provision of incentives or regulations to require on-site storage, and water-saving devices or arrangements such as reuse of wastewater;

(ii) regulations to require water meters and limit rates of abstraction for specified purposes based on assessed need;

(iii) promotion of efficient application or use technologies, for example, in irrigation of crops;

(iv) provision for transfer of water permits from person to person or from site to site to encourage high value uses of water to develop.

These methods apply to both physical and economic efficiencies of water use. Each has implications for individual choice in pursuing community benefits from greater water availability.

Augmentation options include:

(i) discovery and development of new groundwater resources, for example, deep aquifers in the Waimea or Moutere areas;

(ii) water supply dams to retain excess flows;

(iii) inter-catchment transfer of water available from other areas.

Augmentation is a relatively expensive response to water-short situations and may have investment risks and environmental effects that need to be limited or managed.

In practice, effort may be put into both encouraging or requiring efficient water uses, and into augmenting available water resources.

ALLOCATION METHODS

Methods of allocation of available water may attempt to achieve both a fair sharing of available water within sustainable limits, and efficient use of that water. Issues arise in that as water availability fluctuates seasonally and year by year, allocated quantities are never assured completely. A standard for security of supply needs to be chosen in allocating available water. Standards currently in use in parts of the District are one in ten year (or 10% probability) or one in twenty year (or 5% probability) drought (or low flow or level). Such standards may be used in low flow or level allocation arrangements such as rationing or rostering of usage. The choice of a standard for supply security will interact with decisions on sustainable limits of affected water bodies. Other low flow allocation methods include differential classes of permits reflecting either priority in time or different priorities for water takes for specified purposes.

Allocation that is limited by maximum rates of use based on assessed need should achieve both fair and efficient allocation results. What are appropriate maximum rates for irrigation, industry or other purposes is an issue.

Provision for transferable or tradeable water permits is one method for allowing users in addition to Council to decide on rates, locations or purposes of water use by the establishment of a market for water permits. The scope of such markets (transferable permit regimes) may be specified within a regional plan and allow transfer or trade of permits within areas of a water resource, and within established sustainable allocation limits. The transfer of permits from site to site and for any abstractive purpose within these limits may assist in generally encouraging efficient uses of water.

Issues in the use of this method of allocation include:

(i) information costs to define all necessary sustainable limits for water resources;

(ii) the administrative costs of setting up and operating a transferable regime, including enforcement costs, compared with a fully regulated allocation regime;

(iii) the fairness of possible outcomes of a permit market, including monopoly holding of permits in a particular area or for a particular purpose.

These issues may be overcome where there is sufficient resource information, water for abstraction is fully allocated and there is user support, thus allowing increased flexibility and efficiency of water use, potentially at no greater administrative cost than under complete regulatory allocation by Council.

ALLOCATION OF WATER FOR PRESENT OR FUTURE PRIORITY USES OR VALUES

The Act requires available water to be allocated on a priority in time basis, or "first come, first served", in the absence of allocation policies or rules. This is because water permit applications, once lodged, must be dealt with by Council. However, as part of the requirement for sustainable water management (as referred to in the previous section considering establishment of sustainable water allocation limits) the Act specifies certain nationally important natural and cultural values to be particularly provided for or had regard to. These include:

(i) preserving the natural character of wetlands, lakes and rivers and the protection of them from inappropriate development;

(ii) protecting outstanding natural features and significant habitats of indigenous fauna (for example, indigenous freshwater fish and wildlife);

(iii) intrinsic values of ecosystems;

(iv) maintenance and enhancement of amenity values and the quality of the environment;

(v) protecting the habitat of trout and salmon.

Provided sustainable allocation limits are either set or acknowledged in terms of the above requirements, then the Act leaves open the question of whether any uses or values may be reserved or preferentially allocated through policy-making under plans.

The Act exempts minor individual domestic or stock-watering needs or firefighting needs from having to obtain a water permit, provided there are no adverse effects on the environment, but otherwise creates no priority for these uses.

Setting sustainable allocation limits can be regarded as a method of reserving or protecting water for present and future instream or natural and cultural values. Significant water bodies in the District have been identified by interested organisations.

The Motueka River including its main tributaries, and the Upper Buller River tributaries and Lakes Rotoroa and Rotoiti are covered by two Draft Water Conservation Orders. There are also interests in these water bodies for water abstraction or hydroelectric power generation purposes.

Water allocation policies have reserved water for future residential, urban and irrigation supply needs in the Motueka/Riwaka plains, and for future urban needs in the Waimea Delta area.

ALLOCATION PROCEDURES

A number of issues may arise over the process of water allocation. Council may proceed to allocate on a case by case basis without guidance from policies. However, in a number of catchments there has

been a lengthy history of water resource investigations and development of allocation policies specific to those areas. The preparation of water resource management policies and rules under regional plans is an expensive and time-consuming process, but offers the advantages of sound, strategic approaches to addressing water allocation issues.

Involvement of water users and interested groups and organisations in plan development ensures a critical consideration of allocation problems. Water user committees in particular provide important local advice on allocation issues and solutions, and can be given responsibilities in implementing policies and rules concerning water allocation, particularly in low flow periods.

Addressed by Objectives 5.3, 7.1, 7.2, 7.3, 8.2 and Policies 5.3, 7.1, 7.2, 7.3, 7.4, 7.5, 7.7, 7.8, 8.2.
Related issues are Issues 5.3, 7.2, 7.3, 7.4, 8.2.

Issue 7.2

PROTECTION OF NATURAL, RECREATIONAL AND CULTURAL VALUES OF WATER BODIES

Water bodies in the District, such as rivers, streams, lakes and wetlands, have natural, recreational or cultural features or values including natural character and instream values.

These values may be in addition to or in conflict with other values such as water supply, waste discharge or other water use values.

Other threats to such values of water bodies include land uses which may adversely affect natural character and amenity values of the water body.

Some water bodies such as wetlands have particular significance because of their limited number, extent and value as natural ecosystems. Remaining wetlands, particularly those adjacent to estuaries provide important habitats for a wide variety of flora and fauna. They may also have value in reducing contamination of water and in buffering river or stream flows. Threats to wetlands include drainage, infilling and contamination from adjacent land use activities, including sedimentation from land disturbance operations.

Karst water is important for its role in creating karst features, landforms and ecosystems. Karst waters and other groundwaters contribute to the character and quality of some surface and subsurface water bodies in the District.

Addressed by Objectives 6.6, 7.1 and Policies 6.3, 7.1, 7.2, 7.4, 7.5.
Related issues are Issues 6.3, 6.8, 7.1, 7.3.

Issue 7.3

SIGNIFICANT REDUCTION IN SURFACE WATER AND GROUNDWATER AVAILABILITY CAN OCCUR THROUGH THE ESTABLISHMENT OF TALL VEGETATION COVER OR THE GROWING OF CROPS REQUIRING IRRIGATION WATER

A catchment with a forest or tall vegetation cover, including scrub such as fern or gorse, will generally have a lower annual run-off than a similar catchment under a pasture cover. Evidence from experimental and research work in New Zealand and worldwide shows changes in water yield following vegetation changes are dominated by changes in the interception characteristics of the vegetation cover. That is, rainwater is intercepted by the foliage, evaporated back into the air and thus prevented from reaching the ground.

This process has important consequences for water resources: surface water yields may decline, and, if the catchment also recharges to groundwater, then groundwater yields may also decline. Both

instream values and the opportunities for new or continuing abstractions for irrigation or other purposes may be adversely affected by such declines.

The Moutere Gravel terrain is the area of the District most susceptible to water yield reduction through increased tall vegetation cover. This is because of the impermeable Moutere clay and in the northern part of the area, its relatively low annual rainfall. The Moutere and minor coastal catchments, Redwood, Wai-iti and Dove catchments are the most susceptible. Both surface water and groundwater yields may be adversely affected. The Moutere Groundwater Recharge Area is particularly important to sustain the Moutere aquifers.

While there has been significant research into this effect in the District, there are still some uncertainties about aspects of the physical process of declining yields. These include the influence of the extent, type and density of tall vegetation, and the nature of the recharge mechanism. Further monitoring and investigations are needed to improve the understanding of the effect.

In addition to the reduction in available water by establishing tall vegetation, particularly plantation forestry in the susceptible catchments of the District, water taken for crop irrigation significantly affects levels or flows of surface water and groundwater in these same areas. The naturally low summer yield and summer takes for irrigation, particularly in the Moutere and Wai-iti catchments, have resulted in frequent low or no summer flows, and low groundwater levels. Water has been historically over-allocated in these areas and there is now an inadequate security of supply for many water abstractors, as a result of low yields and rationing to protect both instream values and aquifer effects.

Conflicts have arisen between abstractors in the susceptible and water-short catchments, who have an interest in crop irrigation, and catchment land owners, who have an interest in plantation forestry. A concern is that further plantation forestry might adversely affect existing water availability, but also that as current water resources are limited anyway, water augmentation and efficient use (rather than forestry restriction) should be pursued. Upstream land owners have an expectation to use the rainfall that naturally falls on their land and that because water yield effects are a natural process, landowners should not be restricted in their opportunity to use land by establishing plantations. This is particularly felt when no irrigation is required for such tree crops. Downstream land owners who rely on a sustainable supply of irrigation water for their crops also expect that adverse effects on that supply will be dealt with.

Council views the issue as one requiring the appropriate management of the available water resource and for this reason methods to address the water reduction effects of water abstraction or of the establishment of tall vegetation, will include water augmentation, limitations on water abstraction and promotion of land uses which use available water efficiently. These methods may also include steps to avoid, remedy or mitigate the effects of tall vegetation on water yields, such as management of plantation forest activities and limitations on extent of forest cover.

Addressed by Objectives 7.2, 7.3 and Policies 6.6, 7.1, 7.3, 7.7
Related issue is Issue 7.1.

Issue 7.4

EFFECTS OF CONTAMINANT DISCHARGES ON WATER QUALITY

A range of contaminant discharges enter rivers, streams, lakes, wetlands and groundwaters from a variety of land-based sources. Discharges may be from discrete points (point-source discharges) or from many minor, scattered points over wide areas (diffuse source discharges). Both consumptive and instream uses of water may be adversely affected by degraded water quality, where the features or condition of water become unsuitable for any particular use or value. Particular contaminant sources which give rise to water quality issues are:

(i) high sediment loads entering rivers and lakes from storm and drainage waters; this is exacerbated by land disturbance during urban development, roading, riverbed, agriculture, horticulture and forestry activities;

(ii) chemical contaminants entering surface waters and groundwaters from urban and rural stormwater, industrial discharges, agrichemical sprays, leachates from dumps and other contaminated sites;

(iii) microbial contamination of surface waters and groundwaters from animal waste run-off, septic tanks, waste treatment discharges;

(iv) nutrient enrichment of surface waters and groundwaters from run-off of fertilisers, animal waste, leachate from silage pits, land application of waste, sewage systems, industrial effluents;

(v) poor natural water quality of streams and groundwaters because of chemical contaminants from country rocks of those areas.

This issue is more fully addressed in Section 10 of the Tasman Regional Policy Statement dealing with contamination and waste issues.

Addressed by Objectives 7.3, 9.6, 10.1, 10.2 and Policies 9.8, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.9.
Related issues are Issues 6.5, 6.6, 7.2, 9.7, 9.8, 10.1, 10.2, 10.3, 10.4, 10.5.

7.3 Fresh Water Resource Objectives

Objective 7.1

Maintenance and enhancement of the natural and cultural values, including natural character of fresh waters, including recreational, fisheries, wildlife and other instream values.

REASONS:

The District contains water bodies significantly valued for their natural or cultural features, and the Act requires the Council to provide for their protection in sustainable water management.

Addresses Issues 7.1, 7.2, 8.2; achieved by Policies 7.1, 7.2, 7.4, 8.2.
Related objectives are Objectives 6.2, 7.3, 8.2.

Objective 7.2

Fair and efficient allocation of available water to abstractive users on a sustainable basis.

REASONS:

While water fluctuates in availability, allocation requires maintenance of life-support or instream needs before water is available for abstractive allocation. Available water needs to be made accessible to abstractive users on a continuing basis in ways that are both fair and efficient. Except where there is sufficient evidence of future public need for water, Council will allocate water on a first come, first served basis, within sustainable limits of allocation.

Addresses Issue 7.1; achieved by Policies 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8.
Related objective is Objective 7.1.

Objective 7.3

Avoidance, remedying or mitigation of reductions in water availability for sustainable water uses, and the efficient use of such available water, arising from water or land uses.

REASONS:

Land and water use activities can affect water resources for a variety of values and uses. Vegetation changes, particularly the establishment of tall vegetation can intercept and remove rainfall that would otherwise contribute to stream flows or aquifer recharge. Reduction in available water by abstractive users can further adversely affect instream values, other water users and aquifer viability. There is a need to ensure that all abstracted water is used efficiently and avoids, remedies or mitigates such adverse effects on water resources. There is also a need to address the reduction in available water which may be caused by land use changes, particularly through establishment of tall vegetation by ensuring that such effects be avoided, remedied or mitigated to an appropriate degree.

Addresses Issue 7.3; achieved by Policies 7.1, 7.3, 7.7.
Related objective is Objective 7.2.

Objective 7.4

Maintenance and enhancement of the quality of surface waters and groundwaters for all public uses and values.

REASONS:

Adequate quality of waters for a wide range of community purposes allows continuing benefits from using or valuing the resource.

Addresses Issues 6.5, 7.3, 9.8, 10.1, 10.2, 10.3, 10.4, 10.5; achieved by Policies 6.4, 6.5, 9.7, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.9.
Related objectives are Objectives 6.3, 9.7, 10.1, 10.2, 10.4.

7.4 Fresh Water Resource Policies and Methods

Policy 7.1

The Council will adopt a cautious approach to setting sustainable limits to water allocation for abstractive purposes.

EXPLANATION AND REASONS:

The Council wishes to set constraints or limits on the abstractive use of available water before significant adverse effects or risks arise, rather than having to respond to problems after they are apparent. The cautious approach reflects the lack of complete understanding about water resource processes and effects of activities. Water allocation for abstractive purposes will be conservative where:

(i) there is insufficient knowledge to predict effects of water abstraction

(ii) it is not practicable to gather sufficient information to be able to accurately predict the impact of the effects of the abstraction.

Allocation of water may need to take into account the potential for reduced water yields following land use changes.

METHODS OF IMPLEMENTATION:

(i) The Council will undertake a programme of development of water management planning provisions for inclusion in the combined plan for all water resources under development pressure or requiring protection as follows:

Table 7.1

Catchment Area for Water Management Plan	Year Notified
Moutere	1992
Motueka/Riwaka Plains	1992
Takaka	1996
Waimea (part)	1996
Moutere review	1998
Motueka/Riwaka review	2000
Waimea review	2001

(ii) The Council will develop policies and rules in regional plans for water management and make decisions on resource consent applications to set and observe sustainable allocation limits for water abstraction.

(iii) The Council will continue to investigate and monitor surface and groundwater resources to improve its understanding of water resource sustainability issues and to provide a defensible basis for the timely setting of sustainable allocation limits for water abstraction.

(iv) Council will allocate water on a priority in time basis within the sustainable limits of available water except where water has been reserved for identified needs.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Avoidance or limiting of adverse effects on water users and natural or cultural values of water resources.

(ii) Efficient and sustainable decisions on water use proposals.

PERFORMANCE MONITORING INDICATORS:

(i) Changes to life-supporting capacity or instream values of water bodies as a result of water abstraction.

Implements Objectives 5.3, 7.1, 7.2, 7.3, 8.2, to address Issues 5.3, 7.1, 7.2, 7.3, 8.2.
Related policies are Policies 4.3, 5.3, 6.6, 7.2, 7.3, 7.5, 7.7, 8.2.

Policy 7.2

The Council will set water allocation limits for abstractive purposes based on a defined standard of availability of water in drought periods, consistent with the instream and life-support values of the water.

EXPLANATION AND REASONS:

The Council will define the level or frequency of drought, with an associated likelihood of water availability, to set the allocation limit for abstraction from all significant surface water or groundwater resources. This limit must provide for the maintenance of instream or life-support values of the water resource, as required by the Act. These may be defined as water flows, levels, or quality standards or a combination. All water users then know the security of their supply of water during drought periods, where access to water may be restricted by rationing.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in regional plans and make decisions on resource consent applications for water management that provide for defined standards of water availability or security of supply during drought periods, including thresholds for and rates of supply restrictions, in conjunction with resource maintenance requirements, as the bases for setting sustainable allocation limits.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Water abstraction within sustainable allocation limits.

(ii) Increased certainty among abstractive water users concerning security of supply, including arrangements for water restrictions, and maintenance of instream and life-support values.

PERFORMANCE MONITORING INDICATORS:

(i) Changes to life-supporting capacity or instream values of water bodies as a result of water abstraction.

Implements Objectives 7.1, 7.2, 8.2, to address Issues 7.1, 7.2, 8.2.
Related policies are Policies 7.1, 7.2, 7.4, 7.5, 7.6, 8.2.

Policy 7.3

The Council will promote efficiency in water use.

EXPLANATION AND REASONS:

Water is a limited resource in the District of absolute economic and ecological significance. Enhancing its availability by measures to achieve efficient uses is an important way of sustaining the water resource.

METHODS OF IMPLEMENTATION:

(i) The Council will investigate the provision of incentives for water storage or water conservation facilities, devices or arrangements.

(ii) Council will investigate and promote efficient water use including reuse of water and water conservation practices, particularly for domestic and irrigation purposes.

(iii) The Council will develop policies and rules in regional plans for water management and make decisions on resource consent applications to:

(a) establish appropriate maximum rates of water use for irrigation or other purposes, based on assessed need; and

(b) require on-site storage of surface water in appropriate situations; and

(c) require the installation of water meters to assure compliance with appropriate quantities or maximum rates of water use.

(iv) The Council will:

(a) investigate areas or situations in the District that may satisfy the requirements for the successful establishment of transferable water permit regimes (for example, management zones within the Waimea groundwater system); and

(b) consult with interested parties including water user committees over the introduction of any transferable water permit regime; and

(c) develop and notify appropriate policies and rules to establish a transferable water permit regime or regimes; and

(d) monitor and assess the effectiveness of such a regime or regimes in implementing the policy; and

(e) continue assessing the suitability of areas in the District for the establishment of such regimes.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Efficient uses of water within sustainable limits.

(ii) Fair access to available water for a wide range of public uses.

PERFORMANCE MONITORING INDICATORS:

(i) Changes in efficiencies of area or use-based water abstractions.

(ii) Extent and assessed performance of transferable water permit regimes.

Implements Objectives 5.3, 7.2, 7.3 to address Issues 5.3, 7.1, 7.2, 7.3.
Related policies are Policies 5.3, 7.1, 7.2, 7.7.

Policy 7.4

The Council will:

(i) preserve the natural character of wetlands, rivers and lakes, and

(ii) protect and enhance or support the protection and enhancement of natural, recreational, cultural, intrinsic, and instream features and values of wetlands, rivers (including karst rivers), and lakes, in particular those that are of international, national, or regional significance;

and in determining significance of such water bodies for such values, the following criteria shall be applied:

(i) size of the water body; and

(ii) diversity of species and abundance of populations of indigenous flora and fauna supported by the water body; and

(iii) rarity of any species of flora or fauna, or of habitat type, associated with the water body; and

(iv) condition of the water body; and

(v) special scientific, recreational, cultural, or amenity values of the water body; and

(vi) recognised international, national, or regional importance of the water body; and

in relation to all significant wetlands, rivers, and lakes, the risk adverse effects on their natural, recreational, cultural, intrinsic or instream values shall be relevant to achieving such protection or enhancement.

EXPLANATION AND REASONS:

The waters of many of the District's rivers, lakes and wetlands have significant natural, recreational or cultural features, or instream values, such as fisheries, water-based recreation, wildlife habitat, or intrinsic values, and may be of traditional significance for the tangata whenua. These values are often in addition to productive values such as water supply or hydropower potential. The Act obliges Council to provide or have regard to the protection of instream values of water bodies of demonstrated significance. The Council will provide or support appropriate protection of water bodies that it is satisfied deserve this protection or reservation for these values.

METHODS OF IMPLEMENTATION:

(i) The Council will investigate and monitor instream uses and values of water bodies and assess the significance of and risks to such values and methods of their necessary and appropriate protection or enhancement.

(ii) The Council will evaluate the significance of natural, recreational or cultural values for water bodies in the District, and including in particular the following:

(a) Motueka River and tributaries, including Wangapeka, Motupiko, Baton and Pearce Rivers and the marble aquifers of Mt Owen and Mt Arthur;

(b) Buller River and tributaries in Tasman District, including the Gowan, Mangles, Matakitaki, Maruia, Matiri, Owen, Glenroy, Tiraumea and Tutaki rivers and the Mt Owen marble aquifer;

(c) Riwaka River, including north and south branches and resurgences;

(d) Takaka River and tributaries, including limestone and marble aquifers and Waikoropupu Springs;

(e) Waimea, Wairoa, Lee, Roding and Lower Wai-iti rivers;

(f) lowland springs and rivers, including Pearl Creek, Neiman's Creek, Takakae Stream and Motupipi River;

(g) north-west rivers, lakes and wetlands, including Puponga, Mangarakau and Rakopi swamps, Lake Otuhie and Kaihoka Lakes and Wairoa, Patarau and Anatori rivers;

(h) waters of Abel Tasman National Park and the Onekaka, Wainui and Awaroa rivers.

(iii) The Council will declare as a future amendment to this policy those water bodies that it regards as worthy of appropriate protection for their outstanding or otherwise significant natural, recreational or cultural values or features.

(iv) The Council will develop policies and rules in regional plans or support provisions in any relevant water conservation order and make decisions on resource consent applications to protect such water bodies declared under Method (ii) above.

(v) The Council will promote practices in the use of water bodies, including their beds, by landowners, operators or the public that avoid, remedy, or mitigate adverse effects on intrinsic, recreational, cultural or instream values.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Appropriate degrees of protection of significant instream values of specified water bodies in the District.

PERFORMANCE MONITORING INDICATORS:

(i) Extent or degree of protection of specified water bodies, provided in water conservation orders or regional plans.

Implements Objectives 7.1, 7.2, 8.2, to address Issues 7.1, 7.2, 8.2.
Related policies are Policies 4.2, 7.1, 7.2, 8.2, 10.1.

Policy 7.5

Except as provided for under Policy 7.4, the Council will only protect or reserve water for future uses or values where:

(i) there is sufficient evidence of a significant future public need for water; and

(ii) that need may be provided for without adverse effects on existing significant natural, recreational or cultural values and features of the relevant water body.

EXPLANATION AND REASONS:

The Council will provide or support appropriate protection of water bodies that it is satisfied deserve protection or reservation for their significant natural, recreational, or cultural features or values. The Council will otherwise reserve or allocate on a priority basis, waters for any defined public use or

value, only where special circumstances such as identified community water supply needs make it appropriate to do so.

METHODS OF IMPLEMENTATION:

(i) The Council will investigate and monitor instream uses and values of water bodies and assess the significance of and risks to such values and methods of their necessary and appropriate protection or enhancement.

(ii) The Council will consider developing policies and rules in regional plans to reserve or allocate for any specified public use or value, where there is evidence of a significant future public need for water, and that need may be provided for without adverse effects on existing significant natural, recreational or cultural values and features of the affected water body.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Appropriate degrees of protection of significant instream values of specified water bodies in the District.

(ii) Water available for significant future public uses or values.

PERFORMANCE MONITORING INDICATORS:

(i) Extent or degree of protection of specified water bodies, provided in water conservation orders or regional plans.

Implements Objectives 5.3, 7.1, 7.2, 8.2, to address Issues 5.3, 7.1, 7.2, 8.2.
Related policies are Policies 5.3, 7.1, 7.2, 7.4, 8.2.

Policy 7.6

The Council will recognise the priority of minimum domestic, stockwater and firefighting needs in providing for water allocation for abstraction during drought periods.

EXPLANATION AND REASONS:

The Council wishes to see basic domestic, stockwater and firefighting needs maintained during drought periods, where other abstractive uses might adversely affect these needs.

METHODS OF IMPLEMENTATION:

(i) The Council will:

(a) develop policies and rules in regional plans for water management; and

(b) make decisions on resource consent applications; and

(c) issue water shortage directions during serious temporary shortages of water:

that provide for the retention of water for minimum domestic, stockwater or firefighting needs during restrictions on water abstraction.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Retention of a secure supply for minimum domestic, stockwater and firefighting needs during most drought periods.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence of supply shortfall for minimum domestic, stockwater or firefighting needs, during drought periods.

Implements Objectives 7.2, to address Issue 7.1.
Related policies are Policies 7.1, 7.2, 7.3.

Policy 7.7

Council will avoid, remedy or mitigate adverse effects on water availability of land use activities that involve:

(i) the first establishment of tall vegetation cover; or

(ii) growing crops that require irrigation water;

after accounting for:

(a) efficient and sustainable water use; and

(b) present and potential land use opportunities that may be limited by or may cause such effects; and

(c) people's interests in existing plantation forestry and in water abstraction for crop irrigation.

EXPLANATION AND REASONS:

The first planting and growth of tall vegetation cover, particularly plantation forestry, can reduce yields of surface water and recharge of groundwater through evaporation and loss of rainwater. In addition, the growing of crops that require water abstraction from water bodies for irrigation purposes can significantly affect water availability for instream and other abstractive needs. The Council wishes to manage the adverse effects of these two sets of activities. In managing these adverse effects, Council will take into account the need for water abstraction to be efficient and sustainable. Council will also take into account the future possible uses of land that either contribute to these adverse effects, such as plantation forestry, or that may be adversely affected by water reduction, such as irrigated horticulture. Council will further account for existing interests in both plantation forestry and abstraction for crop irrigation.

METHODS OF IMPLEMENTATION:

(i) The Council will investigate and monitor the adverse effects of tall vegetation cover on surface water and groundwater yields in Moutere Gravel areas of the District to improve its understanding of water reduction mechanisms, effects and the methods of avoiding, remedying or mitigating such effects.

(ii) The Council will develop policies and rules in the regional and district plans and make decisions on resource consent applications to require:

(a) the sustainable allocation and efficient use of water for irrigating crops; and

(b) the avoidance, remedying or mitigation of reductions in water availability for abstractive or instream purposes, arising from new plantation forestry.

(iii) The Council will investigate opportunities for water augmentation in consultation with land owners, abstractive water users and those who have interests in instream uses and values, in catchments at risk of reduced water yield following afforestation.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Improved understanding of adverse effects on surface water and groundwater resources of vegetation cover changes.

(ii) Efficient and sustainable use of irrigation water for growing crops.

(iii) Reduced future risks of water yield reduction arising from vegetation cover changes.

PERFORMANCE MONITORING INDICATORS:

(i) Changes in water use efficiency in areas where crops are irrigated, including use of augmentation measures.

(ii) Changes to land uses which avoid, remedy or mitigate adverse effects on water availability.

Implements Objective 7.3, to address Issue 7.3.
Related policies are Policies 7.1, 7.3.

Policy 7.8

The Council will support the role of water user committees in the development and implementation of water management policy.

EXPLANATION AND REASONS:

The Council considers that representative committees of present and potential water users of local water resources, including dischargers of contaminants, provide an important and effective means of achieving sustainable water management policies and results that are understood and accepted by all those affected. Users include those with interests in instream values of water bodies.

METHODS OF IMPLEMENTATION:

(i) The Council will promote the establishment and functioning of catchment-based water user committees, with representation from all abstractive users, dischargers of contaminants, and those who have interests in instream uses and values, to:

(a) advise the Council in the development and implementation of water management policies; and

(b) assist the Council in managing water usage during drought periods, including assistance with rationing or rostering arrangements; and

(c) assist the Council in implementing programmes of education and advocacy for good practice methods of water use; and

(d) assist the Council in the development of water classification standards.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Enhanced efficiency and effectiveness in the development and implementation of water management policies and methods, including enhanced local understanding and support for such policies and methods.

PERFORMANCE MONITORING INDICATORS:

(i) Reported degree of awareness and satisfaction by water users of Council policies and programmes for water management.

Implements Objective 7.2, to address Issue 7.1.
Related policy is Policy 13.3.

8.0 RIVER AND LAKE RESOURCES

8.1 Introduction

There are five main river systems in the District. The Waimea and Motueka Rivers drain into Tasman Bay and the Takaka and Aorere Rivers drain into Golden Bay. In the south of the District the Upper Buller River drains westward to the West Coast beyond the boundaries of the District. All of these rivers have significant tributaries. They all have significant recreational and natural values including recreational fisheries. As well, they are all potentially powerful, flood-producing rivers, posing risks in their lowest reaches to floodplain settlements. Floodplain modifications in the form of stopbanks, floodways and bank protection works have meant varying degrees of flood risk reduction from the historically unmodified situations. The waters of the Motueka, Waimea and Moutere Rivers are relied on for water supplies for a range of uses, particularly for irrigation. Gravel carried in the beds of the main rivers has been a significant source for aggregate supplies. And the potential energy of their water flows has been and continues to be regarded as a significant hydropower source.

There are two major natural lakes in the Tasman District - Lakes Rotoiti and Rotoroa -both of which are in the Nelson Lakes National Park. The manmade Cobb Reservoir is in the conservation estate on the boundary of Kahurangi National Park. These lakes have very valuable scenic and recreational values.

There are also innumerable small lakes and tarns in the ranges, some of which were constructed for the purposes of gold recovery. Most are in remote locations and have natural or landscape values.

The Act allows the Council to consider and address in the Tasman Regional Policy Statement, issues relating to activities and their effects in the beds of rivers, lakes and on lands adjacent to rivers (riparian lands) and lakes, for soil and water management or hazards mitigation purposes. River and lake bed activities may include installation of structures such as bridges or culverts; disturbances such as gravel extraction or channel modifications; and plantings. Avoiding, remedying or mitigating the effects of activities on riparian lands is an important part of both river, land and water management. As riparian margins are essentially a land resource, they have been addressed in Section 6.

The following is a summary of river and lake resource issues addressed in this section of the Tasman Regional Policy Statement. Aspects of many of these issues are also water, land, contamination or hazards issues that are addressed in other sections of the Tasman Regional Policy Statement.

(i) Physical processes including water flow and sediment movement have formed river channels and floodplains, and the shape or location of river channels may change over time. Floodplains, because of their productive alluvial soils are generally occupied and intensively used, and are often the location for transport and other services. Major changes to river channels can occur during a single flood event. Unless the efficiency and stability of river channels can be maintained, river dynamics will inevitably adversely affect uses of floodplain lands and of the river itself. In addition, the placement of structures in river beds may aggravate the adverse effects of flood flows, including channel erosion, inundation of adjacent areas and damage to the structures themselves.

(ii) The bed, banks and waters of rivers, streams and lakes provide an important habitat for fish, wildlife and plants, and an important natural environment for recreational and cultural enjoyment and a source of uncontaminated water. Riverine ecosystems, with the wide range of instream uses and values they support, need protection from adverse effects of disturbances, contamination, water abstraction and plant pests. Inadequate access to rivers and lakes for their enjoyment is a further aspect of this issue.

(iii) Some activities on the surface of the water can adversely affect others and may need to be controlled, and these include the use of jet boats and other craft.

(iii) Extraction of gravel may partially meet the aggregate needs of society and can decrease the risk of flooding. But this activity can also increase the cost of river protection, the likelihood of damage to structures (including bridges and stopbanks), and may adversely affect groundwater availability, public safety and the natural appearance of rivers.

8.2 River and Lake Resource Issues

Issue 8.1

RIVER CHANNEL MANAGEMENT AND FLOOD MITIGATION

Control of river channels and management of floodplains is necessary if channel stability and efficiency in carrying floodwaters and sediment is to be maintained, and flooding of riparian lands is to be avoided or mitigated. Communities living near rivers have traditionally expected that river channels would remain in the same place, that the margins would be protected from erosion, and that riparian and floodplain lands would be protected from flooding to some adequate standard.

Activities such as disturbances or structures in or over the bed or the banks of rivers and streams may adversely affect these community aspirations, and require some active management. These include gravel extraction, bridges, buildings and tree plantings.

The physical control of rivers has only been practised in New Zealand since the arrival of Europeans. Immigrants found a geomorphologically young country and rivers which were still actively changing the landscape to a far greater degree than most they had been accustomed to dealing with in Britain. Their transport needs, their developing need to utilise nearly all available alluvial land for production and their concepts of individual land ownership all contributed to the wish to provide protection works to prevent erosion of river banks and riparian land, and to protect communities, transport networks and farming operations from floodwaters.

The earliest river management actions were channel and flood control works carried out by directly affected landowners but without any overall catchment planning. Since the 1940's, the efforts of the former Nelson Catchment Board and since 1989, the former Nelson-Marlborough Regional Council, in promoting catchment and river control schemes of works have made significant progress in achieving river channel and floodplain management objectives.

The Council now has these powers as part of its river management responsibilities.

The aims of works in river channels and on riparian lands are to:

(i) protect the channel from erosion and instability;

(ii) maintain efficient movement of flood waters and sediment down the channel; and

(iii) prevent or mitigate the effects of flooding.

The building of flood control structures on riparian lands to protect floodplain developments will provide protection to a certain level of risk. This means that works cannot control floods greater than their protection standard, and works can also fail, particularly if they are not maintained. As well, once control structures such as stopbanks are in place, floodplain communities may assume they are "safe" and continue to develop and intensify land uses. However, with sufficient capital expenditure, many floodplains can be physically protected from the maximum probable flood.

But works need to be designed in a comprehensive manner; if stopbanking systems are incomplete, floodwaters diverted from part of the system may end up damaging another part of the floodplain. Both the standard of protection of existing works and the completeness of the system of control structures, need to be regularly reviewed by floodplain communities.

In addition to works to achieve protection of floodplains, Council has the option of providing information about flood risk so that floodplain dwellers can decide themselves whether they will invest in development. Council also has the option of regulating floodplain development to limit in the interests of the community as a whole, the type, extent and value of land developments that are at

risk from floods. Furthermore, Council has the ongoing responsibility to avoid the protection works being adversely affected by major floods, or to limit or fix flood damage to protection works.

Schemes of works in river channels or on riparian lands may modify or damage habitats, alter the visual appearance of rivers, or even affect groundwater systems (for example, through lowering the level of beds). Such potentially adverse effects may conflict with the aims of channel and riparian (berm) modifications.

Addressed by Objectives 8.1, 11.1 and Policies 8.1, 11.1.
Related issue is Issue 11.1.

Issue 8.2

PROTECTION OF RIVERINE ECOSYSTEMS AND INSTREAM VALUES

The main rivers and many of their tributaries in the District have significant recreational, fisheries, wildlife and other natural and cultural uses. Most headwaters of the main rivers drain protected natural areas. The Upper Buller River is the least modified catchment area. Maori attach a special significance to rivers and their natural qualities.

Use or disturbance of rivers, both of their waters, beds and banks, for example for gravel extraction, structures for hydro-electricity generation, water abstractions and contaminant discharges, may damage or destroy fisheries, wildlife or other natural values, through physical modification of the river channel and adverse effects on water flow or quality. Protective measures are needed to limit such effects of activities on the healthy functioning of the riverine ecosystem.

The Act gives the Council a major responsibility to protect riverine ecosystems from activities that may adversely affect their natural and cultural values.

Preserving the natural character of rivers and their margins, protecting them from inappropriate development, protecting significant habitats of plants and animals, enhancing amenity values and ecosystem health and managing water quality are all matters to be addressed.

Addressed by Objectives 7.1, 8.2 and Policies 7.1, 7.4, 8.2.
Related issues are Issues 6.3, 7.1.

Issue 8.3

ACTIVITIES ON THE SURFACE OF WATERS OF RIVERS AND LAKES

Activities on the surface of the water of rivers and lakes are boating, including jet, power, sailing, rowing, canoeing, rafting; as well as swimming, angling or passive enjoyment of the river/lake environment. Activities on the surface of the waters of rivers and lakes may conflict with other users of the river or lake and its environs. For example, a jetboat (or even a raft) may annoy a fisher. At the same time of course, the fisher may be annoying a swimmer and a swimmer may be annoying a canoeist. Issues arise as to how conflicts between river and lake users may be avoided or limited.

Movement of craft on rivers and lakes is regulated by the Maritime Safety Authority of New Zealand. Boat speeds on lakes and tidal and navigable rivers are limited to 5 knots relative to land within 200 metres of the shore or 30 metres of any other vessel, raft or person, but this speed limit can be uplifted on some rivers and lakes.

Many activities which can occur on the surface of the water may have commercial possibilities and commercial jetboats and rafts are now common in New Zealand. Rafting is unlikely to cause much upset to other river users but jetboats do tend to upset people if operated in an inappropriate and

inconsiderate manner. If a number of commercial operators is present on the same reach of a river then there is the possibility that unsafe "competitive" practices will develop. In order to be successful and safe a commercial jetboat operation may require sole use of a reach of river, but for any river which is accessible by others it seems unlikely that such a limitation would be acceptable to the general public.

Addressed by Objective 8.3 and Policy 8.3.
Related issues are Issues 8.2, 9.2.

Issue 8.4

GRAVEL EXTRACTION FROM RIVERS

Gravel extraction from rivers has yielded an important supply of high quality aggregate for construction and other industrial purposes in the District. However, gravel extraction can have significant adverse effects on:

(i) the stability of river channels, including river banks, through the alteration or lowering of bed levels, with associated adverse effects on the integrity of river control structures, the stability of other structures in rivers, levels of aquifers or drainage networks connected with the river, and the supply of gravel and sand to the coast, with implications for coastal stability;

(ii) contamination of river water by sediment movement, with adverse effects on fisheries, and the generation of dust and noise from machinery;

(iii) disturbances of fisheries and wildlife, and modification or destruction of their habitats, as well as adverse effects on other natural, recreational or aesthetic values of the river;

(iv) safety risks to the public from the use of machinery or creation of hazards in river beds.

Gravel extraction is a particularly significant form of river bed disturbance. Its potentially adverse effects have connections with river channel management and riverine ecosystem protection issues.

Historically, many major rivers in the District have been mined for river gravel on an unsustainable basis, in that more gravel has been removed that has been naturally supplied, so causing or aggravating many of the adverse effects identified above. Issues arising from this situation are the need to limit river gravel extraction and encourage efficient use of aggregate from rivers as well as other high quality sources, such as hard rock quarry sources.

Addressed by Objectives 8.1, 8.2 and Policies 8.1, 8.2.
Related issues are Issues 6.6, 8.1.

8.3 River and Lake Resource Objectives

Objective 8.1

Maintenance of the stability and efficiency of rivers and floodway lands to carry floodwaters or sediment.

REASONS:

River channels and certain lands near rivers need to be able to carry flood flows without erosion, bed movement or other flood damage. Disturbances, structures or plantings in river beds or floodways must avoid, remedy or mitigate adverse effects on their ability to continue to pass floodwaters or sediment and on the stability of any structures associated with the river.

Addresses Issues 5.2, 8.1, 11.1; achieved by Policies 8.1, 11.1.
Related objectives are Objectives 5.2, 11.1.

Objective 8.2

Maintenance and enhancement of natural and other instream values of rivers, lakes and streams.

REASONS:

The natural habitats, water quality, recreational and other instream values of rivers, lakes and streams are important public values. Disturbances, structures, contaminant discharges or water abstractions must avoid, remedy or mitigate adverse effects on the health of the riverine ecosystem.

Addresses Issues 7.2, 8.2; achieved by Policies 7.1, 7.4, 8.2.
Related objectives are Objectives 6.2, 7.1.

Objective 8.3

Recreational and other activities on and in rivers and lakes that avoid, remedy or mitigate adverse effects on each other.

REASONS:

Boating, fishing, swimming and other activities may occupy the same river or lake space and conflict with each other. Such conflicts must be minimised.

Addresses Issue 8.3; achieved by Policy 8.3.
Related objective is Objective 9.2.

8.4 River and Lake Resource Policies and Methods

Policy 8.1

The Council will seek to maintain the stability and efficiency of river channels and floodway land.

EXPLANATION AND REASONS:

River channels and floodway lands carry floodwaters or sediment. It is important to ensure their capacity to continue to perform these natural functions is not adversely affected by either natural processes or disturbances or other activities. Where channels or floodways are modified by works, there is a need to ensure that their role in supporting stable and efficient passage of floodwaters is protected to an appropriate degree. The stability of river channels and floodway land is also important to ensure stability of any structures associated with the river.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in regional and district plans and make decisions on resource consent applications to regulate the adverse effects of all channel or floodway disturbances, including river gravel extraction, or structures or plantings.

(ii) The Council will maintain existing channel and floodway protection works to their design standard where economically worthwhile.

(iii) The Council will promote and carry out new channel or floodway protection works where they are economically worthwhile and contribute to a comprehensive approach to river and floodplain management, and where adverse effects on other river uses or values are appropriately avoided or limited.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Maintenance of channel and floodway efficiency and stability.

PERFORMANCE MONITORING INDICATORS:

(i) Funding expenditure for maintenance of existing works or promotion of new works.

(ii) Existence of policies and rules in the Plan that regulate channel or floodway protection.

Implements Objectives 8.1, 11.1, to address Issues 8.1, 11.1.
Related policy is Policy 11.1.

Policy 8.2

Council will avoid, remedy or mitigate adverse effects of activities in river and lake beds on intrinsic, recreational, cultural, and other instream values of rivers, lakes and streams.

EXPLANATION AND REASONS:

Maintenance of instream values of rivers, lakes and streams is important for healthy riverine and lacustrine ecosystems. The Council is required to ensure the protection of significant natural habitats and features and the life-supporting capacity of river and lake waters.

METHODS OF IMPLEMENTATION:

(i) The Council will investigate and monitor instream uses and values of rivers, lakes and streams and assess the significance of and risks to such values, and methods of their necessary and appropriate protection or enhancement.

(ii) The Council will promote practices in the use of rivers, lakes and streams including their beds and waters, by landowners, operators, or the public that avoid, remedy or mitigate adverse effects on instream values.

(iii) The Council will develop policies and rules in regional plans or support provisions of any relevant water conservation order and make decisions on resource consent applications to avoid, remedy or mitigate the adverse effects of river and lake bed disturbances, including river gravel extraction or other channel modifications; water takes; or contaminant discharges on significant instream uses or values of rivers, lakes and streams.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Appropriate degrees of protection or enhancement of significant instream uses or values in specified rivers, lakes or streams in the District.

PERFORMANCE MONITORING INDICATORS:

(i) Extent or degree of protection of specified rivers, lakes and streams provided in regional plans or relevant water conservation orders.

Implements Objectives 7.1, 8.2, to address Issues 7.1, 8.2.
Related policies are Policies 4.2, 7.1, 7.4.

Policy 8.3

The Council will avoid or minimise conflicts between recreation and other activities on the surface of rivers and lakes.

EXPLANATION AND REASONS:

The use of the surface of rivers and lakes for recreational activities can result in safety risks or other conflicts over the use of river or lake space. The Council needs to assess and act on situations where safety risks need to be addressed beyond compliance with current government regulations on craft speed.

METHODS OF IMPLEMENTATION:

(i) The Council will provide information and promote practices of active use of rivers and lakes for recreational purposes that avoid, remedy or mitigate adverse effects on each other.

(ii) Council will develop policies and rules in regional and district plans or provisions in any harbour bylaw where appropriate and make decisions on resource consent applications, to avoid, remedy or mitigate adverse effects on the use of river or lake space by conflicting activities.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced safety risks for space use conflicts on the surface of river and lake waters.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence of conflicts on river and lake waters.

Implements Objective 8.3, to address Issue 8.3.
Related policy is Policy 9.2.

9.0 COASTAL ENVIRONMENT

9.1 Introduction

The coastal environment of Tasman District extends from Kahurangi Point on the West Coast, to a point on the shoreline of Waimea Inlet, opposite the Champion Road boundary with Nelson City. It includes the territorial sea out to the 12 nautical mile (22.2 kilometre) limit. The inland extent of the coastal environment is variable, defined only as being land where there are interactions between the land and sea environments.

The sea (coastal marine) area may be considered to consist of five distinct geographic areas, while the shoreline and adjoining land form five distinct geographic areas. These areas are:

A. COASTAL MARINE AREA

1. The open ocean of the West Coast and north of Farewell Spit. Little is known about the ecological or natural influences of this area, nor of uses currently made of it other than as a transit area primarily for fishing vessels at the western entrance to Cook Strait.

2. The largely enclosed waters of Golden Bay, which is generally circular, approximately 35 kilometres across, and open through an arc of roughly 900 (or 25 kilometres) on its eastern side. Commercial fishing, minor aquaculture (1994) but extensive spat catching and scallop enhancement areas, and recreational boating, are prevalent activities in the Bay.

3. The wide V-shaped Tasman Bay, for which Council has jurisdiction only over the western half. Coastal activities in Tasman Bay are similar to those in Golden Bay, but more intensive recreational boating is associated with the Abel Tasman National Park coastline and day-sailing from Nelson. Commercial shipping to and from Port Nelson traverses the bay.

4. Estuaries, varying in scale from the large Waimea and Whanganui Inlets, in the east and west respectively, to Onahau and Puponga estuaries.

5. Extensive intertidal sandflats extend up to 6 km from high water on the south side of Farewell Spit; and on a lesser scale are common throughout Golden Bay and in the Riwaka/Motueka coast in Tasman Bay.

B. SHORELINE AND ADJOINING COASTAL LAND

1. Kahurangi Point to Pillar Point

This open ocean coastline includes extensive dune systems in the south, otherwise it is a rocky shoreline, with cliffs being a strong landscape and scenic element. It is breached by the entrance to the Whanganui Inlet; smaller estuaries in the south provide important largely unmodified habitats.

The area has limited road access and it is sparsely populated. Some farmland adjoins the coastline, with the Kahurangi National Park occupying the hinterland of the Wakamarama Range virtually through to the base of Farewell Spit.

The Big River Estuary, Whanganui Inlet, and the coast between Kahurangi River and Big River, and between Te Hapu and Fossil Point, are ranked as nationally important.

2. Farewell Spit

This low sandspit shelters Golden Bay from ocean influences to the north. The spit and the extensive tidal flats to the south are a nature reserve of international importance for bird

species, especially waders. Land access to the Spit is controlled by the Department of Conservation. Access by sea from Golden Bay is limited by the extremely wide intertidal area.

Farewell Spit and the tidal flats are ranked as internationally important.

3. Golden Bay

The bay is characterised by a shallow-graded sandy shoreline, interrupted by estuaries. Farm properties are dispersed along the western coastal plain and through the Aorere and Takaka river valleys which drain into the bay. Small retirement or holiday settlements have been established sporadically along the coastline.

There are several small ports, but limited opportunities for berthage, moorings, or launching ramps. Fish processing occurs on the Waitapu Wharf, and at Seaford.

The scenic qualities of the area, its beaches and mild sunny climate attract a range of residents, holiday-makers and tourists, but the bay does not have the range of continually available activities of mainstream coastal tourist areas.

Coastal erosion is evident in parts of the bay. Protection works of variable apparent effectiveness have been put in place, some having no aesthetic merit.

There are eleven estuaries and inlets in Golden Bay which are of national importance: Puponga Inlet; Pakawau Inlet; Waikato Spits, Inlet and Shell Banks; Ruataniwha Inlet; Parapara Inlet and Sandspit; Onekaka Estuary and Sandspit; Onahau Estuary; Waitapu Estuaries; Motupipi Estuary; Tata Beach Estuary; and Wainui Inlet.

4. Abel Tasman National Park Coastline

While not entirely within the extent of the national park, the coastline between Tarakohe and Tapu Bay includes a succession of cliffs or headlands, sandy beaches and estuaries. Much of the land has regenerating bush cover. Small residential areas adjoin the northern and southern coastal limits of the Park, and enclaves of private land are surrounded by park at Awaroa and Torrent Bay. (The national park extends only to mean high water springs: it does not include tidal foreshore.)

This coastline has major scenic importance, attracting people to walk the coastal track or explore the coastline by boat. The Tonga Marine Reserve was established over a central section of the park coastline in 1993. All fishing is excluded in the marine reserve: a restriction on trawling and dredging also applies in a sector of sea off Separation Point, to protect beds of bryozoan corals. The near-shore subtidal community was studied prior to the marine reserve being proposed, but little is known of the undersea environment further offshore.

Recreational boat traffic to and along this coastline is high, especially in summer. Craft vary widely in size, speed, visibility and purpose, from larger commercial passenger craft to privately owned boats, including canoes and kayaks.

National importance is given to the coast between Pohara and Abel Tasman Point, while the Abel Tasman National Park coastline and estuaries are internationally important.

5. Tasman Bay

The coastline from Tapu Bay to the District boundary at Champion Road has a variety of natural features including the Moutere Inlet and the major western part of the Waimea Inlet; the ports at Motueka and Mapua; the delta area of the Riwaka and Motueka rivers; sandspit at Motueka; barrier islands (Rabbit Island and Jackett Island); Kina Peninsula and the cliffs between Kina and Ruby Bay.

Seabed build up is reported at the former Riwaka port area. Erosion is evident at Marahau and Ruby Bay, while the Motueka Sandspit varies as erosion and deposition of sand fluctuates.

Of the larger urban communities, parts of Motueka extend to the coastline but, as with Richmond, the bulk of the urban area is close to but not immediately on the coastline. Other coastal residential areas are at Tapu Bay, Riwaka, Ruby Bay, Mapua and Bests Island. Farmland, orchards, forestry and industries adjoin the remainder of this coastline.

The regional sewage scheme treats urban effluent at Bells Island in the Waimea Inlet and discharges into the inlet on the outgoing tide. The Motueka oxidation ponds discharge to marsh cells, which in turn discharge to ground soakage on land adjoining the Motueka river mouth. The Tasman/Nelson district boundary drawn through Tasman Bay includes an adjustment to place the dumping ground for Port Nelson dredgings under the jurisdiction of Nelson City.

National importance is given to: the Otuwhero and Marahau Estuaries, Sandspits and Tidal Flats; Motueka Delta; Moutere Inlet and Waimea Inlet. No Man's Island is ranked as internationally important.

The Act allows the Council to consider and address in the Tasman Regional Policy Statement, issues relating to:

(i) the occupation and use of the coastal marine area (sea space occupied by coastal waters, foreshore or seabed), including disturbances, extraction of material, structures, use of water, discharges, and other activities;

(ii) the effects of any use, development or protection of any land in the coastal environment that are of regional (that is, district) significance;

(iii) the control of land use for the purposes of soil conservation, water management, natural hazards or hazardous substances management.

In addition, the Council has the powers of a harbour board under the Harbours Act 1950 to implement any policies in the Tasman Regional Policy Statement concerning navigation and safety issues where harbour limits have been defined. The entire coastline could be included within harbour limits.

There is a range of issues in the coastal environment of the District, arising from interactions between coastal resources and processes and the adverse effects of established activities or of any future activities. In summary form, these issues are:

(i) a lack of information on the coastal marine environment and likely effects of various activities on this environment;

(ii) issues concerning coastal craft, including the management of navigation and safety risks and provision of boating facilities;

(iii) potential adverse effects of aquaculture activities and determining appropriate methods of allocating sea space for aquaculture;

(iv) effects on public access to coastal space from authorising private rights to use the coast;

(v) legal limitations on the Council concerning the management of the effects of aquaculture and fisheries activities;

(vi) identifying and maintaining the natural character of any part of the coastal environment;

(vii) adverse effects of land-based activities on the coastal environment;

(viii) the maintenance and enhancement of coastal water quality, including adverse effects of sewage effluent, other land-based discharges and accidental spills or discharges into the sea.

(ix) public interest in access to and along the coast.

9.2 Coastal Environment Issues

Issue 9.1

LACK OF INFORMATION ON THE COASTAL MARINE ENVIRONMENT

The undersea or coastal marine environment is not a natural habitat for people, and knowledge of this environment must be gained through active research effort. Comparatively little is known about physical processes or natural or modified marine habitats. Further, the medium of the sea is dynamic and many of the fish and other animal species inhabiting it are mobile. There is general acknowledgement among agencies with interests in coastal management that information bases to assess marine ecological processes, such as nutrient supply for commercially important fisheries, and coastal processes such as shoreline stability, is generally inadequate.

Knowledge of significant landscapes ("seascapes"), special habitats, endangered species or other natural features is scant or does not exist. There are therefore risks that poorly known coastal resources may be damaged, with no management response possible. Because the coastal marine environment is inhospitable and not very accessible, resource investigations are more expensive than investigations on land.

With a limited information base, coastal management may result in:

(i) policies and decisions that are overly cautious, pursuing an unnecessary or unachievable degree of environmental protection, and resulting in a loss of economic or enjoyment opportunities;

(ii) policies and decisions that carry a risk which, if realised, would result in significant environmental damage.

Even with continuing efforts by a number of agencies into understanding coastal resources, it will be some years before results can be regarded as having general reliability or significance.

This issue means that Council has to decide:

(i) how conservative it should be in its coastal management policies and consent decisions;

(ii) what research priorities should be set to help the Council in carrying out its responsibilities; what is the most cost-effective level of effort and who should contribute what to that effort; and

(iii) to what extent can information needs be met through monitoring and assessment requirements of consent holders, who are authorised to use or develop some coastal resource or area.

Addressed by Objectives 9.1, 13.2 and Policies 9.1, 13.7, 13.8.
Related issue is Issue 13.6.

Issue 9.2

ISSUES CONCERNING BOATS: NAVIGATION AND SAFETY AND FACILITIES

Navigation and Safety

Navigation and safety issues were previously addressed by the former harbour board and other local administrations, and by the Ministry of Transport.

Council has inherited various harbour bylaws, applying to separate parts of the District. There are also areas not subject to bylaw control, where the Ministry of Transport remains responsible for navigation and safety through the Water Recreation Regulations 1979. There is a need to determine what navigation and safety matters require appropriate regulation, and whether this should be through harbour bylaw rules or regional coastal rules.

There is a need for consistent navigation and safety rules, applying throughout the District. There is a need for an advisory or compliance service for the public concerning navigation and safety problems, particularly over the summer holiday period, at several places along the District's coastline.

There is also a need to establish consistency in navigation and safety regulation between vessels less than and more than 6 m in length, and between vessels (regardless of size) used for commercial or for recreational purposes.

Boating Facilities

Despite the extensive coastline of Tasman District, locations where launching ramps, moorings or jetties can be used at all states of the tide are limited. Improving this natural situation may require significant dredging or harbour works in a number of locations. The provision of boating facilities, from swing moorings to port developments, can alter the appearance and natural character of an area and may affect natural coastal processes. Reliance on trailer craft will require increased parking areas in association with launching ramps. Continued expansion of boating activity in Tasman District is likely to result in increasing frustration with the limitations of existing facilities, which can only be overcome by significant expenditure. A user pays policy can be applied to all boating facilities which have identifiable users, but direct user charges cannot be practicably recovered from ramps or wharves which receive intermittent casual usage or which are in isolated locations.

The current pattern of boating facilities around the District's coastline inherited from previous administrations has resulted in significant variations in occupations of seabed for mooring structures, including their environmental effects, legality and physical condition. Any future allocation of rights for individuals to occupy and use parts of the coast for moorings or jetties needs careful assessment, especially along the Abel Tasman National Park coastline.

Addressed by Objective 9.2 and Policy 9.2.
Related issue is Issue 8.3.

Issue 9.3

ADVERSE EFFECTS OF ACTIVITIES IN THE COASTAL MARINE AREA

General Activities

Many activities in the coastal marine area are transient. They occur without preventing other people's activities, and without causing any continuing effect on the environment. Fishing activities may affect the state of the seabed and the ecosystems it supports, but these effects are removed from Council's responsibility by the exemptions of Section 12(1)(c) and (e) of the Act. Structures, such as jetties or marine farm equipment, or physical changes, such as reclamation or impoundment, may have a variety of effects, including:

(i) apparent privatisation of public space;

(ii) restrictions on public access;

(iii) impediment to general navigation;

(iv) physical change from natural state and natural processes;

(v) visual change.

These effects are particularly associated with aquaculture which is identified as an issue in the District because aquaculture activities involve the occupation or use of coastal space, often including the use of structures, and there is significant potential for the development of aquaculture activities in the District's coastal marine area. Other coastal space occupations or structures are usually limited in extent.

Roads and other utilities adjoin the sea or cross estuaries in several places in the District. They require maintenance from time to time, and those maintenance activities need to be managed to avoid, remedy or mitigate their effects in the coastal marine area.

Potential Effects of Aquaculture

Aquaculture involving marine farming with longline or cage structures occupies sea space and is a potential impediment to the passage of craft, particularly vessels trawling or dredging for fish and shellfish species. There is a need to consider that physical obstruction when space for such aquaculture activities is to be allocated. The effect of aquaculture on access to fisheries is also an issue to be considered by the Council and by the Ministry of Fisheries under the Fisheries Act. Nearshore or intertidal aquaculture proposals may be highly visible. In some cases they may be perceived as limiting public access along the foreshore or coastline. Iwi interests are strongly opposed to aquaculture in the vicinity of Pariwhakaoho and there is a need to avoid locating future aquaculture activities in this area. Other effects of aquaculture include:

(i) cumulative visual effects of structures;

(ii) ecological impacts of particular species, or farming techniques (e.g. artificial feed);

(iii) visual impact of structures on areas of landscape importance.

Farming of filter feeding bivalves requires high water quality. There are few major point source discharges to either Tasman or Golden Bays that affect current aquaculture activities, but crop harvesting is considerably limited by the quality of freshwater discharges from the main rivers entering each bay. Contaminated fresh water results from a range of land use activities throughout each of the main river valley and plains systems. Such diffuse source contamination of coastal waters is not easily addressed. The problem is made more complex by the fact that many of the microbial and nutrient contaminants in coastal waters are taken up as food by farmed bivalves.

A further aspect of this issue concerns the biological carrying capacity of the marine ecosystem. Golden Bay and Tasman Bay are subject to finfish harvesting, and snapper stock augmentation is currently being trialed. Dredging for oysters and scallops, a developing enhancement programme for scallops, and an increasing interest in farming mussels, scallops and oysters are all taking place. The potential effects of the augmented fish populations on bottom components of the coastal marine food web is not well understood but it raises questions about how much space should be made available for aquaculture. There are connections between these questions and the issue of statutory responsibilities for making such decisions.

Aquaculture species may be threatened by nuisance organisms, or may cause nuisance to other organisms or natural values. Contingency planning is desirable, but may have only limited effect.

Addressed by Objective 9.3 and Policy 9.3.
Related issue is Issue 9.4.

Issue 9.4

PRIVATE AND PUBLIC RIGHTS OF ACCESS TO COASTAL SPACE

The sea, foreshore and seabed are resources in the public domain. Authorising various activities by coastal permits or rules creates private rights over parts of this public domain. The extent to which the

public are consequently excluded varies according to the nature of the authorised activity, and the activities which members of the public may want to undertake in that location.

For example, marine farming may limit, but not prevent, other craft movements through the farm site. Farm structures provide artificial reef habitats which attract fish species sought by recreational fishers. However, farm structures prevent trawling or dredging activities through farm sites. The presence of marine farms may deter some people from using areas much larger than the farm sites themselves.

Because the sea and seabed are generally not subdivided nor allocated for private purposes, there is a tendency to regard the sea as space simply waiting to be claimed for (private) productive use. There is a question of principle about the extent to which the public domain should be allocated to private use. But the practical effect on public interests of such allocation may vary, as some activities such as aquaculture, or locations of other activities for private use, may have little or no adverse effects on uses of the area by other people. It may be difficult to show that the adverse effects of allocation of public space to private interests are significant in any particular instance. This can make assessment of likely cumulative effects also difficult, in advance of those effects actually developing.

A particular example of this issue is the existence of private moorings along the Abel Tasman National Park coastline. The National Park does not have a continuous boundary along its shoreline, as there are enclaves of private land along that coastline, varying from individual house sites to the settlements of Torrent Bay and Awaroa. These properties are dependent on access by sea. Requests for moorings to be used in conjunction with these properties may not be unreasonable, but the view that the National Park coastline should be free of such developments must also be considered.

As aquaculture is an evolving activity, there is a need to ensure that its regulation is not limited to currently known technologies, and that space allocation methods are sufficiently robust and flexible to deal with increasingly sophisticated uses of sea space for aquaculture, including access to the space occupied by aquaculture activities for other purposes.

Allocating Sea Space for Aquaculture

Marine farming has been significantly limited in Tasman Bay and Golden Bay by a rule initially promulgated under the Marine Farming Act, but which can only be replaced once the Council's Regional Coastal Plan is made operative. As a result there is an unsatisfied demand for marine farming sites. Regardless of how much sea space the Regional Coastal Plan makes available for marine farming, there is likely to be competition for sites. There is a need for a fair and open means of allocating sites, particularly if the number of sites to be made available is less than the demand.

However, the coastal marine area is public territory and any departure from that must be justified.

Addressed by Objective 9.4 and Policy 9.4.
Related issue is Issue 9.3.

Issue 9.5

LEGAL CONSTRAINTS ON THE MANAGEMENT OF ADVERSE EFFECTS OF AQUACULTURE AND FISHERIES

Coastal management is provided for under the Resource Management Act (the Act) and fisheries management (including aquaculture) is provided for under the Fisheries and the Marine Farming Acts. While coastal management is defined in comprehensive terms, certain aspects of fishing or aquaculture activities (enhancement and lawful harvesting of animals or plants) are unable to be managed by Council. As fish includes any aquatic plant or animal, then no enhancement or harvesting activities may be controlled by Council if the purpose is protection or management of any other marine life. Farming or harvesting any fish life by either aquaculture or fishing methods, is managed by the Minister of Fisheries. Adverse effects from fish harvesting, for example: repeated disturbance of the seabed by trawling or dredging, and the associated effects on marine life, can not be addressed

by Council (except by advocacy to the Minister of Fisheries). Similarly, adverse effects on marine organisms arising from aquaculture, for example: food competition; predation; disease; or displacement through the use of sea space, are Fisheries, not Resource Management, issues. While there are several opportunities during the development of fisheries policy and legislation for the public to address effects of fisheries, there is little opportunity to challenge the effects permitted by decisions made under the Fisheries Act.

However, issues arising from structures in occupation of or disturbances to coastal waters or the seabed that are not related to marine life, may be addressed under Council's coastal management responsibilities.

The issues raised by the complex relationship between the current laws for coastal and fisheries management are:

(i) the need to distinguish between matters that can be properly dealt with by Council and those that are the responsibility of the Minister of Fisheries; and

(ii) the need for all interests in coastal and fisheries management to understand these distinctions in order to avoid, remedy or mitigate conflicts between the commercial use of the coastal marine area for fisheries or aquaculture and any other coastal uses or values.

Addressed by Objective 9.3 and Policies 9.3, 9.5.

Issue 9.6

IDENTIFYING AND MAINTAINING THE NATURAL CHARACTER OF THE COASTAL ENVIRONMENT

There is a need for careful evaluation of natural character in all coastal localities. A consistent approach should be taken throughout the District. Information on natural character needs to be presented in a way which is effective in decision making. Ways of preserving natural character need to be carefully considered, particularly in relation to cumulative visual changes through successive physical developments. Care needs to be taken to include consideration of the natural character of the coastal marine area, much of which is invisible to most people.

Natural character needs to be preserved for the benefit of natural habitat and ecosystem conservation, and for recreational, aesthetic and cultural values. There is a need to ensure that the activities of residents and visitors in the coastal marine environment do not degrade the natural character factors which attracted them to it in the first place.

Visible elements of natural character include land form, land cover, plant and animal communities, and the interface between land and water. Less apparent factors are natural processes, climate, and the quality of water and air.

Particular features of the natural character of the District's coast include:

(i) the combination of granite sand beaches, rocky headlands, regenerating nature vegetation, estuaries, and sea, along the Abel Tasman National Park coastline;

(ii) the series of estuaries and river deltas, and their particular biological communities;

(iii) tidal range, particularly the exposure of extensive tidal sand flats;

(iv) sand spits, barrier islands and dune systems;

(v) contrast between the sheltered shoreline of Tasman Bay and Golden Bay, and the exposed ocean shoreline of the north-west coast.

Addressed by Objectives 9.5, 9.6 and Policies 9.6, 9.7.
Related issues are Issues 5.5, 6.3.

Issue 9.7

ADVERSE EFFECTS OF LAND-BASED ACTIVITIES ON THE COASTAL ENVIRONMENT

Natural features, resources and processes in the coastal environment can be adversely affected by the use of land, whether it is coastal land or inland areas. Land uses or activities having such effects include:

(i) coastal settlements or other land developments, including buildings in inappropriate locations on active coastlines;

(ii) contaminant discharges from a wide variety of sources, including sediment movement into estuaries and offshore.

Coastal Settlements and Land Developments

Coastal settlements or other land developments on or near the coast may displace or modify natural habitats or other features, and the visual or natural appearance of the coastline, through buildings or other structures, land drainage or reclamation, vegetation removal or other land disturbances, in relation to forestry or farming, stocking or plantings. Such developments may limit public access to the coast. There is a need to manage the adverse effects of all these kinds of land uses in ways or locations that are appropriate.

Coastal Erosion

The location or development of coastal settlements may be at risk from changes to the shoreline through active coastal processes. Often structural modification of the shore by erosion protection works may conflict with such processes, and damage the shore features or the protection works themselves. There is a need to establish whether built development is appropriate in certain coastal locations, or whether coastal erosion processes can be structurally controlled without damage to the coast or to development.

Coastal Contamination

Contaminant discharges to the coast may arise as sediment movement from land disturbance activities or through natural erosion in catchment areas away from or next to the coast; from agricultural or urban effluent; or from agrichemical or industrial discharges. This issue is dealt with further below and also in Section 10 of the Tasman Regional Policy Statement addressing environmental contamination.

Addressed by Objectives 5.2, 9.5, 9.6 and Policies 5.5, 9.6, 9.7.
Related issues are Issues 5.5, 9.6.

Issue 9.8

MAINTENANCE AND ENHANCEMENT OF COASTAL WATER QUALITY

Coastal waters are used or valued for a wide range of public purposes, where the physical, chemical or biological features of water may be important. Coastal waters that are clear and uncontaminated are sought for recreational, aquaculture, fisheries, aesthetic and cultural reasons, as well as for the health of coastal communities. However, coastal water quality may be degraded by a variety of natural influences and human activities. Natural sediment movement, particularly from storm events, may lower water quality for such sensitive activities as aquaculture. Accelerated sedimentation from land

disturbance operations; diffuse or point source discharges of agrichemicals, nutrients or microbial contaminants from farming and forestry activities; sewage effluent; contaminated site leachate; stormwater runoff or other urban point source discharges; are all land-based discharges that may enter coastal waters and adversely affect coastal water quality. In addition, sea discharges from boats or ships can be significant risks, especially from accidental spills of oil products or discharges of foreign ballast water.

There is a need to establish water quality requirements under water classifications to limit the effects of any direct discharges into coastal water. The Act requires consideration of options for significant discharges, and this, coupled with the importance of avoiding adverse effects on the natural character of the coastal environment, means a restrictive outlook for coastal discharges. There is also a need to address diffuse source discharges from land use activities, and to provide for contingencies or risks of marine oil spills, or of sewage.

National regulations implement international obligations governing discharges from ships, and prescribe options for coastal plan rules.

Addressed by Objectives 7.3, 9.7, 10.1, 10.2 and Policies 9.8, 10.3, 10.5.
Related issues are Issues 7.3, 10.1, 10.3.

Issue 9.9

PUBLIC INTEREST IN ACCESS TO AND ALONG THE COAST

People place high value on access to and along the coast. The Act regards public access to the coast as a matter of national importance.

The principal means of creating additional access to the coast are:

(a) A requirement for roads, reserves, esplanade strips or access strips to be provided when coastal land is subdivided or developed.

(b) Negotiated purchase or other statutory instrument.

There is conflict between the provision of roads and reserves or strips to enhance coastal access, and a preference to limit subdivision and development of coastal land. There can be conflict between public access and the protection of ecological values, cultural values, public safety, or security for some authorised activity. Public access can even be in conflict with itself: the quality of experience in some locations, for example the Abel Tasman coastal track, can be reduced simply by the numbers of other people present, or by their activities.

Addressed by Objective 9.8 and Policy 9.9.
Related issues are Issues 5.5, 9.6, 9.7.

9.3 Coastal Environment Objectives

Objective 9.1

Adequate information on the resources, processes, and values of the coastal environment to support sustainable management decisions, and decisions which acknowledge the level of uncertainty in the information available for assessing policy and consent options in the coastal environment.

REASONS:

There is a critical lack of information on the coastal environment, particularly coastal marine resources, processes and values. Improvement in the coastal environment information base is necessary to reduce risks in coastal management decisions.

Addresses Issues 9.1, 13.6, 13.7; achieved by Policies 9.1, 13.7, 13.8.
Related objective is Objective 13.2.

Objective 9.2

Opportunities for boating practices and uses of the sea that are safe and avoid, remedy or mitigate adverse effects on other coastal activities and values.

REASONS:

There is a need to ensure safe boating practices and to avoid, remedy or mitigate nuisances or other adverse effects arising from boating activities.

Addresses Issue 9.2; achieved by Policy 9.2.
Related objective is Objective 8.3.

Objective 9.3

A coastal marine area in which adverse effects from activities, including structures, physical modification, or occupation, are avoided, remedied, or mitigated.

REASONS:

The effects of activities need to be managed so that the particular activities, and the environment in which they occur, are sustainable; and also so that the public domain will not be estranged lightly.

Addresses Issue 9.3; achieved by Policies 9.3, 9.6, 9.7.
Related objectives are Objectives 9.4, 9.5, 9.6.

Objective 9.4

A fair and efficient process for the allocation of rights to use parts of the coastal marine area, especially where parties are in competition for a limited area.

REASONS:

Where parts of the coastal marine area are available for private activities, after having taken into account the wider public interest, the process for allocating use rights needs to be fair to all parties and administratively efficient.

Addresses Issue 9.4; achieved by Policy 9.4.
Related objectives are Objectives 9.3, 13.2.

Objective 9.5

Preservation of the natural character of the coastal environment, including the functioning of natural processes.

REASONS:

The coastal environment is an area with significant natural values. Its natural character needs to be protected or enhanced along all parts of the District's coastline, both for its intrinsic value and its visual, aesthetic and cultural appreciation by the public.

Addresses Issues 5.5, 6.3, 9.6, 9.7; achieved by Policies 5.5, 6.3, 9.6, 9.7.
Related objectives are Objectives 5.2, 6.2, 9.6.

Objective 9.6

Coastal land use and development that avoids, remedies or where appropriate mitigates adverse effects on:

(i) natural character, including natural processes, outstanding natural features and landscapes, and areas of significant indigenous vegetation and significant habitats of indigenous fauna; and

(ii) public access to and along the coast; and

(iii) amenity values; and

(iv) heritage values; and

(v) Maori traditional associations with any coastal lands, waters, sites, wahi tapu, and other taonga; and

(vi) the natural qualities of coastal waters.

REASONS:

The coastal environment has many natural, public amenity and cultural values and associations. Many of these values are supported by interactions between coastal land and water resources and processes. Coastal land uses need to avoid, remedy or where appropriate mitigate adverse effects on these values.

Addresses Issues 5.5, 9.6; achieved by Policies 5.5, 9.6, 9.7.
Related objectives are Objectives 5.2, 9.5.

Objective 9.7

Maintenance and enhancement of coastal water quality to provide for the needs of marine ecosystems and for sustainable public uses and values.

REASONS:

Coastal water needs to retain and improve its value for a wide range of public uses where quality features are important. Risks of degraded quality need to be minimised.

Addresses Issues 6.5, 7.3, 10.1, 10.2, 10.3; achieved by Policies 6.4, 9.8, 10.3, 10.5.
Related objectives are Objectives 7.3, 10.1, 10.2, 10.4.

Objective 9.8

Maintenance and enhancement, where appropriate, of public access to and along the coast.

REASONS:

There is public and statutory recognition of the importance of public access, although it can conflict with other values.

Addresses Issue 9.9; achieved by Policy 9.9.
Related Objectives are 5.2, 6.2, 9.5, 9.6

9.4 Coastal Environment Policies and Methods

Policy 9.1

Council will promote the development of an adequate information base for sustainable coastal management decision-making.

EXPLANATION AND REASONS:

Information is a critical need in sustainable coastal management decisions. There are substantial gaps in knowledge of coastal resources and processes and such information requires significant investigations and monitoring effort.

METHODS OF IMPLEMENTATION:

(i) The Council will assess investigation and monitoring priorities for coastal marine resources and processes, and:

(a) undertake research and monitoring within established priorities; and

(b) advocate or contribute to efforts by other agencies with interests in coastal management.

(ii) The Council will require applicants and holders of coastal permits to provide an adequate amount of information concerning the likely effects of their proposal or activity on coastal resources and processes.

(iii) The Council will consult with the fishing industry, Ministry of Agriculture and Fisheries and other agencies, or other interested parties, in establishing programmes and priorities for research and monitoring, and in ensuring all parties are kept up to date in the collection and availability of such data.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Improved confidence that coastal management policies are based on sound environmental information and that adverse effects of coastal activities or uses can be identified and appropriately managed.

PERFORMANCE MONITORING INDICATORS:

(i) Assessed risks or uncertainties in relation to coastal management policy or consent decisions.

(ii) Incidence of coastal management decisions contested on grounds of inadequate information.

Implements Objectives 9.1, 13.2, to address Issues 9.1, 13.6.
Related policies are Policies 13.7, 13.8.

Policy 9.2

The Council will seek to minimise navigation and safety risks arising from boating and aquaculture activities in a consistent and efficient manner.

EXPLANATION AND REASONS:

There are inconsistencies and inefficient approaches to navigation and safety issues in the Tasman coastal marine area. Several types of rules apply and a number of issues in particular locations need to be addressed.

METHODS OF IMPLEMENTATION:

(i) The Council will assess the need for regulation of boating activities through a review of navigation and safety rules in harbour bylaws and government regulations, and will periodically reassess the staffing need for maritime safety.

(ii) The Council will develop policies and rules in the Regional Coastal Plan and in a single harbour bylaw for the District's coastal marine area and make decisions on resource consent applications to minimise as appropriate, navigation and safety risks.

(iii) The Council will support the local administration by transfer or delegation, of navigation and safety rules affecting particular parts of the coastal marine area.

(iv) The Council will provide for or assist in providing for the development of boating facilities of public benefit to an appropriate standard of service.

(v) Council will notify the Maritime Safety Authority and the Hydrographic Office of the Royal New Zealand Navy of permits granted for any structures and works in the coastal marine area.

(vi) Council will promote safe boating practice, including encouraging recreational boat users to undertake courses to improve boat handling skills or to join clubs which give advice on, or have requirements for, safe and environmentally acceptable marine practice.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Increased efficiency of harbour use by boats and reduced risks or nuisance effects from boating activities.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence of accidents or complaints concerning use of boats.

Implements Objective 9.2, to address Issue 9.2.
Related policy is Policy 8.3.

Policy 9.3

The Council will provide for activities in the coastal marine area, while avoiding, remedying or mitigating their adverse effects on:

(i) the natural character of the coastal environment, including natural processes, outstanding natural features and landscapes, and significant habitats of indigenous species;

(ii) the amenity values of the locality, including heritage values;

(iii) public access and multiple use, including any degree of occupation (exclusion) sought;

(iv) the natural qualities of coastal water;

(v) Maori culture, traditions and taonga;

(vi) existing and potential uses of the locality;

(vii) environments or facilities beyond the site, including transport facilities;

and whether these effects can be avoided, remedied, or mitigated.

EXPLANATION AND REASONS:

Activities in the coastal marine area may affect both existing and potential uses and values, including fishing, recreational, and visual, natural or cultural values. There is a need to consider the appropriate limits to the extent to which activities may affect those interests and values.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the Regional Coastal Plan and make decisions on resource consent applications to provide for the use of sea space for activities that avoid, remedy or mitigate significant adverse effects, including cumulative effects, on existing or future uses or values of sea space.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Increased opportunity for activities in the coastal marine area, in areas or forms that avoid, remedy or mitigate adverse effects on public uses or values of sea space.

PERFORMANCE MONITORING INDICATORS:

(i) The level of competition or conflict for the use of sea space.

(ii) Any change in opportunities for customary use of sea space.

Implements Objectives 9.3, 9.4, to address Issues 9.3, 9.4.
Related policy is Policy 9.4.

Policy 9.4

The Council will establish procedures for the allocation of sea space between competing applicants that are fair and efficient.

EXPLANATION AND REASONS:

For some uses of sea space, such as aquaculture, there is likely to be a continuing demand for sites that is greater than the area allocated by Council. There is a need for administrative arrangements to ensure that competing applications are able to be dealt with in a fair and efficient way.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the Regional Coastal Plan for the allocation of coastal space. In the period immediately after that plan becoming operative, a closely regulated procedure may be applied in pursuit of equal opportunity for all potential applicants - particularly relating to aquaculture needs. Beyond that initial period, normal application procedure would be resumed i.e. applications lodged as and when necessary.

(ii) The Council will advocate to coastal industries seeking sea space that industry agreements be established to avoid, remedy or mitigate potential conflict in allocation of available sea space.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Orderly and efficient uptake of any new sea space use opportunities.

PERFORMANCE MONITORING INDICATORS:

(i) Degree of satisfaction among industries seeking sea space concerning allocation procedures.

Implements Objectives 9.3, 9.4, to address Issues 9.3, 9.4.
Related policy is Policy 9.3.

Policy 9.5

The Council will seek to integrate its coastal management responsibilities with fisheries management responsibilities of the Minister of Fisheries.

EXPLANATION AND REASONS:

There is a complex interrelationship between coastal management and fisheries management. There is a need to define and carry out practical, legally valid and integrated arrangements between the Council and the Minister of Fisheries for coastal and fisheries management.

METHODS OF IMPLEMENTATION:

(i) The Council will confirm the statutory basis for any policy, rule or consent relating to coastal marine organisms before making any decision on such matters.

(ii) The Council will address or advocate the addressing of issues relating to coastal marine organisms under the Fisheries or other relevant legislation, in a manner that is integrated with the Resource Management Act and decisions made under that Act.

(iii) The Council will advise all affected interests on the extent of its responsibilities under the Resource Management Act concerning fisheries and other coastal marine organisms.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Increased awareness and understanding of the respective roles of Council and other parties in coastal and fisheries management.

(ii) Integrated decisions affecting both coastal and fisheries management issues.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence of contesting of Council's jurisdiction in relation to issues affecting fisheries or other coastal marine organisms.

(ii) Assessed degree of integration of sampled decisions made by the Council or by other parties in relation to fisheries or other coastal marine organisms.

Implements Objective 9.3, to address Issues 9.3, 9.5.
Related policy is Policy 9.3.

Policy 9.6

The Council will preserve the natural character of the coastal environment by protecting:

(a) natural features and landscapes, such as headlands and cliffs, coastal plains, estuaries, tidal flats, dunes and sand beaches;

(b) habitats such as estuaries and wetlands;

(c) ecosystems, especially those including rare or endangered species or communities, or migratory species;

(d) natural processes, such as spit formation;

(e) water and air quality;

having regard to the:

(i) rarity or representativeness;

(ii) vulnerability or resilience;

(iii) coherence and intactness;

(iv) interdependence; and

(v) scientific, cultural, historic or amenity values;

of such features, landscapes, habitats, ecosystems, processes and values.

EXPLANATION AND REASONS:

The coastal environment supports significant natural resources and values that give it a natural character. The Council is obliged to provide for the preservation of the natural character of the coastal environment and to protect it from inappropriate use and development. In modified areas there may be opportunities to enhance natural features.

METHODS OF IMPLEMENTATION:

(i) The Council will:

(a) investigate and collect information on habitats, features, sites, landscapes or seascapes, ecosystems and natural processes that support the natural character of the coastal environment of the District; and

(b) assess the extent, location, significance and risks to such areas, features, ecosystems or values and the options available for protection or enhancement; and

(c) formally establish relative priorities and sequences for the appropriate actions to protect or enhance coastal natural character.

(ii) The Council will:

(a) advocate or promote ways or practices for protecting or enhancing coastal natural character; and

(b) provide or assist in providing financial incentives and other forms of assistance for landowners to allow or support the protection or enhancement of areas, features, ecosystems, processes, or values contributing to the natural character of the coast; and

(c) negotiate agreements for the management of or purchase or acquire areas, features, or sites, including coastal riparian margins, that support natural character of the coast, integrated with:

(i) the management of the current stock of open space reserves for natural habitat conservation purposes; and

(ii) policies for esplanade provisions and financial contributions in the Council's District Plan;

(d) develop policies and rules in the District Plan and make decisions on resource consent applications that:

(i) provide for esplanade reserves or strips and financial contributions for reserves upon subdivision or development in relation to coastal lands that contribute significantly to natural character; and

(ii) regulate coastal land use activities to avoid, remedy or where appropriate mitigate adverse effects on areas, features, ecosystems, processes or values that contribute significantly to the natural character of the coast.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Increased protection or enhancement of areas, features, ecosystems, processes or values supporting natural character of the coastal environment.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed extent and quality of protection or enhancement of the natural character of the coast, set against priorities or sequences for such actions.

Implements Objectives 5.2, 9.5, 9.6, to address Issues 9.6, 9.7.
Related policies are Policies 4.2, 5.2, 5.5, 6.3, 8.2, 9.7.

Policy 9.7

The Council will avoid, remedy or where appropriate, mitigate adverse effects of the subdivision, use or development of coastal land on:

(a) coastal habitats, including wetlands, estuaries and dunes;

(b) coastal ecosystems, especially those including rare or endangered species or communities, and indigenous or migratory species;

(c) natural coastal features and landscapes, including headlands, beaches, spits;

(d) sites of coastal processes;

(e) public access to and along the coastal marine area;

(f) water and air quality;

(g) traditional associations of Maori with ancestral coastal lands, waters, sites, wahi tapu, turanga waka, mahinga mataitai, taonga raranga and other taonga;

having regard to the:

(i) rarity or representativeness;

(ii) coherence and intactness;

(iii) vulnerability or resilience;

(iv) interdependence; and

(v) scientific, cultural, historic or amenity values;

of such habitats, ecosystems, features, landscapes, sites, values or taonga.

EXPLANATION AND REASONS:

The coastal environment has many natural, public amenity and cultural values and associations. Many of these values are supported by interactions between coastal land and water resources and processes. Coastal land uses need to avoid, remedy or mitigate adverse effects on those values, although the use of remediation or mitigation actions is constrained by New Zealand Coastal Policy Statement Chapter 1 in specific circumstances given in that Statement.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications to ensure that coastal land uses and developments, including buildings and land disturbance, avoid, remedy or where appropriate, mitigate:

(a) adverse effects in areas subject to active or potentially active coastal processes including coastal erosion or inundation; and

(b) adverse effects in areas of open space which contribute significantly to the protection of the natural character or amenity values of the area; and

(c) adverse effects on any significant natural features or processes, landscapes, or seascapes; and

(d) any significant reduction in public access to and along the coast; and

(e) damage or destruction of sites or areas having heritage value, including any Maori traditional associations; and

(f) any reduction in the quality of coastal water or air for their natural values.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) The maintenance or enhancement of natural components and processes, amenity values, heritage values, water and air quality, of the coastal environment, traditional Maori associations, and public access to or along the coast.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed extent and degree of adverse change to coastal natural character, amenity values, public access, heritage values and Maori traditional associations in the coastal environment.

Implements Objectives 9.5, 9.6, to address Issues 9.6, 9.7.
Related policies are Policies 4.2, 5.5, 9.6.

Policy 9.8

The Council will classify coastal waters according to iwi and public uses and values, including aquatic ecosystem, gathering or cultivating of shellfish, fishery, contact recreation, and aesthetic uses and values, for which water quality is to be maintained or enhanced.

EXPLANATION AND REASONS:

Water quality classification is a statement of the public uses and values for which coastal waters are to be managed in relation to their quality, and the limits within which point source contaminant discharges to coastal water may adversely affect coastal water quality after reasonable mixing. Water quality classification of coastal waters provides an important indication of the acceptable adverse effects of any point source contaminant discharge to coastal water, and the public purposes for managing coastal water quality in any part of the coastal marine area.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the Regional Coastal Plan to provide a coastal water quality classification that reflects:

(a) significant existing uses and values for which coastal water quality is relevant, including aquatic ecosystem, gathering or cultivating of shellfish, fishery, contact recreation, and aesthetic uses and values, for which water quality is to be maintained or enhanced; and

(b) existing water quality; and

(c) any significant limits on existing uses and values of coastal water because of adverse effects on existing water quality, including diffuse source contamination.

(ii) The Council will make appropriate provision or take whatever course of action is available and would be effective in the circumstances to ensure the avoidance, remedy or mitigation of adverse effects arising from the discharge of foreign ballast water.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) A greater degree of avoidance or limiting of adverse effects on coastal water quality by point source contaminant discharges, consistent with the limits set in the Council's water quality classification.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed extent, degree and rate of change in specified water quality features in relation to defined water quality standards and coastal locations.

Implements Objectives 9.7, 10.1, 10.2, to address Issues 9.8, 10.1, 10.2, 10.3.
Related policies are Policies 4.2, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.9.

Policy 9.9

Council will maintain and where appropriate enhance public access to and along the coast.

EXPLANATION AND REASONS:

While public access is sought by the public and by Section 6 of the Act, it may have adverse effects on other values. The numbers of people exercising rights of access to the coast, or the activities they undertake, may adversely affect each others' opportunities, values and experiences.

METHODS OF IMPLEMENTATION:

(i) The Council will establish policies and rules in the District Plan and Regional Coastal Plan and make decisions on resource consent applications to provide for public access to and along the coast, unless it is inappropriate in particular circumstances.

(ii) The Council, Department of Conservation, or any other party, may negotiate rights of public access to and along the coast in circumstances where access cannot otherwise be required.

ANTICIPATED ENVIRONMENTAL RESULTS:

A greater proportion of coastline readily accessible to the public.

PERFORMANCE MONITORING INDICATORS:

Increased satisfaction about opportunities for public access to the coast, without increased concern about effects of public access.

Implements Objective 9.8 to address Issue 9.9.
Related policies are Policies 9.3, 9.6, 9.7.

10.0 CONTAMINATION AND WASTE

10.1 Introduction

Contamination is the result of the environmental discharge of substances that change the physical, chemical or biological condition of land, water or air. These changes may have adverse effects on ecosystems, and their animal, plant and human communities. Contamination may degrade or lower the quality of soil, water or air for human or ecological health, economic, recreational, aesthetic, or cultural uses or values.

Contamination may originate from either defined point source discharges or from diffuse source or area-wide discharges that are associated with urban, industrial or rural activities. Discharges may be of waste materials or of contaminants that are derived from wastes (for example, through biochemical decomposition and leaching). The generation and disposal of waste therefore has a strong connection with activities and processes that result in contamination.

The Act allows the Council to consider and address in the Tasman Regional Policy Statement, issues relating to the adverse effects of discharges of contaminants into or onto land, water or air, and the effects of generating, minimising, treating or disposing of all forms of contaminant wastes. In addition, the Act allows consideration of efficient uses of natural and physical resources and of their finite nature, in seeking to minimise the generation of waste and ensuring safe and appropriate treatment or disposal of waste. The Council as a unitary authority is also able to directly deliver waste management services, such as collection and disposal of some solid waste.

The following is a summary of contamination and waste issues that are addressed in this section of the Tasman Regional Policy Statement. Aspects of these issues are also land, water or hazards issues, that are addressed in other sections of the Tasman Regional Policy Statement.

(i) Point source discharges of liquid, particulate or gaseous contaminants to water or air from agricultural, industrial and other urban activities, including treated farm effluent, sewage effluent, contaminated stormwater, vegetation burn-offs, incinerators and industrial emissions may significantly contaminate water or air.

(ii) Deposition of solid or liquid contaminants onto land from agricultural or industrial activities may contaminate soil or water.

(iii) Environmental contamination may result from diffuse source discharges to land, water, or air from agricultural forestry, residential and other urban sources, including stormwater, sediment, farm effluent, agrichemical applications and smoke from fires.

(iv) There is a legacy of urban and rural contaminated sites, such as timber treatment plants, industrial chemical dumps and old tips, that requires better definition and reduction of contamination risks.

(v) There is a need to manage the effects of generating and disposing of solid, liquid, gaseous or hazardous wastes as environmental contaminants.

(vi) Reduction in the amount of wastes generated in the District and a reduction in the amount of wastes requiring treatment, storage or disposal.

10.2 Contamination and Waste Issues

Issue 10.1

INDUSTRIAL, AGRICULTURAL OR URBAN EFFLUENT DISCHARGES TO WATER AND AIR

The discharge of industrial, agricultural or urban effluent can result in significant adverse effects on the receiving environment, particularly water and air. These discharges include sewage, stormwater, treated dairy shed and piggery effluent, and emissions to air, including industrial waste discharges and boiler emissions. The discharges are generally point source discharges and may give rise to adverse effects including nutrient enrichment, bacterial, particulate and chemical contamination, with reduced water or air quality and effects on aquatic ecosystems and community health.

There is a need to advocate appropriate waste minimisation and treatment processes, and cleaner process or treatment technologies. There is also a need to regulate discharges to avoid, remedy or mitigate adverse contaminant effects.

Addressed by Objectives 10.1, 10.2 and Policies 10.1, 10.2, ,10.3, 10.4.
Related issues are Issues 6.4, 6.5, 7.3, 9.8, 10.2, 10.3.

Issue 10.2

AGRICULTURAL, FORESTRY AND OTHER INDUSTRIAL DISCHARGES TO LAND

The District supports significant agricultural, forestry and fishing activities. These activities can generate large quantities of organic wastes in either solid or liquid form that are deposited or otherwise disposed of onto land. Examples of these discharges are bark and other wood processing waste, fish processing waste, and land application of dairy shed or piggery effluent, either untreated or treated. Some of these waste materials are accepted in landfill sites, but usually deposition or land application takes place on forest plantation land, farm land, or vacant industrial land.

Landfills are industrial sites where a variety of solid waste contaminants may be deposited on or in the ground and contamination contained to certain standards. They may range from sanitary landfills, with high containment standards, to farm tips.

The likely adverse effects of discharges to land are the covering of land together with any productive soil, as well as soil, groundwater and surface water contamination through the generation of leachate. The contaminant from such wastes may include nutrient or bacterial contamination.

As with the discharge of contaminants into water or air, there is a need to advocate appropriate waste minimisation and treatment assessment including the reuse or recycling of bulk organic wastes, use of effluent treatment systems and cleaner process or treatment technology.

Addressed by Objectives 10.1, 10.2, 10.4 and Policy 10.4.
Related issues are Issues 6.4, 6.5, 7.3, 10.3, 10.5.

Issue 10.3

DIFFUSE SOURCE DISCHARGES FROM LAND USE ACTIVITIES TO LAND, WATER AND AIR

Diffuse source discharges to the environment come from a wide range of sources and activities. Some are of natural origin, such as sediment from land erosion; many are generated by accelerated or intensified natural processes, or by the use of chemicals or by combustion, giving rise to smoke or gaseous emissions. Diffuse source contaminants include sediment generation from land disturbances;

agrichemical and fertiliser application to land, water or air; stocking of farm land where stock effluent reaches water, either directly or through run-off or seepage; emissions of gases or smoke from vehicles, fires; or through the use of ozone depleting substances.

The key feature of such discharges is that they are emitted in a large number of places and often in minor quantities. However, their cumulative contaminant effects may be significant and contributing sources may be hard to identify.

The adverse effects of diffuse source discharges are quite varied, and may be either localised or widespread. Sediment, nutrient, chemical, microbial or particulate contamination of land, water or air may result, with adverse ecological, economic and health effects likely.

There is a need to advocate and promote appropriate land use practices including management of land disturbance, stocking, fertiliser, or other agrichemical applications, and the use of riparian vegetation as a buffer or filter in appropriate situations. There is also a need to regulate significant diffuse source contamination from land disturbances, agrichemical applications, stocking, riparian land use, and urban domestic smoke emissions.

In relation to emissions to air of fossil carbon or ozone depleting substances, there is a need to advocate to the Government for continued and strengthened national measures to encourage less fossil fuel usage and to develop renewable forms of transport fuels, and to advocate and promote the use of recycled or non-ozone depleting substances.

Addressed by Objectives 10.1, 10.2 and Policy 10.6.
Related issues are Issues 6.4, 6.5, 7.3, 10.1, 10.2.

Issue 10.4

LEGACY OF CONTAMINATED SITES IN URBAN AND RURAL SETTINGS

Contaminated sites are the legacy of past or existing land use activities that have resulted in contamination of land, water or air of an area. These sites can pose risks to human health as well as to animal and plant communities. There is often limited information on contaminated sites as risks associated with such sites have not always been known or previously recognised. Time has brought an increased understanding of contaminants and their effects, along with changes in relevant legislation to assist in avoiding, remedying or mitigating the adverse effects of contamination. Changes in public perception and expectations regarding contaminant use and disposal, and industrial site management practices have resulted in the identification of a large number of actually or potentially contaminated sites in the District. These sites include timber treatment plants, chemical manufacturing sites, mine sites, underground storage tanks, old landfills, reclamations, agrichemical storage sites and industrial sites. The extent of possible contamination and the risks posed by many of these sites, have yet to be properly established.

Contaminated sites can adversely effect the environment in a number of ways. Leachate from a range of contaminated sites can contaminate soil, groundwater and surface water. Hazardous wastes such as timber treatment chemicals can pose human health risks, as well as risks to animal and plant health.

There is a need to undertake targeted investigations, risk assessment of sites, site remediation, regulation of site land uses or the use of water adjacent to such sites, with efforts to require landowners or other liable parties to carry out site management work. There is also a need to provide information on the existence and risks associated with contaminated sites and on waste management practices so that further creation of contaminated sites is avoided in future.

Addressed by Objectives 10.1, 10.2, 10.4, 11.4 and Policies 10.7, 10.9, 11.7.
Related issues are Issues 6.5, 7.3, 10.2, 10.5, 11.6.

Issue 10.5

THE EFFECTS OF GENERATING AND DISPOSING OF CONTAMINANT WASTES

The Tasman District generates significant quantities of waste each year and wastes are disposed of or otherwise dealt with by:

(i) storage of solid or liquid wastes in containers or buildings;

(ii) land disposal of solid wastes by landfill or other methods; and

(iii) discharges to water, land or to the air of liquid or gaseous wastes.

Wastes are usually environmental contaminants. For example, waste agrichemicals and their containers, waste industrial chemicals, waste oil, bulk organic wastes such as wood or fish processing wastes, may all pose contamination risks to soils, surface water or groundwater, ecosystems and communities that depend on uncontaminated environments. Many waste contaminants are also hazardous wastes, because of their toxic, explosive, flammable, corrosive, persistent or other significant contaminating or hazardous qualities. Ballast water is a contaminant of special interest both locally and nationally because of its potential impact on the coastal environment. Council's options for avoiding, remedying or mitigating adverse effects of ballast water are limited although there are opportunities to support and promote national measures for control.

Solid wastes are generated by industrial, commercial, residential and service activities in towns and in rural areas. The most significant effect of solid waste disposal is the contamination risk, including the likelihood of discharges of waste leachate into soils, groundwater or surface water, together with combustion risks or smells from methane or other organic gaseous emissions. Most solid wastes are collected and disposed of in sites called landfills that contain or control the movement of contaminants from the site. The presence of contamination risks and other adverse environmental effects associated with solid waste disposal sites may mean that properly managed landfills are some distance from urban or industrial centres.

The Council is a significant provider of solid waste (refuse) collection and disposal services and facilities. Regular collections of refuse are carried out in the larger towns of the District. Several transfer stations operate in the District, at Richmond, Mariri, Waiwhero and Tapawera. The main District landfill site is in Eves Valley, in the Moutere Hills west of the Waimea Plains. Other smaller landfills are operated at St Arnaud, Murchison and Takaka. Landfills are expensive to establish and manage, and generally have a limited life. They can have adverse effects on water quality through leachate generation and may adversely affect natural, amenity or cultural values or features of an area. New landfill sites are often difficult to establish because of the degree of public concern about potential adverse effects. Many disused sites of former tips or dumps are present in the District and these present a range of contamination risks.

Bulk organic wastes such as bark waste, fish waste, sewage or effluent sludge are generated by organic processing industries or effluent treatment facilities and may be disposed of at landfills or other sites in the District.

Addressed by Objectives 10.4, 11.4 and Policies 10.4, 10.8, 10.9.
Related issues are 10.4, 10.6, 11.6.

Issue 10.6

MINIMISING THE AMOUNT OF WASTE GENERATED

The accepted strategy for waste management follows the hierarchy of: avoidance of waste generation, reduction in volumes of waste streams, reuse of wastes, recycling of wastes generated, recovery of

resources from wastes, safe treatment and disposal of residual wastes, and, finally, storage of intractable wastes.

Council has had limited involvement in developing waste minimisation strategies. There is scope for investigating improved separation of solid wastes in the Council's solid waste collection and disposal service with subsequent improvements in reducing waste volumes. Difficulties inherent in this process include the need for extensive public education, additional costs to provide the service, and the uncertain and unpredictable nature of reuse/recycling companies. Other developments outside the scope of the Council's control may complicate waste minimisation strategies such as the lack of adequate market controls to ensure that waste generators are made more accountable for the costs of waste management.

There are national and local initiatives seeking to investigate and adopt cleaner production systems and there is a need to encourage and ensure greater awareness of the strategies available.

Addressed by Objective 10.3 and Policy 10.8.
Related issues are Issues 10.4, 10.5, 11.6.

10.3 Contamination and Waste Objectives

Objective 10.1

Maintenance and enhancement of the quality of soils, water, and air for a range of uses and values where particulate, chemical, or biological contamination pose risks to this quality.

Objective 10.2

Avoidance, remedying or mitigation of adverse effects of all contaminants of soils, water, and air.

EXPLANATION AND REASONS:

Environmental contamination has significant adverse effects and risks for the receiving environment of land, water or air and the health of animal, plant and human communities. Council has responsibilities for the control of discharges of contaminants to land, water or air.

Addresses Issues 6.5, 7.3, 9.7, 9.8, 10.1, 10.2, 10.3, 10.4, 11.6; achieved by Policies 9.7, 9.8, 10.1, 10.2, 10.3, 10.4, 10.6, 10.7, 10.9.
Related objectives are Objectives 7.3, 9.7, 10.4, 11.4.

Objective 10.3

Minimised generation of solid, hazardous and other wastes.

EXPLANATION AND REASONS:

Once waste is generated, it needs to be managed in some way, with resulting costs and risks. By reducing the amount of waste created, reusing waste materials, recycling of wastes to form usable products, or recovering usable resources from wastes through some treatment process, adverse effects of waste generation may be avoided or limited.

Addresses Issues 10.5, 10.6, 11.4; achieved by Policies 10.8, 10.9, 11.5.
Related objectives are Objectives 10.4, 11.4.

Objective 10.4

Minimised risks of contamination of the environment arising from the storage, treatment or disposal of all forms of waste.

EXPLANATION AND REASONS:

Wastes need to be stored, treated or disposed of in ways that avoid, remedy or mitigate the likelihood of contamination of soils, waters and air, and of plants, animals and communities through health risks. Contamination risks may be significant where hazardous wastes are concerned.

Addresses Issues 10.4, 10.5, 11.6; achieved by Policies 10.8, 10.9, 11.5.
Related objectives are Objectives 10.3, 11.4.

10.4 Contamination and Waste Policies and Methods

Policy 10.1

Council will classify significant water bodies for which water quality is to be maintained and enhanced for the following purposes:

(i) aquatic ecosystem;
(ii) fisheries and fish spawning;
(iii) gathering or cultivation of shellfish;
(iv) contact recreation;
(v) water supply;
(vi) abstractive;
(vii) aesthetic and cultural uses and values;

and in determining significance of such water bodies where water quality is relevant, the following criteria shall be applied:

(a) Size of the water body

(b) Diversity of species and abundance of populations of indigenous flora and fauna associated with the water body

(c) Rarity of any species of flora, fauna or of habitat type associated with the water body

(d) Range and intensity of uses and values of the water body

(e) Conflicts between uses and values of the water body

(f) Existing condition of the water

(g) Risk of adverse effects on the existing condition of the water

EXPLANATION AND REASONS:

It is desirable to classify the important water resources of the region to give clear management objectives for water quality and acceptable limits for adverse effects of discharges to water. The limits provide reasonably certain standards for water quality maintenance that may be refined over time.

METHODS OF IMPLEMENTATION:

(i) In relation to significant catchments, the Council will investigate and assess present water quality, public uses and values for water quality, and risks to present water quality.

(ii) The Council will develop policies and rules in regional plans to classify significant water bodies by water quality classes and standards and to require new and existing discharges to comply with relevant standards.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Maintenance or enhancement of water quality for specified uses and values in significant water bodies.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed condition of water in significant water bodies affected by point source discharges.

Implements Objectives 10.1, 10.2, to address Issue 10.1.
Related policies are Policies 9.8, 10.2.

Policy 10.2

Council will require that the adverse effects of any discharge of contaminants on existing water quality are avoided, remedied or mitigated where there is no water classification.

EXPLANATION AND REASONS:

Council will ensure that existing water quality is not significantly adversely affected by discharges of contaminants where there is no water classification. This provides an approach to managing discharges until water classifications specify the acceptable limits of adverse effects. Where there is a classification, Council will allow discharges to alter water quality as long as relevant water quality standards are complied with.

METHODS OF IMPLEMENTATION:

(i) Council will develop policies and rules in regional plans and make decisions on resource consent applications to require that the adverse effects of any discharge on either existing water quality or until method (ii) of policy 10.1 is implemented, be avoided remedied or mitigated.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Maintenance of water quality for specified uses and values in water bodies affected by point source discharges.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed condition of water in water bodies affected by point source discharges.

Implements Objectives 10.1, 10.2, to address Issue 10.1.
Related policy is Policy 10.1.

Policy 10.3

The Council will seek to avoid, remedy, or mitigate adverse effects of the discharge of contaminants to air.

EXPLANATION AND REASONS:

Decreasing the quality of air through the discharge of particulate or gaseous contaminants (including smoke, dust, carbon monoxide odours) can have considerable impact on human health and amenity values on the environment. The Council will manage the effects of discharges to air so that air quality is maintained or enhanced.

METHODS OF IMPLEMENTATION:

(i) The Council will continue to investigate and monitor air quality to improve its understanding of air quality issues in the District.

(ii) The Council will promote and advocate adoption of appropriate technology and discharge practices to air, including practices that are the best practicable option to reduce any adverse effect on the environment.

(iii) The Council will investigate the use of incentives to encourage appropriate domestic burning and heating practices under method (ii).

(iv) The Council will develop policies and rules in regional plans and make decisions on resource consent applications to require contaminant discharges to air to adopt the best practicable option to prevent or minimise any actual or likely effect on the environment.

(v) The Council will investigate and, where appropriate, require any financial contribution in respect of the discharge of any contaminant, in order to offset adverse environmental effects and to act as a disincentive for such discharge activities.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced extent or risk of contamination of the air from contaminant discharges.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed condition of air quality affected by discharges to air.

Implements Objectives 10.1, 10.2, to address Issues 10.1, 10.3.
Related policies are Policies 6.4, 10.6.

Policy 10.4

Council will avoid, remedy, or mitigate adverse effects of the disposal of solid or liquid waste contaminants, by seeking land disposal of such wastes where it is the best practicable option.

EXPLANATION AND REASONS:

In most situations, land-based disposal of wastes will be a preferred disposal option because surface water contamination risks are likely to be significantly less than with discharges to water. Land disposal system design and operation must also account for adverse effects on groundwater or the soil and such systems must avoid, remedy or mitigate contamination risks to an acceptable degree. Any discharges of waste to water must be treated to a standard that avoids significant contamination beyond a reasonable mixing zone.

METHODS OF IMPLEMENTATION:

(i) The Council will promote and advocate adoption of appropriate discharge practices to land and water, including practices that are the best practicable option to remove or reduce any adverse effect on the environment.

(ii) The Council will develop policies in regional plans and make decisions on resource consent applications to require waste contaminant discharges to water including agricultural, industrial and sewage discharges, to adopt the best practicable option to prevent or minimise any actual or likely adverse effect on the environment.

(iii) The Council will investigate and, where appropriate, require any financial contribution in respect of the discharge of any contaminant, in order to offset adverse environmental effects and to act as a disincentive for such discharge activities.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced extent or risk of contamination of soil or water from waste contaminant discharges.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed condition of water bodies affected by point source discharges of significant waste contaminants.

(ii) Reported incidence and severity of adverse effects resulting from contaminant discharges.

Implements Objectives 10.1, 10.2, 10.4, to address Issues 10.2, 10.5.
Related policy is Policy 10.9.

Policy 10.5

Council will reduce the risk of emergency discharges to land, water, or air by:

(i) requiring development of contingency plans where any activity:

(a) includes the generation, use, storage, or discharge to air, land or water of any contaminant, and

(b) requires a resource consent under the Act or any plan to authorise the activity; and

(ii) implementing a pollution response procedure to emergency discharges.

EXPLANATION AND REASONS:

Emergency discharges arise from accidental failure to contain contaminants and control their escape onto land or into water or air. Significant damage to ecosystems may result from such discharges. Avoiding or limiting the possible effects of emergency discharges is better than attempting to clean up after an emergency.

METHODS OF IMPLEMENTATION:

(i) The Council will promote and advocate to industry the development of site contingency plans to avoid, remedy or mitigate the likely adverse effects of any emergency spills or other discharges.

(ii) The Council will develop and follow a pollution response procedure, when emergency discharges occur, including requiring cleaning up and recovering costs.

(iii) The Council will develop policies and rules in regional and district plans and make decisions on resource consent applications to require the preparation and maintenance of a site contingency plan to prevent, avoid, remedy or mitigate the potential adverse effects of any emergency discharge of any contaminant from any site or facility that otherwise requires a resource consent.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced risks and effects of emergency discharges of significant contaminants.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence and severity of damage or harm to people and ecosystems arising from emergency discharges.

Implements Objectives 9.7, 10.1, 10.2, to address Issues 9.7, 10.1, 10.2.
Related policies are Policies 10.2, 10.9.

Policy 10.6

Council will where practicable avoid, remedy or mitigate the adverse effects of diffuse source discharges of particulate, chemical, nutrient and microbial contaminants on the quality of soil, water and air resources.

EXPLANATION AND REASONS:

Diffuse source contaminant discharges to the environment arise from many minor discharges over an area and these may collectively significantly degrade the quality of soils, water or air, and adversely affect animal and plant communities and human health. Because of the varied nature of these discharges and their effects, and the practical difficulty of direct management, it is important to make the community aware of the significance of this form of contamination.

METHODS OF IMPLEMENTATION:

(i) Council will investigate and monitor the relationship between environmental processes and land use activities to better understand the processes and effects of non-point source contamination on water quality.

(ii) The Council will provide incentives where appropriate to encourage appropriate land use practices under Method (i).

(iii) The Council will develop policies and rules in regional and district plans and make decisions on resource consent applications to require where appropriate the avoidance or limitation of particulate, chemical, nutrient and microbial contamination of soil, water and air in connection with land use.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Over time, reduced environmental contamination that is attributable to diffuse source discharges.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed extent of uptake of good practice information regarding rural and urban discharges that contribute to diffuse source contamination.

(ii) Surveyed condition of soil and water bodies that are affected by diffuse source discharges.

(iii) Reported incidence and severity of adverse effects resulting from contaminant discharges.

Implements Objectives 7.3, 9.7, 10.1, 10.2, to address Issues 9.7, 10.2, 10.3.
Related policy is Policy 9.7.

Policy 10.7

The Council will manage the legacy of contaminated sites in the District.

EXPLANATION AND REASONS:

Contaminated sites create significant contaminant risks for land and water quality, with associated ecosystem and public health effects, and loss of land and water use opportunities. There is a need to understand and deal with the risks posed by contaminated sites. There is a need to better identify potentially contaminated sites so that risks are known and are able to be reduced.

METHODS OF IMPLEMENTATION:

(i) The Council will investigate or encourage landowners to investigate known types and locations of contaminated sites to:

(a) define their location and extent; and

(b) assess the contaminant effects and risks; and

(c) assess options for remediation or cleanup; and

(d) assess priorities for further investigation, assessment, remediation, enforcement or other actions; and

(ii) Council will develop and encourage landowners help in developing a public register of known contaminated sites, and sites which may be potentially contaminated through association with land use activities which are known to have a high probability of causing site contamination.

(iii) The Council will, within established priorities:

(a) provide appropriate funds or other resources to undertake further assessment and remediation of contaminated sites; and

(b) require liable parties to undertake such assessments and remediation actions; and

(c) develop policies and rules in regional and district plans and make decisions on resource consent applications to regulate land and water use activities on or over actually or potentially contaminated sites, including sites in post-remediation condition, in order to reduce safety and other risks to people and ecosystems.

(iv) The Council will continue to seek the establishment of a co-ordinated and adequate programme for the remediation of the chemically contaminated sites at Mapua, in conjunction with the government and the land-owning companies concerned.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Better known and reduced risks of land and water contamination from contaminated sites in the District.

PERFORMANCE MONITORING INDICATORS:

(i) Proportion of registered contaminated sites assessed as requiring remedial action.

(ii) Proportion of contaminated sites subject to completed remedial action.

Implements Objectives 10.4, 11.4, to address Issues 10.4, 11.4.
Related policies are Policies 10.9, 11.7.

Policy 10.8

The Council will seek to minimise the generation of all forms of wastes, particularly hazardous wastes.

EXPLANATION AND REASONS:

Waste minimisation involves reducing the amount of waste requiring disposal, by allowing the reuse of waste materials, recycling of wastes to form usable products, or recovering usable materials from waste streams. Greater rates or volumes of waste mean more effort is needed in treating or disposing of wastes. Avoiding or limiting the production of wastes may lessen the likelihood of eventual contamination from wastes. Waste minimisation may help in using resources in a more efficient manner, for example, land space for waste storage and disposal, or the gaining of materials or energy that are otherwise useful in the production of goods or services. Hazardous wastes may have significant adverse effects on the environment in relatively small quantities and so are an important target for minimisation efforts.

METHODS OF IMPLEMENTATION:

(i) The Council will review its own corporate waste generation practices and adopt waste minimisation methods as under Method (ii).

(ii) The Council will gather information on appropriate opportunities or methods to minimise waste generation, in accordance with the following hierarchy of measures, and will advocate and promote the uptake by waste generating industrial, commercial, domestic and service activities of these measures:

(a) avoidance of waste generation;

(b) reduction in volumes of waste streams;

(c) reuse of waste generated at all stages of product processing;

(d) recycling of confirmed wastes;

(e) recovery of resources from wastes;

(f) compliance with the Act, plans, and consents in appropriate disposal of residual wastes;

such uptakes to incorporate use of the following methods:

(a) waste audits of sites or operations;

(b) use of cleaner technologies in industrial or commercial processing operations;

(c) use of networks for exchange or sale of reusable or recyclable wastes or materials;

(d) use of user charges for Council's solid waste collection and disposal services that take into account long-run public costs of collection and disposal, including the costs of assuring reduced contamination risks, and so provide appropriate signals that encourage waste minimisation measures.

(iii) Council will prepare a waste management strategy for the District consistent with the hierarchy and methods in method (ii).

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Over time, reduced volumes of waste streams, including solid and hazardous wastes, that require storage, treatment or disposal.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed uptake of waste minimisation measures by waste producers.

(ii) Surveyed changes in waste stream volumes entering residual waste storage, treatment or disposal destinations.

Implements Objectives 10.3, 10.4, 11.4, to address Issues 10.5, 10.6, 11.4.
Related policies are 10.9, 11.7.

Policy 10.9

The Council will ensure that environmental contamination from the storage, treatment or disposal of wastes, particularly hazardous wastes, is avoided, remedied or mitigated.

EXPLANATION AND REASONS:

Contamination of groundwater, surface waters, soils and air may adversely affect the quality of these resources for a range of uses and values, and may pose risks to healthy animal and plant communities and people. Many sites previously used for waste disposal, such as tips and reclamations, are now contaminated sites because of inadequate recognition of the risks or management of disposal practices. A wide range of wastes may be hazardous to the environment in relatively small amounts and their storage, treatment or disposal may need special attention or effort.

METHODS OF IMPLEMENTATION:

(i) The Council will monitor specific waste streams that may significantly contribute to solid or hazardous waste volumes requiring storage, treatment or disposal, including waste industrial chemicals, waste agrichemicals and bulk organic wastes.

(ii) The Council will maintain a network of appropriately authorised and managed facilities for receiving, sorting, storing and disposing of solid wastes, including transfer stations and landfills.

(iii) The Council will establish and maintain a secure facility for the receiving, sorting and storing of waste agrichemicals.

(iv) The Council will develop policies and rules in its regional and district plans and make decisions on resource consent applications to regulate the establishment, operation and post-closure effects of landfills and transfer stations, and will have particular regard to the need to reduce environmental contamination risks from all such activities.

(v) The Council will pursue compliance with the Act, plans or consents in dealing with all unauthorised disposal of wastes, particularly hazardous wastes.

(vi) The Council will support national strategies for the tracking of hazardous substances.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Better known and reduced risks of environmental contamination from sites of waste storage, treatment or disposal including sites dealing with hazardous wastes.

PERFORMANCE MONITORING INDICATORS:

(i) Surveyed degree of authorisation (including compliance) of waste storage, treatment and disposal sites or facilities.

(ii) Assessed nature and significance of contamination risks arising from sites or facilities as under Indicator (i).

Implements Objectives 10.1, 10.2, 10.4, 11.4, to address Issues 10.5, 11.4.
Related policies are Policies 10.7, 10.8, 11.7.

11.0 ENVIRONMENTAL HAZARDS

11.1 Introduction

The Tasman District is situated in a geologically active part of New Zealand and a number of natural processes or occurrences continue to affect the location and physical stability of land and its possible inundation by floodwaters or seawaters. These occurrences include:

(i) ground shaking, rupture along faults, ground subsidence through differential settlement or liquefaction, caused by earthquakes;

(ii) slope instability or failure of natural slopes, and other erosion processes, and downslope deposition or sedimentation, through gravity, rainwater or earthquakes;

(iii) flooding of land adjacent to rivers or the sea by river waters, stormwaves or tsunami (tsunami are generated by earthquakes);

(iv) permanent inundation of land through river bank or coastal erosion.

These geologic or climatic processes or occurrences become natural hazards to human settlements or occupation of land when they cause damage or harm to property or people. Fire is another type of natural hazard that arises where flammable vegetation and buildings are too close to each other. Other natural hazards such as geothermal or volcanic activity do not occur in Tasman District. Drought is addressed as a water resource issue in the section on water resources.

In addition to natural hazards, there are significant risks to people's health and safety that may be generated by the use, storage, transport or disposal of hazardous substances. Such substances are hazardous because of their explosive, flammable, toxic or noxious chemical nature and can damage or harm people or ecosystems. Hazardous substances need special care in their storage, use, transport and disposal relative to other substances because of these environmental risks. The management of waste hazardous substances (hazardous wastes) is addressed in the contamination and waste section of the Tasman Regional Policy Statement.

The Act allows the Council to address in the Tasman Regional Policy Statement, the avoidance or mitigation of natural hazards and the avoidance or mitigation of the effects of storage, transport, use and disposal of hazardous substances. These matters are all described in this section as types of environmental hazards, as there are similar aims and methods in dealing with such issues.

The following are considered to be significant environmental hazards issues in the District:

(i) the avoidance or mitigation of flooding;

(ii) the avoidance or mitigation of coastal erosion;

(iii) the avoidance or mitigation of slope instability, ground shaking or failure from earthquake and erosion processes;

(iv) the avoidance or mitigation of the adverse effects of storage, use, transportation and disposal of hazardous substances;

(v) the avoidance or mitigation of coastal erosion and effects of sea level rise.

11.2 Environmental Hazards Issues

Issue 11.1

AVOIDANCE OR MITIGATION OF FLOODING

Flooding from rivers is the most likely, widespread and damaging type of natural hazard in the District. By contrast, coastal erosion is a more localised hazard and earthquake hazards are much less frequent than floods (but could be extremely damaging).

Rainfall intensities that are sufficient to produce flood events are possible over all of the main catchment areas of the District, and such events are relatively regular. Most of the river systems are rather short with rapidly draining headwaters, and this results in a relatively short warning time from the onset of heavy rainfall until possible flooding. Historical flooding has affected floodplain areas on the Aorere, Takaka, Motueka, Riwaka, Moutere, Waimea and Buller river systems. While removal of indigenous forest cover over large parts of the catchments has increased the rates of runoff, most of the steeper, headwater areas remain well vegetated. As well, before the development of the District, most river systems were naturally lowering or degrading their channels and this trend has continued, and has been accelerated by river gravel removal in some river channels.

Historical floods are not well recorded earlier than the 1950's but since then, improved methods of recording flood events and hydrological data by the former catchment boards have provided information to predict flood frequency. Flood features such as depth, velocity and duration are not well known in most areas. Lower reaches of the Takaka, Motueka, Riwaka and Waimea Rivers are protected to variable standards from flooding by schemes of works including stopbanks, floodways and channel improvements. These structural alterations to rivers and floodplains increase the water carrying efficiency and are able to contain floods up to a certain size. The maintenance of river channels and floodways is an ongoing activity and expense.

There are several options or methods for avoiding or mitigating flooding hazards. Avoidance or mitigation can be achieved by:

(i) keeping floodwaters away from people or built development;

(ii) keeping people and built development away from floodwaters;

(iii) providing information about flood risks, including flood warnings, undertaking emergency responses to flood events, and providing insurance or financial assistance to flood victims.

Historically most efforts have been put into the first option in the District through the development of flood control works. Many of the current structures are several decades old and may provide limited and differing standards of flood protection. There is a significant expense for adequate maintenance and upgrade that has been recently aggravated by withdrawal of government assistance. As well, flood control works have fostered a sense of security from or indifference to flood risks by floodplain dwellers and development has intensified adjacent to flood control works. Often natural floodways have been built on or developed. Gravel removal from river beds such as the Motueka or Waimea Rivers and their tributaries has accelerated the lowering of the beds and may put at risk the integrity of stopbank and bank protection works. There is a need to maintain or upgrade flood control structures in combination with other flood mitigation options in order to provide a comprehensive and cost-effective approach to flood mitigation.

The option of restricting built development in floodplain areas that are flood-prone has been pursued in previous district plans for Takaka and Motueka floodplains. Minimum floor level requirements and restrictions on the type or intensity of built development have been included in rules in association with flood zones or areas within which restrictions apply. Often building restrictions in flood prone areas are of limited effectiveness, especially in large floods, and damage inevitably occurs to public as well as private properties that are not able to be protected, such as roads, utility services, plantings and livestock. Under the Resource Management and Building Acts, subdivision and building consents

cannot be issued where the land affected by the subdivision or building is subject to flooding and the development may worsen the effects of the flooding, unless the building or the land is satisfactorily protected.

Existing development in flood prone areas constitutes the most significant concern as while the Council has powers to limit the continuation or intensification of development in such areas, this may not be acceptable. Yet there may be questions of Council liability where there is a significant flood risk in areas where development has been approved without protection.

There is a need to provide the community with flood risk information including flood warnings, and to undertake flood emergency responses and cleanups of community assets.

Addressed by Objectives 5.2, 8.1, 11.1 and Policies 5.2, 8.1, 11.1, 11.3.
Related issues are Issues 5.2, 8.1.

Issue 11.2

AVOIDANCE OR MITIGATION OF COASTAL EROSION

Coastal processes are active in the District. Both erosion and build up (accretion) of soft or sandy shorelines are evident, with erosion particularly prevalent along many stretches of Golden Bay and parts of Tasman Bay to Waimea Inlet. Hard or rocky shorelines along the north West Coast and the Abel Tasman coast from Tarakohe to Marahau are relatively stable.

Coastal sand erosion occurs when the long-term supply of sand to the beach is less than the movement or removal of coastal sediment from the beach by tidal, current and storm movements, in either off-shore or longshore directions. Many sandy coasts are constantly changing in their shape and location as part of the natural process of sea influences. Evidence of coastal erosion is usually seen after significant storm events. That is, most erosion occurs in discrete episodes. Sand held in the beach or dunes contributes to the maintenance of beach position and is an important buffer against further beach erosion. Built development on the foredune may limit its availability for this purpose.

By contrast some coastal areas are sedimenting or building up, usually with sandy sediment derived from catchment or longshore sources. There are estuaries at Marahau, Kaiteriteri, Riwaka and Motueka that are particularly active in this regard.

There are similar options for avoiding or mitigating coastal hazards, as with flooding hazards. The historical option of protecting the coastline by structural means has resulted in adverse alterations to the beach and its vulnerability to future erosion, particularly by the removal of sand. In some places, structural protection appears to be effective at present. The issue is that coastal protection works are expensive and the knowledge of their effects on erosion or other coastal values requires significant investigation. The ultimate effectiveness of structural protection in the light of sea level rise is questionable.

The avoidance of development on active coastlines, to maintain a buffer area for active processes is a precautionary option. Rules have been used to restrict coastal development in Golden Bay and parts of Tasman Bay, for reasons that include avoiding coastal erosion risks. Issues with this option are the conflicts arising from limiting the opportunity to develop private property on the coast, and the pressures to allow structural protection to proceed where coastal erosion threatens such developments. There is a need to decide on the necessary extent of coastal land as a buffer area or strip for future erosion processes, and on which new development is restricted.

Addressed by Objectives 5.2, 9.5, 11.1 and Policies 5.2, 9.7, 11.2, 11.3.
Related issues are Issues 5.2, 9.7.

Issue 11.3

EFFECTS OF SEA LEVEL RISE

The influence of sea level rise on rates of coastal erosion in the District is a significant issue. International research indicates that global greenhouse effect is likely to result in warming of the atmosphere and a rise in sea level through polar ice melting and thermal expansion of the sea. Estimates in 1990 of the rate of rise of global temperatures have been translated into likely rates of sea level rise for New Zealand of between 7-25 centimetres by the year 2025 and between 17-50 centimetres by the year 2050, although there is continuing scientific debate about a relationship between atmospheric conditions and sea-level. Significant uncertainties are acknowledged as being likely to alter these or any more recent estimates of rates of sea level rise[1]. The possible implications for the District's sandy beaches and estuaries are an increase in the extent and rate of erosion of these areas, with landward movement of the sea at all areas where there is currently erosion, as well as over areas currently stable. The erosion threat from sea level rise together with current erosion trends along both Golden Bay and Tasman Bay strongly suggest the need to avoid further development in a wide buffer area of vulnerable coastal land. Current developments that have sought to protect themselves by structures are likely to be eventually overwhelmed or outflanked.

The implication of sea level rise are wider than just accelerated erosion or inundation of land, and include:

(i) change to the nature of shoreline habitat, especially the margins of estuaries and other intertidal areas;

(ii) retreat or re-shaping of beach systems;

(iii) change to salinity in the lower reaches of rivers and aquifers.

Addressed by Objectives 5.2, 9.5, 11.1 and Policies 5.2, 9.7, 11.2, 11.3.
Related issues are Issues 5.2, 9.7, 11.2.

Issue 11.4

AVOIDANCE OR MITIGATION OF LAND INSTABILITY AND STRUCTURAL RISKS FROM SLOPE OR GROUND FAILURES AND EARTHQUAKE SHAKING

Slope instability is a hazard to built development including roads and services in a number of areas in the District. Slope failure processes such as slumps or earth flows may also adversely affect the productive use of land by burying soils and exposing poorly productive subsoil. Hazardous areas are present in the lower foothills of the Barnicoat Range east of Richmond; and areas of Separation Point Granite terrain west of Motueka and in parts of Golden Bay adjacent to Pohara. Elsewhere in the District, rainfall runoff on steeper, weaker slopes may result in soil particle movement, particularly where natural slopes have been modified by earthworks such as tracks or soil disturbance by mechanical methods of vegetation removal. In these latter situations, the natural process is less of a hazard to property or people, but does have adverse effects on soil productivity and fresh water and coastal water quality and aquatic life.

Earthquakes may trigger slope failures but have a range of other significant adverse effects. The District lies in an active earthquake (seismic) region of the country and moderate to strong earthquake shaking has occurred since European settlement. An active fault zone extends along the eastern hills of the Waimea Basin and is linked with the Alpine Fault system. There are other active faults in the District. Earthquakes are deep earth movements, resulting in ground shaking and rupture or surface movement along fault lines. The intensity of ground shaking depends on a number of factors including depth of the earthquake, the amount of energy released, the distance from the epicentre and

[1] "New Zealand Climate Report 1990, Royal Society of New Zealand"

the nature of ground conditions (strength and density of rock or soil). Buildings on soft, unconsolidated soil or saturated ground may experience more intense shaking effects than on dense bedrock and consolidated ground. Motueka and Takaka are relatively more vulnerable to shaking effects, as they are sited on poorly consolidated gravels and silts. Richmond is sited on more consolidated clay-bound gravels. While surface rupture is possible along the Waimea Fault east of Richmond, the frequency of movement and hence the likelihood of future earthquakes associated with further movement is not well known. There are active fault traces in the St Arnaud and Upper Buller areas on which movement is possible.

Liquefaction of saturated, fine grained sediment is possible in intense earthquake shaking. Settlement of areas of unconsolidated ground may also occur. A number of coastal settlements are sited on this type of ground. Tsunami or sea waves may occur in Tasman Bay or Golden Bay as a response to earthquake centres either close to or distant from the District. Tsunami may inundate low lying areas in either bay.

Damage to structures including buildings, roads and other services is possible from shaking, fault rupture, or other ground failures including slope instability, settlement or liquefaction.

Approaches to avoiding or mitigating earthquake and slope instability hazards are similar to those that may be applied to other natural hazards. However, with earthquakes, the effects may be mitigated but cannot be avoided. The Building Code prescribes building performance criteria for structural stability, including the ability to withstand earthquake shaking. There is a need to define the maximum credible earthquake intensity for the various parts of the District for use in ensuring stability through building consents. As well, there is a need for the identification of areas that may be susceptible to fault rupture or other significant ground failures. Restricting built development in such areas may help to limit damage to community facilities and private property in the event of earthquakes. Information on slope instability and earthquake hazards can be developed and made available to the public and can help the Council's civil defence efforts in emergency response planning.

Addressed by Objectives 5.2, 11.1 and Policies 5.2, 11.4.
Related issue is Issue 5.2.

Issue 11.5

AVOIDANCE OR MITIGATION OF RISKS OF FIRE

Fire is a threat to natural environment, property, livestock, forests, and human lives. Fire fighting capability can be limited by access, especially in rural areas. Some fires may occur naturally; the majority is a consequence of human activities.

There is a need to minimise the potential impact of uncontrolled fires, without unduly restricting the use of fire in legitimate household and rural land management practices. In some cases, the need to keep land clear of flammable vegetation may conflict with the use of vegetation for erosion control or for aesthetic reasons.

Addressed by Objective 11.3 and Policy 11.6.
Related issue is Issue 5.4.

Issue 11.6

AVOIDANCE OR MITIGATION OF RISKS FROM HAZARDOUS SUBSTANCES STORAGE, USE, DISPOSAL SITUATIONS

Hazardous substances include materials that are hazardous, flammable, toxic or chemically active, and that may damage or cause harm to the health or safety of people or ecosystems. A wide range of such

materials is imported into the District, and stored or used in industrial, service or rural situations, including petroleum products, industrial chemicals, pharmaceuticals and agrichemicals. Many household products may be hazardous. Various pieces of legislation currently require their safe storage, use and transport. Various voluntary codes of practice guide industrial operators in safe handling and use. The forthcoming hazardous substances and new organisms legislation is intended to refine the national processes by which hazardous substances are approved for use and subsequently managed. When hazardous substances are no longer required or wanted they become hazardous wastes and their environmental contamination may become even more significant.

Issues in the District include the poor state of knowledge of the introduction, transport, storage, use and disposal of many hazardous substances, including hazardous wastes. Previous surveys have estimated significant tonnages of hazardous substances in use annually in the District that are not consumed in use and that require treatment or disposal. There is a need to assess risks of site usage or storage as part of land use activities, including the likely effects of contingency events such as accidental spillage, fire or flooding. Performance requirements for such hazardous sites or installations may be necessary. There is also a need to minimise the generation of hazardous wastes and to establish safe treatment and disposal methods.

Addressed by Objective 11.4 and Policy 11.7.
Related issues are Issues 10.2, 10.5, 10.6.

11.3 Environmental Hazards Objectives

Objective 11.1

Reduced risks arising from flooding, erosion, inundation and instability and earthquake hazards.

REASONS:

Flooding, erosion, land instability and earthquakes are significant natural hazards with potentially damaging effects on communities, buildings, land and other resources. There is a need to minimise the potential adverse effects from these processes and events.

Addresses Issues 5.2, 8.1, 9.7, 11.1, 11.2, 11.3, 11.4; achieved by Policies 5.2, 8.1, 9.7, 11.1, 11.2, 11.3, 11.4.
Related objectives are Objectives 5.2, 8.1, 9.5, 11.2.

Objective 11.2

Efficient reinstatement of utility services after damage by environmental hazard.

REASONS:

Hazard events of different severity may require different levels of response e.g. immediate repair, temporary alternatives, and new facilities. Normal methods of response may not be available e.g. roads disrupted, fuel limited.

Addresses Issues 11.1, 11.2, 11.4, 11.5, 11.6; achieved by Policy 11.5.
Related objectives are Objectives 11.1, 11.3, 11.4.

Objective 11.3

Reduced risks of fire to natural and built resources, from the use or development of land.

REASONS:

There is a need to allow for controlled use of fire while avoiding the consequences of uncontrolled fire, especially in rural areas.

Addresses Issues 5.2, 11.5; achieved by Policy 11.6.
Related objective is Objective 5.2.

Objective 11.4

Reduced risks arising from storage, use or disposal of hazardous substances.

REASONS:

Hazardous substances may have significant adverse effects on public safety and health and on environmental contamination where they are inappropriately stored, used or disposed of. There is a need to minimise the potentially damaging effects of hazardous substances on people, animals and plants.

Addresses Issues 6.5, 7.3, 9.7, 10.4, 10.5; achieved by Policies 10.4, 10.7, 10.8, 10.9.
Related objectives are Objectives 7.3, 10.4.

11.4 Environmental Hazards Policies and Methods

Policy 11.1

The Council will seek to reduce risks to communities in relation to land use and development on floodplains that are subject to flooding.

EXPLANATION AND REASONS:

Land use activities on parts of floodplains may be exposed to damage from floods. Public costs may be incurred through damage to community facilities and services as well as private property. There is a need to minimise the potential adverse effects of floods on communities and individuals.

METHODS OF IMPLEMENTATION:

(i) The Council will:

(a) investigate and collect information on flood hazards and make it available to the public including information on the relationship between land use practices and the rate of stormwater run-off from land;

(b) assess the significance of flooding risks and the options available to reduce these risks.

(ii) The Council will maintain existing flood protection works and promote new works provided they are economically worthwhile and contribute to a comprehensive approach to floodplain management.

(iii) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications to regulate the use and development of land on floodplains where such regulation is necessary to avoid, or mitigate the extent or degree of exposure to flooding.

(iv) The Council will maintain a flood-warning system to enable effective responses to actual or potential flood events.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced incidence of damage to property or harm to people on floodplains subject to flooding.

PERFORMANCE MONITORING INDICATORS:

(i) Reported incidence of flood damage or harm where there are structural measures, development restrictions or flood-warning measures in place.

Implements Objectives 5.2, 8.1, 11.1, to address Issues 5.2, 8.1, 11.1
Related policies are Policies 5.2, 8.1.

Policy 11.2

The Council will seek to reduce risks:

(i) to the use and development of land subject to erosion, inundation or instability; and

(ii) to the use and development of any other land that may be affected as a result of such erosion or instability;

EXPLANATION AND REASONS:

Erosion and land instability may occur in coastal, riverside or other inland locations where natural processes or events result in ground shifting or being removed. Public costs may be incurred through damage to community land or services as well as private property. There is a need to minimise the potential adverse effects of erosion and land instability on communities and individuals.

METHODS OF IMPLEMENTATION:

(i) The Council will:

(a) investigate and collect information on coastal erosion and land instability processes and hazards; and

(b) assess the significance of coastal erosion and land instability risks and the options available to reduce these risks.

(ii) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications to regulate the use and development of coastal land in areas subject to coastal erosion and inundation, and of other land subject to slope instability, or ground subsidence, where such regulation is necessary to avoid, remedy or mitigate the effects of these hazards.

(iii) The Council will consider providing assistance for existing developments to relocate or to protect themselves in situations where it is satisfied the community risks are significant.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced incidence of damage to property or harm to people from coastal erosion, slope instability or other forms of erosion.

PERFORMANCE MONITORING INDICATORS:

(i) Reported incidence of damage or harm from instability and erosion where there are structural measures or development restrictions in place.

Implements Objectives 5.2, 8.1, 9.5, 11.1, to address Issues 5.2, 8.1, 9.7, 11.1, 11.2, 11.4.
Related policies are Policies 5.2, 8.1, 11.1, 11.3, 11.4.

Policy 11.3

Council may allow activities at risk from flooding or land instability provided that:

(i) the activity does not cause risk to the land itself, or to other people, land or natural values; and

(ii) the person carrying out the activity is aware of the risk; and

(iii) that person carries responsibility for risk management, including the costs of any protection.

EXPLANATION AND REASONS:

Activities may be established in areas at risk from natural hazards and so suffer damaging effects or aggravate such effects on other activities or resource values. Where the risks are known and the effects of natural hazards are confined to an activity, then the Council may permit such development activity.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications to:

(a) specify the requirements and standards for risk reduction including avoidance of risk to activities and resource values, in areas subject to natural hazards; and

(b) consider allowing development activities in such areas subject to such requirements and standards for risk reduction.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced likelihood of damage to land, resources or assets or harm to people from flooding or land instability.

PERFORMANCE MONITORING INDICATOR:

(i) Reported incidence of damage or harm from flooding or instability where there are requirements or restrictions on development activities in place.

Implements Objectives 5.2, 8.1, 9.5, 11.1, to address Issues 11.1, 11.2, 11.4.
Related policies are Policies 5.2, 8.1, 11.1, 11.3, 11.4.

Policy 11.4

The Council will seek to reduce risks to people, structures and land from the effects of earthquake shaking and ground movement.

EXPLANATION AND REASONS:

Earthquakes may cause ground to shake and shift, and to move along fault lines. Earthquakes may damage buildings and land, and be a danger for the public at large. There is a need to minimise the adverse effects of earthquake shaking and ground movement on communities and individuals.

METHODS OF IMPLEMENTATION:

(i) The Council will investigate earthquake hazards and assess the significance of risks to people, structures and land.

(ii) The Council will develop policies and rules in the District Plan and make decisions on resource consent and building consent applications to regulate locations and performance of buildings and other essential structures or services where such regulation is necessary to avoid, remedy or mitigate the effects of earthquake hazards.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced incidence of damage to property or harm to people from earthquake effects.

PERFORMANCE MONITORING INDICATORS:

(i) Reported incidence of damage or harm from earthquakes where development restrictions are in place.

Implements Objectives 5.2, 11.1, to address Issues 5.2, 11.4.
Related policy is Policy 5.2.

Policy 11.5

Council will establish principles for re-establishing utility services after damage by environmental hazard, to overcome threats to life and health, minimise waste of resources, and avoid further environmental damage.

EXPLANATION AND REASONS:

As the severity of an environmental hazard event increases, the range of normal response options is likely to decrease. Restoration of utilities needs to be based on priorities for life, health and safety. Adequacy, rather than convenience, may dictate immediate stages for various utilities if limited resources are to achieve the greatest result.

METHODS OF IMPLEMENTATION:

(i) Council will develop a set of environmental hazard contingency principles to apply to the re-establishment of utility services following any environmental hazard.

(ii) Council will advocate or apply these principles in responding to any emergency and in managing public utility assets.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Optimal reinstatement of utilities and containment of further environmental damage.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence of damage to utility services from environmental hazards remaining following hazard events.

Implements Objectives 11.1, 11.2, to address Issues 11.1, 11.2, 11.3, 11.4, 11.5, 11.6.
Related policies are Policies 11.1, 11.2, 11.4, 11.6. 11.7.

Policy 11.6

Council will seek to reduce risks to people, property, land and ecosystems from fire.

EXPLANATION AND REASONS:

Fire is a hazard to both private and community assets. The risk should be reduced where practical.

METHODS OF IMPLEMENTATION:

(i) Council will investigate District Plan provisions to separate assets at risk of fire, from potential sources of fire, particularly in rural areas where fire control response times are greater than in urban areas and equipment may be less.

(ii) Council will advocate land use, development and management practices to reduce the risk of uncontrolled fire occurring or spreading.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced spread of fire from source areas.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence of fires having serious damage to property and ecosystems.

(ii) The proportion of contained to uncontained fires.

Implements Objective 11.3, to address Issue 11.5.
Related policies are Policies 5.4, 6.4.

Policy 11.7

The Council will minimise risks to public safety, health and environmental contamination arising from the storage, transport, use, or disposal of hazardous substances.

EXPLANATION AND REASONS:

Hazardous substances may have significant adverse effects on public safety and health, and on environmental contamination where they are inappropriately stored, transported, used or disposed of. There is a need to minimise the potentially damaging effects of hazardous substances on people, animals and plants.

METHODS OF IMPLEMENTATION:

(i) The Council will investigate the storage, transport, use and disposal practices for hazardous substances and assess the significance of risks of hazardous substances and the options available to reduce these risks.

(ii) The Council will develop policies and rules in regional and district plans and make decisions on resource consent applications to regulate:

(a) the locations and performance of land use activities involving the storage, transport or use of significant hazardous substances;

(b) the contamination effects of the disposal of waste hazardous substances by discharges to land, water or air.

(iii) The Council will promote and advocate good practices in the storage, transport, use and disposal of hazardous substances where no rules or consents apply.

(iv) The Council will prepare and implement a "cradle-to-grave" tracking system for hazardous substances in the District, in accordance with requirements of the Hazardous Substances and New Organisms legislation when enacted.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced incidence of harm to people or ecosystems arising from the storage, transportation, use or disposal of hazardous substances.

PERFORMANCE MONITORING INDICATORS:

(i) Reported incidence of harm to people or ecosystems arising from the storage, transport, use or disposal of hazardous substances where there are management restrictions or good practice codes in place.

Implements Objective 11.4, to address Issue 11.6.
Related policies are Policies 10.8, 10.9.

12.0 OTHER SIGNIFICANT RESOURCE MANAGEMENT ISSUES

12.1 Introduction

The Council seeks to address in the Tasman Regional Policy Statement, two significant issues that involve the protection, use or development of a number of key resources, including land, water, and the coast. These issues are:

(i) Energy and the need for energy efficiency initiatives and appropriate allocation of resources to avoid, remedy or mitigate adverse effects on land, water, air through fuel mineral extraction, river and river bed disturbances for hydropower generation, and environmental contamination from fossil fuel use.

(ii) Transport and the need to manage the development of road networks, other transport modes to avoid, remedy or mitigate adverse effects on land uses including urban safety and convenience, use of land space, and on the safety and efficiency of the road network as the major transport system.

These issues are addressed in the following sections.

12.2 Energy Issues, Objectives, Policies and Methods

Energy Issues

Introduction

The use of energy in all its forms in the District is vital to the wellbeing of the community and the maintenance and development of the District's economy. While Council has no direct management functions for energy resources, its responsibility for sustainable resource management means that the Council is interested in the protection, use, or development of resources that are in some way affected by the production, transmission, or use of energy. Resources include natural resources from which energy may be produced, such as flowing water, and physical resources such as sites or locations and facilities for energy production or transmission.

The Council is able to consider and address in the Tasman Regional Policy Statement, issues such as:

(i) any significant adverse effects of land uses that are associated with the production, transmission, or use of energy; or

(ii) any adverse effects of energy resource development on water, rivers, the coast or environmental contamination.

The District is endowed with a sunny and moderately windy climate, suitable for solar or wind power electricity generation. While hydropower electricity is produced at the Cobb power station and a few small-scale hydropower generating facilities, most of the District's electricity demand is met by the major South Island hydropower installations, through the national transmission grid. The national grid feeds electricity to the substation at Kikiwa, from where it is distributed to the Tasman, Nelson, Buller and Marlborough districts. The link to Kikiwa has finite capacity. The future cost of increasing supply to these four northern districts through additional national grid facilities is expected to encourage consideration of options for local production and distribution of electricity. Deregulation of the national supply and transmission monopolies could increase electricity prices, because of the relatively large distances involved in power transmission and the relatively small local markets.

The District imports petroleum fuels for transport and industrial uses, and coal for industrial and domestic heating. A feature of the local demand for petroleum fuels is the relatively higher proportion of diesel usage than in other areas, because of heavy haulage transport, particularly for forest products.

There are two significant energy issues that the Council considers need to be addressed in the Tasman Regional Policy Statement. They are:

(i) the environmental effects of energy resource development, particularly electricity generation; and

(ii) the need to promote efficient energy uses.

The environmental effects of using imported petroleum fuel, including its likely contribution to the greenhouse effect and associated climate change, has been considered by the Council. The Council recognises that fossil carbon in petroleum fuels passes into the atmosphere and is a significant contributor to the greenhouse effect. However, the effects of petroleum fuel use are a global issue. In the District, as in the country at large, there is no easy substitute for petroleum fuels, therefore measures such as economic instruments or voluntary reductions may not be effective and may carry their own adverse social and economic effects. The Council believes that policy to encourage or influence the development of renewable alternatives to current hydrocarbon fuels, as well as policy to address present fossil fuel usage, is a government responsibility.

The pursuit of energy efficiency may result in a switch from one form of energy to another, increasing demand for that form of energy and potentially increasing the environmental effects of obtaining or using that form of energy.

Issue 12.1

ENVIRONMENTAL EFFECTS OF ENERGY RESOURCE DEVELOPMENT

The District has potential for the production of energy from a number of natural and physical resources. Conflicts may arise where there are other resource values that may be adversely affected by such development.

Electricity may be generated by hydropower, tidal, wind or solar power means, where, except for solar power generation, the kinetic energy of flowing water or air may be tapped. There are a few large rivers in the District with potential for significant hydropower generation, and many smaller waterways may be suitable for small-scale hydropower facilities to serve single properties or small communities. While water is a renewable resource, there may be a limited number of sites or locations from which to economically produce electricity. This applies to rivers and is likely to apply also to tidal power generation. Such sites are therefore a significant energy resource in association with the flowing waters.

However, most of the rivers and streams in the District having hydropower potential also support often significant wildlife, fisheries, scenic and other natural values. Most hydropower technologies, including run of the river methods of generation, interfere with flows by diversions or dammings and adversely affect such values. Reduced flows in river reaches may restrict habitat, and fish passage is usually difficult to achieve effectively. The visual effects of the reduced flows or of structures may also have significance. Tidal energy is a potentially significant source of electricity; however there does not appear to be sufficient investigation to demonstrate feasible development at any site around the District's coastline.

There are long term tradeoffs to be made concerning the continued provision for natural or instream values associated with river or stream sites, and the uptake of such sites for hydropower generation. Increasing interest in hydropower generation in the District can be expected as a result of the deregulation of the electricity supply market.

Sites for wind power or solar power generation are also likely to be limited. Key effects are the visual and noise effects of large structures such as turbines, and the use of space for these facilities. Again some choices will need to be made about the extent and location of such activities.

Transmission of energy requires linear sites or corridors crossing a variety of land uses and parts of the coastal marine area. The visual effects of transmission structures and lines are a key issue. Continuity of such activities is an important consideration, and the Act protects lawfully established land uses where their effects remain similar in character, intensity and scale.

The question of relocation of transmission facilities could arise if an upgrade, replacement or duplication would have effects different from those of the existing facilities, taking the work outside the protection of the Act. The need for relocation would only arise for a transmission work requiring a resource consent or a requirement to designate land for the work. Relocation could only be implemented if an alternative location was available where the transmission line would have less adverse effects.

While there are no significant petroleum or coal resources in the District, there is potential for a significant stream of wood or other plant biomass for liquid or gas fuel conversion in the future. Already, significant quantities of wood waste are available and used for industrial heating. Co-generation or the joint production of heat and electricity is a future possibility. Conversion of organic wastes such as stock effluent into biogas for heating or even fuel purposes is also an option. The environmental performance of sites or plants for conversion or co-generation would need to be established, in order to manage contaminant discharges and other adverse effects.

Addressed by Objective 12.1 and Policy 12.1.
Related issues are Issues 7.2, 8.2.

Issue 12.2

PROMOTION OF EFFICIENT ENERGY USES

The Council has an interest in the promotion of efficient uses of energy where these are able to avoid, remedy or mitigate adverse environmental effects. As well, the achievement of energy efficiency may reduce the rates of growth of energy demand, and the need to establish new energy generation facilities or pursue options, together with their possible adverse effects.

Energy efficiency may be seen within a wider context than simply thermal efficiency, or the avoidance of heat loss. Energy efficiency can include the minimisation of energy costs embodied in resources that are needed to establish or maintain structures, settlements, transport networks or other developments. Energy efficiency in transport may involve choices between different fuels, or the location and form of transport networks, or transport mode (e.g. rail). Reductions in adverse effects such as environmental contamination (for example, smoke, waste heat) or the use of finite natural resources, as well as achieving community safety, health and convenience are all possible benefits of energy efficiency. There are strong connections between energy efficiency and waste minimisation aims and methods.

Achieving energy efficiency in built development may involve consideration of location, siting or design of buildings, and the use of materials or technology. Energy efficiency in transport may involve choices between different fuels or the location and form of transport networks, or transport mode (e.g. rail). The transport and urban development sections of the Tasman Regional Policy Statement address this issue.

While the national Building Code sets the performance requirements for energy efficient buildings, there is a need for wider promotion of voluntary energy efficient measures in all types of built development, particularly in buildings for industrial and domestic use, and including improving the energy efficiency of existing buildings. For new buildings, passive energy efficiency can be achieved through location and siting to the weather, and design features may take advantage of solar power or minimise the need for other forms of heating. Retrofitting or refitting existing buildings with new materials or methods of insulation or heat generation is an important area for promotion.

Addressed by Objectives 5.6, 12.2 and Policy 12.2.
Related issues are Issues 5.1, 7.1.

Energy Objectives

Objective 12.1

The use and development of natural and physical resources for the generation and distribution of energy, in a manner which is efficient and which avoids, remedies or mitigates any adverse effects on the environment.

Objective 12.2

Conservative and efficient use of energy, and reduced dependence on non-renewable energy resources.

REASONS:

Energy use and development is a necessary part of community wellbeing. There are opportunities for energy production, transmission, and use that are both efficient and able to be continued without significant adverse effects on natural and physical resources. The Council wishes to maximise uptake of such opportunities.

Addresses by Issues 12.1, 12.2; achieved by Policies 12.1, 12.2.
Related objectives are Objectives 5.6, 7.1, 8.2.

Objective 12.3

No risk of contamination from radioactive material or irradiating apparatus.

REASONS:

Use of radioactive material, principally as an energy generating source, is seen to have unacceptable contamination risks for Tasman District, and the presence of such material or of apparatus, particularly in connection with this use, is opposed.

Addresses Issue 12.3; achieved by Policies 12.3, 12.4.
Related objective is Objective 11.4.

Energy Policies and Methods

Policy 12.1

The Council will seek to provide for the continuation of energy generation, transmission, or use opportunities, while avoiding, remedying or mitigating the adverse effects of such actions on natural, heritage and amenity values of resources.

EXPLANATION AND REASONS:

The Council recognises the need for continuity in energy supply. Council wishes to ensure that the limited stock of resources that may be required for or affected by energy production, transmission, or use is protected to an appropriate degree, where those resources also have important public uses or values.

METHODS OF IMPLEMENTATION:

(i) The Council will liaise with organisations and individuals having energy supply interests, in order to remain informed concerning national and local energy market conditions and outlook, and the long term options and implications for energy production within the District.

(ii) The Council will develop policies and rules in its regional and district plans and make decisions on resource consent applications to provide for appropriate energy production, transmission, or use activities, including hydropower electricity, that do not adversely affect natural, heritage and amenity resource values of resources, including instream values of water bodies and the natural character of the coastal environment.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Continuity of energy supply including electricity from either national or local sources.

(ii) Protection of significant natural values of water bodies, the coast and other significant resource values.

PERFORMANCE MONITORING INDICATORS:

(i) Assessed significance of changes to water bodies or other sites affected by energy generation, transmission, or use.

Implements Objective 12.1, to address Issue 12.1.
Related policies are Policies 5.1, 5.6, 7.4, 8.2, 12.2.

Policy 12.2

The Council will promote the use of energy efficient materials, technologies, designs and locations for buildings and developments.

EXPLANATION AND REASONS:

Energy efficient buildings and other developments avoid unnecessary energy use, provide economic benefits and so help to reduce the need for new energy sources or for building materials or other resources that may involve adverse environmental effects.

METHODS OF IMPLEMENTATION:

(i) The Council will advocate and promote methods of incorporating energy efficient materials, technologies, designs and locations into built developments and will liaise with organisations and parties having energy management interests.

(ii) The Council will develop policies and rules in the District Plan that require the consideration and incorporation of energy efficient features in built developments including, for example, continued access to solar energy.

(iii) Methods (i) and (ii) apply to renovations as well as to new building, and include:

(a) lighting;
(b) insulation;
(c) heating and ventilation;
(d) passive solar design;
(e) appliances;

to the extent allowed by the Building Act.

(iv) The Council will act to pursue energy efficiency in its operations.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) An increased level of energy efficiency in built development.

(ii) Energy efficient building features that contribute to reduced environmental contamination or waste generation.

PERFORMANCE MONITORING INDICATORS:

(i) Rate of uptake of energy efficiency in built development.

(ii) The extent to which energy demand can be reduced, and the production outputs achieved with less energy consumption.

Implements Objective 12.2, to address Issue 12.2.
Related policies are Policies 5.1, 5.6, 12.2.

Policy 12.3

The Council will prohibit:

(a) the generation or use of radioactive material;

(b) the generation of energy from radioactive material or irradiating apparatus; and

(c) the transport, storage or disposal of radioactive material or waste;

in Tasman District **except where**:

(i) the transport, storage, or use of radioactive material, or the use of irradiating apparatus for medical, educational, or research purposes; or

(ii) the disposal of radioactive material or waste;

is undertaken in accordance with the Radiation Protection Act 1965.

Policy 12.4

The Council is opposed to the presence of nuclear powered or nuclear equipped vessels in the waters of the Tasman District.

EXPLANATION AND REASONS:

The use of radioactive material or irradiating apparatus is principally in connection with energy generation or supply, elsewhere in the world. Apart from particular medical, educational or research purposes, potential energy generation uses of such material or apparatii are considered to have unacceptable risks of contamination or other environmental damage in Tasman District. The Council will prohibit or oppose such uses or activities to the extent of its resource management powers.

METHOD OF IMPLEMENTATION:

(i) The Council will advocate to the government that energy-related uses of radioactive material or nuclear technology be kept out of Tasman District.

(ii) The Council will develop policies and rules in its district and regional plans and make decisions on resource consent applications to prohibit or restrict radioactive material and nuclear technology in activities within Tasman District in accordance with the policies.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Continued low or no risk of contamination or other environmental damage from radioactive sources.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence of radioactivity from nuclear sources or technology present at any time in Tasman District.

Implements Objective 12.3, to address Issue 12.3.
Related policy is Policy 10.8.

12.3 Transport Issues, Objectives, Policies and Methods

Transport Issues

Introduction

The land transport system is a network of roads, cycleways and walkways linking settlements in the District and providing an access service for a number of land transport modes, including private and commercial vehicles, heavy freight vehicles, passenger transport services, cyclists and pedestrians. The land transport system is a basic utility service and both the Council and Transit New Zealand fund its maintenance and development. The Council has an operative Regional Land Transport Strategy jointly with Nelson City Council for the purpose of the strategic management of the system.

Maritime transport services include local coastal shipping and passenger craft together with ports, wharves and points of landing on beaches for commercial and recreational vessels. The main ports in the District are at Motueka, Mapua, Tarakohe, Takaka and Collingwood with a variety of small facilities in variable states of service at other coastal locations. A number of navigational aids are sited at key coastal locations. The need to establish ownership and management priorities for these facilities and structures is a transitional issue for Council arising from its responsibilities as a harbour board.

Air transport services include the provision and operation of aerodromes at Motueka, Murchison and Takaka. Enhanced service provision including airport expansion is a service issue at Motueka.

Issue 12.4

SIGNIFICANT LAND TRANSPORT ISSUES

The Council is able to consider and address in the Tasman Regional Policy Statement, issues relating to the sustainable management of transport services as physical resources and public utility networks. The Council considers the following land transport issues as significant:

(i) The extensive nature of the road network of state highways and local roads in the District links many small centres and serves a range of private and commercial transport activities. The dispersed nature of the system requires significant effort to maintain and upgrade. Over one-third of Council's annual expenditure is directed to the roading system, the single largest expenditure activity; but less than one-half of this is government funded. The roading network services the transport needs of a wide range of activities, including forestry, horticulture, farming, and fishing product transport, commercial and commuter traffic and tourist travel.

(ii) Urban expansion in the main settlement areas of the District creates increasing travel demand for private cars, or for commercial traffic. This issue is addressed in the Urban Development section of the Tasman Regional Policy Statement.

(iii) Vehicle usage consumes significant amounts of fossil fuels with environmental emissions of carbon dioxide as a greenhouse gas, lead and toxic hydrocarbons. There does not appear to be an easy substitute fuel for road transport in the District or nationally. Vehicle emissions probably contribute to poor winter air quality in Richmond. Urban traffic on highway routes through centres such as Richmond, Motueka and Takaka constitute a noise nuisance.

(iv) The District's passenger transport services are virtually entirely commercial activities, and opportunities to consider the need for public funding for the passenger transport needs of the transport disadvantaged have not been pursued.

(v) Provision for urban or rural cycleways and walkways is not well developed in the District.

(vi) Road accidents continue to exact a miserable toll on many individuals in the community through inattention, speed, alcohol and hazardous roading situations.

(vii) Land use activities can have adverse effects on the operation and management of the road network.

Addressed by Objective 12.4 and Policies 5.6, 12.5.
Related issue is Issue 5.6.

Transport Objectives

Objective 12.4

Maintenance and enhancement of safe and efficient land, maritime, and air transport systems, while avoiding, remedying or mitigating the adverse effects on human health, public amenity and water, soil, air and ecosystems.

REASONS:

Transport systems provide vital access and communications services to the community. Problems of efficiency and safety are created where urban and rural land use activities interact with the roading network, and space use pressures also arise for air and maritime transport facilities. There is a need to manage both supply of and demand for transport systems, in order to ensure acceptable interactions between developments and the transport system generally.

Addresses Issues 5.6, 12.4; achieved by Policies 5.6, 12.5.
Related objective is Objective 5.4.

Transport Policies and Methods

Policy 12.5

The Council will ensure that the land transport system efficiently and safely provides for the movement of goods, services, and people, including a reasonable level of access, while avoiding, remedying or mitigating adverse effects on the environment including communities.

EXPLANATION AND REASONS:

The land transport system of roads, cycleways and walkways is a significant service for meeting the transport needs of urban and rural communities and the District's economy. Council is able to provide for the maintenance and development of the system to meet appropriate community travel demands, consistent with the minimisation of adverse effects on the environment from the operation of the system.

METHODS OF IMPLEMENTATION:

(i) The Council will continue to implement the annual District Land Transport Programme for funding local road construction and maintenance, road safety, transport administration and the total mobility scheme, and the Regional Land Transport Strategy for long term system management.

(ii) The Council will develop policies and rules in the District Plan and make decisions on resource consent applications which provide for compatibility between:

(a) the standard of roading;
(b) the nature of adjoining land use;
(c) traffic generation (at source and cumulative downstream traffic);
(d) access to property.

(iii) The Council will investigate and consider nonstructural methods of enhancing access to, and safety and efficiency of, road usage with those affected or interested.

(iv) The Council will investigate the transport and amenity advantages of options such as walkways, cycle ways, and bridle-paths, for some transport activities.

(v) The Council will investigate the provision of facilities for the disposal of refuse and waste by road users.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) A more efficient, accessible and safer land transport system.

PERFORMANCE MONITORING INDICATORS:

(i) Degree of achievement of maintenance and safety standards for roads.

(ii) Reported satisfaction of the community with land transport network performance.

Implements Objectives 5.4, 12.4, to address Issues 5.6, 12.4.
Related policy is Policy 5.6.

Policy 12.6

The Council will seek to avoid, remedy or mitigate adverse environmental effects of activities at the District's ports and on adjoining land and at its airports and on adjoining land.

EXPLANATION AND REASONS:

It is almost impossible for ports and airports to operate without some effect, even if these are simply site modifications, or occupation at the expense of alternative uses. It is necessary to consider what impacts can be reduced; and those for which even the best practical option requires control on other activities in the vicinity.

METHOD OF IMPLEMENTATION:

(i) The Council will develop policies and rules in the District Plan and Coastal Plan and make decisions on resource consent applications that establish performance requirements for port and airport operations and regulate adjoining land use which may be affected by port or airport operations.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) No or reduced conflicts between port and airport operations and adjoining land uses.

PERFORMANCE MONITORING INDICATORS:

(i) Reported incidence of conflicts between ports and airports and adjoining land.

Implements Objective 12.4, to address Issue 12.4.
Related policy is Policy 5.4.

13.0 RESOURCE MANAGEMENT PROCESSES

13.1 Introduction

Resource management processes are the various ways or procedures for carrying out resource management responsibilities under the Resource Management Act (the Act), or by using other Acts. Resource management process issues are concerns about or opportunities for using various resource management processes.

The key processes available to Council under the Act are summarised in Section 1.3 of the Tasman Regional Policy Statement (page 5). This section addresses a number of important resource management process issues. These are:

(i) the development of resource management plans as a unitary authority;

(ii) dealing with cross-boundary issues;

(iii) consultation with the public in resource management plan development;

(iv) assessment of resource management options;

(v) implementing resource management plans;

(vi) monitoring the environment and the effects of resource use activities, and enforcing conditions of plans and consents;

(vii) managing resource management conflicts of interest within the Council.

The statements of issues, objectives, policies and methods in this section describe how the Council will use the processes that are available under the Act together with processes under other Acts to manage resources.

13.2 Resource Management Process Issues

Issue 13.1

THE DEVELOPMENT OF INTEGRATED RESOURCE MANAGEMENT PLANS AS A UNITARY AUTHORITY

The Council as a unitary authority has resource management functions and responsibilities of a regional Council and a territorial authority under Sections 30 and 31 of the Act. Section 1.3 (page 5) gives a complete list of these Council functions. In pursuing these functions, Council must prepare and implement a regional policy statement, a regional coastal plan and a district plan. Council may also prepare any number of other regional plans. Council may continue to develop resource management plans as separate plans or it may combine in any way its various district and regional plans. The Act charges Council with achieving integrated resource management. Continuing with separate resource management plans will mean that policies and rules, including resource consent requirements, may apply to an activity under more than one plan. A single integrated plan in time will reduce any overlaps between regional and district policies and rules and will provide a single set of planning requirements for all resource use activities in the District. Council would still be required to retain the Tasman Regional Policy Statement distinct from this integrated resource management plan. The Council has proceeded to develop the Tasman Resource Management Plan, combining district, coastal and regional plan provisions into one document.

Addressed by Objective 13.1 and Policy 13.1.

Issue 13.2

CROSS-BOUNDARY ISSUES

Some resource management issues or concerns are common with those for other local authorities adjacent to Tasman District. Such issues may be in relation to a specific resource or area that extends across district or regional boundaries, for example, continuous urban areas, areas of high natural value. Other common issues may be similar processes or systems such as erosion, contamination, transport networks or water bodies that require a consistent approach to management. The Act requires the Council to investigate common or cross-boundary issues with adjacent local authorities, and to specify in its regional policy statement, processes to deal with these issues.

The West Coast Region and Buller District lie to the west of Tasman District, and Nelson City, Marlborough District, Hurunui District and the Canterbury Region lie to the east and south.

Since 1 July 1992 when the Council became a unitary authority, issues have arisen in consultation between the Council and some adjacent local authorities, particularly Nelson City Council and West Coast Regional Council. Significant issues include:

(i) consistent approaches in resource management policies and plans (Tasman District/Nelson City/Marlborough District/West Coast Region/Buller District/Canterbury Region/Hurunui District).

(ii) consistent approaches in addressing issues of significance to the tangata whenua and iwi authorities (Tasman District/Nelson City).

(iii) consistent management of effects of urban land use activities in the Nelson-Stoke-Richmond urban area, including space needs for residential, commercial, industrial (large and small sites), rural-residential and open space purposes (Tasman District/Nelson City);

(iv) consistent management of the effects of land disturbance activities (Tasman District/Nelson City/West Coast Region);

(v) co-ordinated management of land use effects in areas that are significant hard rock quarry aggregate sources in the Eastern Nelson Hills (Tasman District/Nelson City);

(vi) consistent coastal water quality management and coastal space management for aquaculture, recreational activities in eastern Tasman Bay (Tasman District/Nelson City);

(vii) protection of natural values and features in Waimea Estuary (Tasman District/Nelson City);

(viii) consistent water management on shared catchments, including the Roding River (Tasman District/Nelson City) and Buller River (Tasman District/West Coast Region);

(ix) co-ordinated waste minimisation and hazardous waste management programmes (Tasman District/Nelson City);

(x) co-ordinated environmental monitoring of water and air quality and hazardous wastes (Tasman District/Nelson City);

(xi) co-ordinated management of the effects of land transport systems and modes, including roading, passenger transport, cycleways and walkways, and of the effects of land use activities on these systems and modes (Tasman District/Nelson City);

(xii) co-ordinated provision for specific amenity services and facilities in relation to recreation, arts, culture, tourism (Tasman District/Nelson City).

Addressed by Objective 13.1 and Policy 13.2.

Issue 13.3

CONSULTATION WITH THE PUBLIC IN DEVELOPING PLANS

Public involvement in local authority planning, regulation and community development proposals has progressively evolved over the last few years to become a normal part of local government business. Reform of local government legislation in 1989 and the introduction of the Resource Management Act 1991 now together impose important obligations on the Council to consult widely and adequately in resource management plan and annual plan preparation.

Under the Resource Management Act, Council is required to consult with government agencies and the tangata whenua of the area through iwi organisations, when preparing resource management plans. The Council may also consult with the public at large and with any relevant or affected interest group at this time. When plans are formally proposed by Council, they are publicly advertised, and the public have a right to make submissions to the Council and to be heard before the Council on their submissions. Following decisions on submissions made by Council, those who made submissions and who are not satisfied with the outcome may refer the relevant planning provisions to the Environment Court, and the Environment Court may make a final decision on the plan.

The Council is required to follow a special consultative procedure under the Local Government Act when preparing its annual plan, when proposing to transfer any of its functions or powers to another body, when making administrative charges for recovering the costs of managing resource consents, or when making bylaws. The special consultative procedure requires the Council to publicly advertise its draft proposal and allow a period for public submissions. The public are to be given the opportunity to be heard on their submissions, before the Council finalises its proposal.

Other legislation relevant to resource management responsibilities (for example, the Transit New Zealand Act, Reserves Act, Biosecurity Act) also contains obligations on the Council to consult with the public on relevant plans and strategies.

Generally, consultation begins with a potentially wide scope of enquiry by Council, often with the circulation of general issues and options papers. As the understanding of relevant resource management issues and options develops, further consultation may be more focused and may converge on specific matters and more detailed policy options. The Committee policy papers and draft resource management plans may be used in further public consultation in order to build consensus before proposed plans are publicly notified for submissions and have formal effect.

Effective consultation takes time and effort by both Council and the interested public. The Council needs to allow sufficient time for public views to be formed on Council proposals and to be put to Council. The Council must also be committed to responding to public and interest group views and considering and amending planning proposals where necessary. The community for its part needs to acknowledge that there will inevitably be many views on issues that the Council will receive in the process of consultation and that it must reconcile. The shaping of planning proposals through early and full consultation can avoid, remedy or mitigate the degree of conflict that may later result between community interests or between the Council and others on behalf of certain community interests, when plans are approved. This is likely to result in a speedier, less expensive planning process overall, and a process whose results are likely to have a higher level of awareness, acceptance or support from the community than if less consultation had been undertaken.

Public consultation also needs to be well managed, as repeated or inadequate consultation or lack of continuity in consultation may result in community suspicion, scepticism or fatigue with Council proposals or processes.

Addressed by Objective 13.2 and Policy 13.3.

Issue 13.4

DUTY TO ASSESS ALTERNATIVES IN DEVELOPING RESOURCE MANAGEMENT PLANS

The Resource Management Act obliges the Council in all its resource management plan preparation processes to:

(i) have regard to the need for particular resource management methods in achieving sustainable resource management;

(ii) evaluate the likely benefits and costs of preferred methods and the principal alternative means; and

(iii) be satisfied that the preferred means is both necessary and the most appropriate, having regard to its efficiency and effectiveness.

The Act allows the Council to judge under the circumstances what is an appropriate evaluation of all resource management options. The Council must have fulfilled with these duties by the time it finally adopts any resource management plan. When a proposed plan is publicly advertised for submissions, anyone has the right to challenge any planning provision in a submission on the grounds that the duty has not been adequately complied with to that stage of the process. The Council is required to provide statements of the main reasons in support of planning provisions in its plans and this is linked with the duty to have assessed planning options. The law leaves the Council to demonstrate through practice that it has fulfilled the duties.

The Council considers that assessment of resource management options is a basic aspect of good resource management process. Analysis of resource management issues and aims and assessment of management options has been an integral part of the preparation process for all resource management plans by Tasman District Council. Information gained from public consultation efforts has been closely tied to the carrying out of these tasks. Documentation such as issues and options papers provides the public and the Council with an opportunity to think about ways and means of addressing resource management concerns. More specific assessments of policy options and their implications,

particularly for complex, contentious or otherwise significant issues are provided to the Council's Environment and Planning Committee for consideration and decisions. Draft options assessments may be circulated to key interest groups for their input before Committee consideration. These analyses are reviewed and if necessary revised in reporting on submissions on proposed plans. The process of thinking, researching and writing about resource management options must respond to new information as it is developed throughout the process. There may be no need for separate documented assessments, or there may be several documents that provide this record of assessment of alternatives.

In these ways, the Council progressively clarifies and provides justification for adopted planning objectives, policies and methods, including rules. Council has to balance the additional effort and time needed to adequately assess options in plan preparation, against the advantages of reaching sound decisions on resource management policy, as well as avoiding expensive challenges to its plans from affected parties.

Addressed by Objective 13.2 and Policy 13.4.

Issue 13.5

IMPLEMENTING RESOURCE MANAGEMENT PLANS

Funding Plans

Resource management plans seek to achieve sustainable and integrated management through a range of management methods. Section 1.3 of the Tasman Regional Policy Statement (page 5) sets out the kind of methods available to Council. Most resource management plans contain a mix of methods to achieve desired results. Compliance with the duty to assess alternatives helps the Council to determine the particular method or mix of methods necessary and appropriate to achieve those results. However, successful implementation of plans relies on good administrative and funding processes.

The implementation of planning rules is perhaps the most straightforward method, as the Act gives set procedures for Council to follow, and allows Council to recover all actual and reasonable costs of consent processing and administration. However, other resource management methods rely for their implementation on a continued stream of Council funds from other sources over periods of several years. Complete implementation of some resource management policies may take decades, with many possible changes in political and administrative leadership of the Council.

The Council's successive annual plans are the key means of committing resources to carrying out such resource management methods through appropriately defined programmes of action. There is therefore a high degree of integration and consistency needed between policies and methods given in resource management plans, and projects and budgets stated in successive annual plans. Successful resource management plan implementation is likely only if there is continuing and adequate provision of funds for programmes of resource management action. This situation has several important consequences for the Council as well as community interests that are served through resource management plans. The first is that in developing resource management plans, the financial implications for Council need critical assessment and recognition by Council and the public who scrutinise plans. This is normally is achieved by Council's assessing options and making decisions on planning provisions. The second is that in preparing each year's annual plan, Council must ensure that funding for resource management programmes has continuity from year to year. Where Council decides to limit funding for any reason, it must resolve how this might affect the achievement of specific objectives or policies.

Emerging Methods of Resource Management

The Council is able to implement plans through a range of methods and these are summarised in Table 1.2. Emerging issues in the use of resource management methods include the respective roles of the Council and resource users themselves in the processes of avoiding, remedying or mitigating adverse environmental effects of resource use activities. There are opportunities for self-regulation, including

self-monitoring by resource users their own activities, through the use of codes of practice and environmental management systems by sector groups or individual companies, with the possible results of promoting greater ownership of resource management responsibilities by such parties and a reduction in the need for Council intervention in the form of rules, consent requirements and Council monitoring.

Issues of accountability, efficiency and certainty of results arise for both the Council, the resource use industries concerned, and the community at large. While the Council is preparing to increase its efforts in advocating good practices, including education, there are necessary processes of consultation and awareness-raising to be completed before such options may be developed. Council must be satisfied that with any self-regulation or self-monitoring:

(i) there is an open process of developing codes or other self-regulatory mechanisms for resource users to apply to themselves;

(ii) there is a clear system for reviewing or assuring performance by resource users in relation to environmental results.

Other emerging issues include the scope of application of resource management methods that have an economic or monetary basis, such as financial incentives, charges or levies, and transferable resource consents (or consent interests such as "development rights"). Council is in the process of exploring the potential for applying such methods to achieve environmental results and has included use of economic methods within a number of policies of the Tasman Regional Policy Statement. Issues of cost-effectiveness and social equity have arisen in relation to transferable water permits, and will need to be resolved satisfactorily in future development of such methods.

Resource Consent Administration

The administration of planning rules together with the management of consents under the Act, is a key method of implementing resource management plans and achieving sustainable resource management. The processes of receiving, considering and deciding on resource consent applications and administering resource consents, all require effective management. This is because over time, decisions on resource consents substantially influence the patterns of use, development or protection of resources. Inadequate management of consent processes may be expensive or politically contentious and may give rise to decisions that are environmentally damaging or otherwise unsustainable.

There are several ways in which good consents management may be undertaken. The following are ways which improve the efficiency and fairness of consents management:

(i) ***Use of delegations and transfers***

Appropriate delegations from Council to Committee, and from Council to staff for the making of the many procedural decisions as well as decisions on applications themselves. The Council is required to keep an open record of its instruments of delegation so that all parties may be aware of the authority vested in Council committees and officers under those instruments. Transfers of consent granting and administration powers to public authorities such as other local authorities, joint committees, iwi authorities or statutory agencies may also be an appropriate and efficient way of regulatory delivery. This is particularly so where there are public authorities with a clear community responsibility or interest in certain areas or matters.

(ii) ***Maximum use of conflict resolution opportunities in consent processing***

The Act provides for pre-hearing meetings to help resolve concerns or issues between parties in relation to any consent application. While not obligatory, mediation at these meetings by Councillors or Council officers can be a very effective means of arriving at an agreed or satisfactory approach to how a consent application may be considered. Other opportunities for good practice include the encouraging or helping of would-be consent

applicants to explore likely concerns about their proposal with potentially affected parties, before their proposal is developed to the stage of lodging resource consent applications. As well, the process of seeking approvals from affected parties in order to avoid notification of applications, may result in resolution of conflicts. Where Council decisions on resource consent applications may be appealed, there are opportunities for the Environment Court at the request of Council to conduct mediation, conciliation, arbitration or any other dispute resolution procedure that may be appropriate. The success of such processes requires time and goodwill between the parties.

(iii) ***Use of customer-friendly processes in consent processing***

Applying for resource consents may be a complex and expensive business for some resource use proposals. Many relatively minor activities may require authorization to be obtained by people who are quite unfamiliar with the administrative process. It makes good sense to provide clear, prompt and consistent guidance to applicants as Council clients and so allow for efficient administration.

(iv) ***Provision for fair and appropriate cost recovery charges, payable by consent applicants and consent holders for the public effort in consent processing and administration***

Administrative charges may be levied by Council under Section 36 of the Act to recover the actual and reasonable costs of receiving, considering and deciding on resource consent applications, and in monitoring and administration of the exercise of consents once granted. Legal provision for levying such charges recognises that Council expenditure is required to ensure that resource developments lead to sustainable resource management results, including the avoidance or mitigation of adverse effects. A fair measure of the public expenditure in minimising such public costs of development should be paid by the private party who seeks to benefit from his or her development of resources and use of the environment.

Addressed by Objective 13.2 and Policies 13.5, 13.6.

Issue 13.6

MAKING RESOURCE MANAGEMENT DECISIONS UNDER UNCERTAINTY

The processes of developing resource management policy and considering resource use proposals rely on sufficient relevant and reliable information in order to reach decisions that are justified and in accordance with the promotion of sustainable management. In some situations, an adequate amount of information may not be available. Best information may indicate a possible risk, as well as the likely benefits associated with some course of action; but the nature, size and likelihood of the risk is uncertain. This situation may be because the information does not exist, the understanding of the risk is poor or the known situation is very complex.

The Act recognises that uncertainty exists, by imposing functions and duties to collect environmental information and to avoid, remedy or mitigate adverse effects of activities on the environment. Effects include cumulative effects and risks.

A rational response to uncertainty is to be cautious in decision-making, especially when there is an indication that significant risks may be involved. A precautionary approach to decision making has been recognised as an appropriate response in the face of uncertainty by the United Nations in Agenda 21, by the Government in environmental management publications and by other councils in New Zealand, despite the fact that the concept is not expressly stated in the Act.

In adopting a cautious approach, there is a need to carefully balance expected benefits and possible risks, on the basis of all available information. The approach presumes that decisions should avoid or

reduce the identified risk, but with every decision under such an approach, the Council would need to judge:

(a) whether it has enough information about the risk to warrant being cautious;

(b) whether the risk is of such a kind that action should be taken to avoid or reduce it, regardless of the expected benefits;

(c) what decision is most appropriate; for example, more stringent regulation or more environmental information.

Adopting a cautious approach may provide additional information about any proposed action that assists in answering the above questions. However, the approach may unnecessarily inhibit resource use or it may transfer a risk to another part of the environment or to another time. There is a need to exercise careful judgement in applying the approach to the requirements of the Act and the facts of the situation. Commitment to such an approach must be consistent but also responsive to the issues of whether it applies in any particular situation, and how then it is to be applied.

Addressed by Objective 13.2 and Policy 13.7.

Issue 13.7

MONITORING AND ENFORCEMENT

The processes of environmental investigations and monitoring provide information to the Council about problems or issues, the need for policy, whether existing policies and actions are achieving desired results, and whether new responses or approaches are necessary. Enforcement processes ensure that the duties and restrictions on resource use imposed by the Act, or by plans or resource consents are followed.

Monitoring

Under the Act, Council has a significant duty to gather information, investigate and monitor:

(i) the state of the environment of the District;

(ii) the effectiveness of its resource management plans;

(iii) the exercise of resource consents in the District;

and to take appropriate action to carry out its resource management functions.

The Council also has an obligation to observe and enforce the observance of its resource management plans once they are operative. Proposed plans also have effect once they are notified, and Council can enforce provisions of plans, proposed plans and resource consents through the making of enforcement orders and abatement notices.

Monitoring and enforcement are important responsibilities and processes in achieving sustainable resource management. Monitoring programmes are needed in five areas:

(i) Monitoring compliance with conditions of resource consents. Council may require consent holders to undertake their own monitoring with auditing by Council, or Council may undertake compliance monitoring itself and charge the holder for its efforts.

(ii) Monitoring compliance with rules of plans. Rules may specify the performance requirements for resource use activities and their adverse effects. Many rules may not require a resource consent provided that these requirements are met. Council needs to

develop ways of monitoring rules. These may include resource user self-monitoring in appropriate situations, with arrangements for auditing or reviewing the results. Council may undertake targeted inspections or it may liaise with resource user groups, as further methods. Costs of rule monitoring are borne by Council.

(iii) Monitoring the environmental effects of resource use activities authorised either by a resource consent or by planning rules including cumulative effects. This is normally carried out by Council, but a proportion of costs may be recovered from consent holders whose activities have generated the environmental effects that are monitored.

(iv) Monitoring the state of the environment - the effects and trends or changes in environmental systems or processes (known as baseline monitoring). A series of environmental state indicators needs careful selection and monitoring results need careful assessment, including interpretation of their significance for possible resource management responses.

(v) Monitoring the suitability and effectiveness of resource management plans, including the Tasman Regional Policy Statement and regional and district plans. Performance monitoring indicators are specified in all plans to provide the framework for monitoring the degree of implementation, or performance, of plans.

The Council has committed itself to improving the limited information that is available on many natural systems, including terrestrial and freshwater ecosystems, and of the impacts of resource use on such systems. The Council has developed a strategy for monitoring the state of the environment in the District. The strategy identifies issues requiring monitoring and the possible monitoring programmes necessary to fulfil the information needs. There are many competing priorities for monitoring effort and there are significant expenditure decisions in implementing a defensible and publicly acceptable environmental monitoring regime.

Council resources are limited, and several other agencies have responsibilities and information that is important in environmental monitoring. These agencies include:

(i) Department of Conservation, in relation to information on indigenous animals and plants, natural terrestrial and aquatic ecosystems, and natural and historic values generally;

(ii) Ministry of Fisheries, in relation to coastal marine resources, including fisheries and aquaculture;

(iii) Ministry of Agriculture and Forestry, in relation to forestry management and agriculture and horticulture management;

(iv) Ministry of Commerce, in relation to minerals and energy resource management;

(v) Crown Research Institutes, including NIWAR (National Institute of Water and Atmospheric Research), IGNS (Institute of Geological and Nuclear Sciences), LCNZ (Landcare New Zealand Ltd) in the provision of research-based information on natural and physical resources generally.

There is a need for the Council to collaborate with all such agencies, as well as private sector organisations including resource user industries in identifying information needs and monitoring priorities.

Enforcement

Enforcement is the process of ensuring compliance of resource use activities with the Act, the provisions of plans and the conditions of resource consents, and as a result, requiring the avoidance, remedying or mitigation of adverse environmental effects of any activity. Compliance monitoring results, responses to complaints and emergencies may all suggest or require the need for enforcement

action to be taken, often immediately. The enforcement process may involve entry onto private land for survey or inspection purposes. Council's staff who are appointed as enforcement officers may enter property to establish whether a breach of the Act, a plan or a resource consent has occurred. Warrants for entry and search may also be issued by a District Court where there is reason to believe such a breach has occurred. An enforcement officer may lodge an abatement notice with any person who is believed to have been responsible for any breach or to have done something that may have an adverse effect of a particular kind, on the environment. In addition, the Council or anyone else may apply to the Environment Court for an enforcement order to require action that will avoid, remedy or mitigate any adverse effects of an activity, or to require compliance with the terms of the order (for example, apply for a resource consent). In extreme cases, Council may seek to prosecute anyone for failure to comply with these enforcement instruments, or whose actions have resulted in significant adverse effects. Other enforcement actions possible by Council are the issuing of excessive noise directions, water shortage directions, and the taking of emergency action to prevent or remedy adverse effects.

Council recognises that effective enforcement is necessary to ensure that resource management regulation is complied with by individuals for the benefit of the environment and the community of the District. However, as with monitoring effort, Council resources are limited and choices need to be made about how to respond to indications of breaches, through monitoring or complaints. Council field staff are limited in number and rely on assistance from the public in detecting situations requiring enforcement.

In addition, enforcement action is often seen negatively by the community. It can involve the Council in potentially costly and unpleasant proceedings against individuals or organisations. Council may be criticised by the public for not taking sufficient or particular action, or even for taking positive action to ensure compliance.

There is a need for both the community and Council to understand and address the requirements and expectations of the law and the community regarding deliberate or unintended environmental damage and the appropriate enforcement action.

Addressed by Objective 13.2 and Policies 13.7, 13.8, 13.9.

Issue 13.8

MANAGING RESOURCE MANAGEMENT CONFLICTS OF INTEREST WITHIN TASMAN DISTRICT COUNCIL

The Council as a unitary authority is responsible for carrying out a wide range of services to the community, to provide for present and future community needs and expectations. Its services include:

(i) resource management services;

(ii) public utility service provision;

(iii) community and amenity service provision;

(iv) community advocacy.

In carrying out these services, the Council needs to use and develop resources for collective or community benefit. At the same time, its resource management responsibilities require Council to allocate certain public resources for private or community use, and to manage the environmental effects arising from the use, development or protection of a range of resources under public or private ownership or control. Allocating resources and avoiding, remedying or mitigating environmental effects is most commonly achieved by regulating or controlling activities and their effects. As resource manager and as resource user, the several roles of Council may come into conflict.

The Local Government Act 1974 requires Council to ensure that:

(i) clear objectives are established for each of its activities and policies;

(ii) conflicting objectives and conflicts of interest are resolved in a clear and proper manner;

(iii) so far as is practicable, its regulatory functions are separated from its other functions;

(iv) any committee with responsibilities for regulatory functions does not also have responsibilities for other functions;

(v) so far as is practicable, Council's management structure reflects and reinforces the clear separation of regulatory functions from other functions, and is capable of delivering adequate advice to Council to facilitate the explicit resolution of conflicting objectives.

Examples of situations where conflicting interests may need to be resolved include the development of resource policy concerning the availability of resources where Council must decide who is to gain access to resources for private or collective purposes, and where Council also has an interest in the allocation outcome. More commonly, Council as applicant for a resource consent must also deal with the application as an impartial consent authority, taking into account all interests including those affected by or opposed to Council's proposal.

The Council has a committee structure and management structure that effectively separates its regulatory function from potentially conflicting non-regulatory functions. The four standing committees of Council each perform separate functions and this is reflected in management structure of four departments.

Appropriate procedures are necessary for dealing with situations where:

(i) Council is both applicant for resource consents and consent authority; and

(ii) Council resource policies affect both its service or commercial interests and wider community interests.

In both situations, proposals may be subject to public submissions, hearings, decisions and appeals before the Environment Court. Parties other than the Council may support any of the Council's interests or any other interests.

A key principle underlying an appropriate procedure in both the above situations is to ensure that Council interests are dealt with in the same manner as any other interests, and there is no bias in the procedure. Council considers that while separation of interests is important, it must at some point in any proceedings establish a single position on such conflicts and thereafter provide an independent, open procedure for that position to be advanced, publicly contested and resolved. Appointment of commissioners to act on behalf of Council may be made to provide for this. A single position may be established before proposals are open for public scrutiny, or established through the decision of an appointed commissioner.

Addressed by Objective 13.3 and Policy 13.10.

13.3 Resource Management Process Objectives

Objective 13.1

Full and effective integration of resource management planning processes and of decisions.

REASONS:

The Council as a unitary authority has a significant opportunity to save time and effort in achieving sound resource management through integrating its regional and district resource management planning responsibilities for the District, and pursuing integration through consistency with plans of adjacent local authorities and the management policies of central government agencies.

Addresses Issues 13.1, 13.2; achieved by Policies 13.1, 13.2.

Objective 13.2

Use of effective methods in the development and implementation of resource management plans in fulfilment of duties under the Resource Management Act.

REASONS:

Sound resource management practice demands adoption of good process methods in order to develop and deliver good resource management results. Such methods should be open to the public and Council clients, understandable and fair to all interests, flexible in their response to situations, and efficient in their use of effort. Effective process methods should result in sound decisions on policies, consents and other actions to implement plans. Good process includes adequate environmental investigations, monitoring and enforcement to ensure that good resource management decisions are made and complied with, and to enable progress in achieving resource management results to be established.

Addresses Issues 13.3, 13.4, 13.5, 13.6; achieved by Policies 13.3, 13.4, 13.5, 13.6, 13.7.

Objective 13.3

Effective management of resource management conflicts of interest within the Tasman District Council.

REASONS:

The Council delivers a range of public services. It has comprehensive resource management responsibilities, as well as a wide range of public utility and amenity services to deliver. As resource manager and as resource user, the several roles of Council may come into conflict. The Local Government Act requires the Council to ensure that conflicting objectives and conflicts of interest are resolved in a clear and proper manner. It is important that the Council pursues ways of avoiding, addressing and resolving all such conflicts so as to deliver its services in an impartial, coherent and effective way.

Addresses Issue 13.8; achieved by Policy 13.10.

13.4 Resource Management Process Policies and Methods

Policy 13.1

The Council will develop and implement a single integrated resource management plan for Tasman District.

EXPLANATION AND REASONS:

Council's several regional and district plans can be brought together to form a single set of resource management objectives, policies, rules and other resource management methods to achieve sustainable resource management in the District. This will achieve integration of resource management actions more effectively than continuing with several separate plans, in several ways. For example, it will ensure that all significant aspects of resource management issues are adequately addressed under plans, and it may provide for a reduction in the number of rules or consents dealing with the same resource use activities.

METHODS OF IMPLEMENTATION:

(i) The Council will prepare, approve and implement a combined district and regional plan known as the Tasman Resource Management Plan. The combined plan will incorporate Council's Regional Coastal Plan, District Plan and regional plans including the Motueka/Riwaka Plans Water Management Plan, the Moutere Water Management Plan and the Regional Plan (Land). The Council will retain the Tasman Regional Policy Statement as a separate plan.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) An effective, integrated resource management planning framework that is simpler, less costly and more efficient in pursuing resource management results than under many separate resource management plans.

(ii) Better environmental outcomes from the implementation of rules and decisions on consents.

PERFORMANCE MONITORING INDICATORS:

(i) The degree to which all significant aspects of resource management issues are dealt with by the integrated resource management plan at intervals of assessment of the effectiveness of the Tasman Regional Policy Statement as specified in Section 14 of the Tasman Regional Policy Statement.

(ii) Degree of reduction in application of separate regional and district rules, including consent requirements, to resource use activities.

Implements Objective 13.1, to address Issue 13.1.

Policy 13.2

The Council will continue joint definition and analysis of significant cross-boundary issues with adjacent local authorities and seek to pursue consistent resource management policies for their resolution.

EXPLANATION AND REASONS:

Cross-boundary issues are matters of concern and interest to both the Council and any adjacent local authorities. The Act requires these issues to be dealt with in the same way as resource management issues that are contained within the District. There are potential cost savings and cost-sharing arrangements that can be pursued by working together with adjacent councils, particularly with Nelson City Council, with which the Council has a significant number of common issues.

METHODS OF IMPLEMENTATION:

(i) The Council will consult, and undertake joint investigations and analyses of common issues with adjacent local authorities.

(ii) The Council will pursue consistent resource management policies to address these issues, under agreed priorities and processes under regional and district plans.

(iii) The Council will co-operate in the use of joint committees where appropriate to achieve methods (i) and (ii).

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Resolution of significant cross-boundary issues through appropriate timeframes and efforts.

(ii) Environmental results that are in accordance with sustainable and integrated management aims of all affected Councils.

PERFORMANCE MONITORING INDICATORS:

(i) Completion of joint resolution processes within appropriate timeframes.

(ii) Demonstration of sustainable and integrated management outcomes arising from resolution processes.

Implements Objective 13.1, to address Issue 13.2.

Policy 13.3

The Council will provide full and effective consultation opportunities for the public and interested parties throughout plan development processes, including plan changes and reviews.

EXPLANATION AND REASONS:

Effective consultation is necessary to ensure that the community understands the issues and the need for planning proposals, and that Council produces plans that are consistent with community aspirations and interests as well as with the law. Effective consultation means early, open and adequate opportunities for public and interested parties to contribute their views to Council thinking on matters of concern and options to address them.

METHODS OF IMPLEMENTATION:

(i) The Council will provide for consultation stages and tasks, including provision for adequate timeframes, appropriate documentation, and meeting and submission opportunities, in every programme for resource management plan and annual plan preparation and review.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Resource management plans and annual plans specify intentions that are consistent with community aspirations and interests as well as the law.

(ii) Higher degree of awareness and acceptance by the community of planning intentions and provisions in all plans.

PERFORMANCE MONITORING INDICATORS:

(i) Reported and surveyed degree of awareness by public of Council plans.

(ii) Reported and surveyed degree of satisfaction by public with content of Council plans.

(iii) Reported and surveyed degree of satisfaction of Council with public awareness and acceptance of plans.

Implements Objective 13.2, to address Issue 13.3.

Policy 13.4

The Council will undertake open, responsive assessments of resource management issues, and the options for objectives, policies and methods.

EXPLANATION AND REASONS:

Both the Act and good resource management practice demand adequate examination and justification of planning proposals. This can be achieved by appropriate assessment of relevant planning issues and options throughout the process of plan preparation and approval.

METHODS OF IMPLEMENTATION:

(i) The Council will incorporate into resource management plan preparation and approval steps, the necessary and appropriate investigations, consultations and analyses of relevant resource management issues, aims, options and their implications, in order to meet its obligations to have assessed and justified planning provisions.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Justified resource management policy decisions.

Policy 13.5

The Council will ensure that resource management plans are effectively implemented through successive annual plans.

EXPLANATION AND REASONS:

Annual plans provide the year by year financial resources for Council to implement its various measures, and annual reports indicate performance from each year's expenditure. The process of preparation and approval of resource management plans generates Council and community commitment to carrying out resource management actions, including provision of information, advocacy, incentives, provision of services and regulatory measures. Effective implementation of plans requires close co-ordination between the resource management budgets of successive annual plans and the provisions of resource management plans. Annual reports can provide a record of

achievement towards resource management targets, and can assist in programming subsequent annual plans.

METHODS OF IMPLEMENTATION:

(i) The Council will identify all financial resource requirements arising from resource management plan implementation programmes, at the beginning of each year's annual planning cycle, and with the assistance of information in the annual report.

(ii) Council will ensure that adequate funding provision is made in an integrated manner across all resource management planning programmes, particularly including non-regulatory programmes, such as investigations, monitoring and advocacy programmes.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Progressive, orderly implementation of resource management plans through programmes of action, with corresponding success in environmental results.

PERFORMANCE MONITORING INDICATORS:

(i) Degree of continuity in programmes of resource management actions.

(ii) Incidence of plan changes to rationalise budgetary changes.

Implements Objective 13.2, to address Issue 13.5.

Policy 13.6

The Council will provide efficient, fair, open and customer-friendly resource consent processes.

EXPLANATION AND REASONS:

Managing resource consent applications and decisions provides a key means of providing for the sustainable management of resources. Appropriate procedures and practices can give rapid, sound and acceptable results with minimum necessary expenditure by all affected parties.

METHODS OF IMPLEMENTATION:

(i) The Council will establish, monitor and refine appropriate procedures and practices that build on the opportunities under the Act to secure efficient, fair, understandable and responsive processes for managing resource consents.

(ii) In developing its resource management plans, the Council will seek to move towards a reduced need for resource consent applications and a greater certainty of outcome in consent decisions.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Legally sound and timely decisions on resource consent applications and appropriate exercise of consents, achieved at a reasonable level of effort by Council and the community at large.

(ii) Reduced need for resource consents for minor resource use activities.

PERFORMANCE MONITORING INDICATORS:

(i) Degree of reduction in activities requiring a resource consent.

(ii) Incidence of contested hearings of applications for consents.

(iii) Incidence of appealed consent decisions.

(iv) Extent of monitoring effort for each consent.

(v) Incidence of non-compliance with consent conditions.

(vi) Surveyed degree of public satisfaction with resource consent processes.

Implements Objective 13.2, to address Issue 13.5.

Policy 13.7

The Council will adopt a cautious approach to making decisions on plans and consent applications that:

(a) seeks and utilises all relevant available information; and

(b) acknowledges uncertainty or inadequacy in the information available about any potential adverse effect (or risk) of activities, including information about the type and level of risk; and

(c) establishes whether any risk is able to be remedied or mitigated to an acceptable degree or is of a type that must be avoided; and

(d) ensures that the need for further information about any risk is considered when making judgements under (c) above; and

(e) results in decisions that are responsive to new information about effects and risks.

EXPLANATION AND REASONS:

The Council may have to make decisions on plans or consents where there is inadequate information about the likely effects of proposals or activities, or where the information suggests that there are potential adverse effects (or risks). The Council will acknowledge whenever these uncertainties are present. It will consider whether it can obtain further information, or whether any potential adverse effect can be avoided or reduced to an acceptable degree. The Council recognises the role of further information when making its decisions.

METHODS OF IMPLEMENTATION:

(i) The Council will develop policies and rules in its resource management plans and make decisions on resource consents that follow the precautionary approach where information suggests that the approach specified in this policy should be followed.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Use of resources to an extent and in a manner consistent with the existence and understanding of information about the potential adverse effects of such use.

PERFORMANCE MONITORING INDICATORS:

(i) Assessed degree of consistency between:

(a) the extent of regulation of activities; and

(b) knowledge of the existence of potential adverse effects of such activities; and
(c) the degree of understanding of the potential adverse effects, particularly of their irreversibility.

Implements Objective 13.2, to address Issue 13.6.

Policy 13.8

The Council will develop and carry out an integrated strategy for investigating and monitoring the state of the environment in Tasman District, incorporating compliance monitoring, impact monitoring, baseline monitoring and plan performance monitoring.

EXPLANATION AND REASONS:

Appropriate and adequate investigations and monitoring of resources, environmental processes and systems, and the environmental effects of resource use is an essential part of sustainable resource management. There is a need to coordinate monitoring effort across a range of issues and resources, so that all key aspects of environmental change are able to be tracked and understood in a cost effective manner.

METHODS OF IMPLEMENTATION:

(i) The Council will implement its strategy for monitoring the state of the environment in Tasman District (SEM Strategy) developed in 1995 by progressively defining and carrying out investigations and monitoring programmes proposed in the strategy, where the programmes address the environmental information needs that arise from the provisions of the Tasman Regional Policy Statement and regional and district plans, with particular regard to performance monitoring indicators contained in the Statement and plans.

(ii) The Council will ensure that the monitoring programmes within the SEM Strategy integrate:

(a) Monitoring compliance of resource use activities with consent conditions, plan rules and the Act; and

(b) Monitoring the effects on the environment of resource use activities, including cumulative effects; and

(c) Baseline monitoring of the health and quality of ecosystems, resources and environmental processes; and

(d) Monitoring the performance of resource management plans in promoting sustainable resource management.

(iii) In carrying out Method (ii), Council will develop opportunities for self-monitoring after appropriate consultation, and will incorporate in such self-monitoring an effective system for auditing the performance of resource users and consent holders, who monitor the effects of their own activities.

(iv) In accordance with the SEM Strategy, the Council will report monitoring results at appropriate intervals, including annual reports, and will review the monitoring programme under the Strategy as necessary.

Implements Objective 13.2, to address Issue 13.7.

Policy 13.9

The Council will ensure that necessary action is taken in achieving:

(i) compliance with the Act, resource management plans and resource consents; and

(ii) the avoidance, remedying or mitigation of adverse effects on the environment of activities; and

(iii) a decreasing incidence of complaints and breaches of the Act; and

(iv) enhanced community awareness and support for an ethic of care and responsibility in the use of resources and the environment.

EXPLANATION AND REASONS:

The Council will ensure that all activities that may have an adverse environmental effect are in accordance with the Act, or are authorised by Council, and that people understand the need to take care in the use of resources and the environment. Council will take action to correct harm or damage to the environment, where it is not in accordance with the achievement of sustainable resource management under the Act.

METHODS OF IMPLEMENTATION:

(i) The Council will provide resources to follow up the results of compliance monitoring, respond to public complaints concerning apparent breaches of the Act, plans, or consents, and, if necessary, serve or apply for enforcement measures to secure compliance or correction of breaches.

(ii) The Council will develop a complaints database as an additional means of monitoring compliance of authorised activities, and monitoring environmental impacts of resource use.

(iii) The Council will seek to prosecute offenders in situations where breaches of a serious or deliberate nature have occurred, and where negligent, or repetitive actions or non-co-operation have aggravated the breach, so that exemplary or deterrent convictions may be successfully obtained.

(iv) The Council will undertake a programme of community education regarding compliance with the Act, plans and consents and the ways in which the community can help to minimise environmental harm or damage, and detect or prevent likely breaches.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Reduced incidence of damage or harm to communities, ecosystems or physical elements of the environment.

(ii) Reduced incidence of report breaches of the Act, plans or consents.

(iii) Increased community action in preventing damage or possible breaches.

PERFORMANCE MONITORING INDICATORS:

(i) Trends in incidence of complaints reported regarding breaches or environmental damage.

(ii) Trends in Council enforcement action taken.

(iii) Changes in the condition of surveyed resources or ecosystems that have been subject to environmental damage through non-compliance by resource users.

Implements Objective 13.2, to address Issue 13.7.

Policy 13.10

The Council will ensure that in resolving resource management conflicts of interest in Council proposals:

(i) early identification of potential conflicts, and establishment of Council's position is pursued; and

(ii) independent commissioners are delegated power to hear any contested resource development proposals and decide on the proposal; and

(iii) subject to any appeal, all determinations of commissioners are given effect as Council decisions.

EXPLANATION AND REASONS:

Council must identify and address its own conflicting interests in resource management matters. The procedure must provide for an impartial examination of Council's proposal and its several interests and responsibilities, and allow for open resolution of any conflicts. These accountability obligations are required by local government legislation.

METHODS OF IMPLEMENTATION:

(i) Council will maintain a committee structure and a management structure to separate different interests in resource management matters.

(ii) The Council will develop and maintain a written procedure or protocol to follow in addressing and resolving conflicts of interest concerning resource management proposals, including resource consents and policy development.

ANTICIPATED ENVIRONMENTAL RESULTS:

(i) Open and appropriate processes and sound decisions concerning resource management and resource use by Council.

PERFORMANCE MONITORING INDICATORS:

(i) Incidence of contested decisions of Council-appointed commissioners.

(ii) Satisfaction of Council with process and outcome of situations where there are conflicting interests.

(iii) Satisfaction of affected parties with process and outcome of situations where there are conflicting interests.

Implements Objective 13.3, to address Issue 13.8.