

Chapter 10

THE COASTAL ENVIRONMENT

PREAMBLE

As discussed in Chapter 2 the West Coast Region includes the territorial sea lying between Kahurangi and Awarua Points.

For administrative purposes the Act defines the region's seaward area as the *coastal marine area* (CMA). Section 2 of the Act defines the CMA as:

...the foreshore, seabed, and coastal water and the air space above the water -

(a) Of which the seaward boundary is the outer limits of the territorial sea:

(b) Of which the landward boundary is the line of mean high water springs, except where that line crosses a river, the landward boundary at that point shall be whichever is the lesser of-

(i) One kilometre upstream from the mouth of the river; or

(ii) The point upstream that is calculated by multiplying the width of the river mouth by 5:...

Because the environmental interaction between the sea and the land knows no precise boundaries it is necessary to ensure that objectives and policies on either side of the landward boundary of the CMA, are, in this RPS consistent and compatible. Therefore in the context of this RPS, the coastal environment refers to areas where the coast is a significant part or element. This will vary from place to place depending on the extent to which it affects, or is directly affected by coastal processes and the management issue of concern. The coastal environment includes the CMA, coastal wetlands and estuaries, foredunes, beaches, rocky shores, sandplains and tidal reaches. It can also include coastal terraces and associated hillslopes in close proximity to the coast.

The management function of the CMA is shared between the Regional Council and the Minister of Conservation. The Minister's role is to approve the regional coastal plan (RCP), or its relevant coastal sections. The Minister is also required to make decisions on certain resource consent applications in the CMA. The Council's role is two-fold - allocating the right to occupy space in the CMA, and promoting the sustainable management of natural and physical resources in the CMA. The allocation and sustainable utilisation of fisheries resources (including Maori customary fisheries) are managed by the Ministry of Fisheries.

The area that includes the CMA and the landward portion of the region that interacts with it, is in this RPS, called the *coastal environment*. There is no statutory definition of its boundaries.

Section 62(2) of the Act requires that this RPS shall, among other things, not be inconsistent with the New Zealand Coastal Policy Statement (NZCPS).

The NZCPS was prepared following public submissions and review. It was given effect to by the Minister of Conservation by notice in the *NZ Gazette* on 5 May 1994. The NZCPS identifies its purpose as stating policies in order to achieve the purpose of the Act in relation to the coastal environment of New Zealand.

The policies pertaining to the coastal environment in this RPS are, accordingly, consistent with the NZCPS.

The NZCPS, while being prescriptive in terms of policy, does not define the term 'coastal environment'. However some guidance is offered in a commentary on the statement by Nugent and Solomon (1994).

In that commentary the authors draw on decisions by the Planning Tribunal in 1977 and 1982 under the Town and Country Planning Acts 1953 and 1977 respectively. These were that the coastal environment is:

an environment in which the coast is a significant element or part

and

what constitutes a coastal environment will vary from place to place and according to the position from which a place is viewed. Where there are hills behind the coast it will generally extend to the dominant ridge behind the coast

and

the environment is one's surrounding; what one perceives at a particular time and place. Coastal environment means an environment in which the coast is a significant element or part.

Nugent and Solomon argue that these definitions have stood the test of time and that, because the Act does not define or modify them, they are generally applicable today. Section 6(a) of the Act makes it clear that the coastal environment *includes* the CMA.

Sections 63 and 64 of the Act make it clear that, for the CMA, there shall be a *regional coastal plan* prepared by the regional council in conjunction with the Minister of Conservation. Section 67(2)(c) makes it clear that a regional plan shall not be inconsistent with a regional policy statement.

For the land including the coastal environment on the landward side of the CMA, the relevant territorial authority has the responsibility to prepare and administer the appropriate district plan. Section 75(2)(c) requires that a district plan shall not be inconsistent with a regional policy statement.

Thus, for the coastal environment this RPS should contain objectives and policies that are consistently reflected in the regional coastal plan and the district plans of the region's territorial authorities.

The definitions of the coastal environment established by the Planning Tribunal and Environment Court, are in themselves, open to wide

interpretation and debate - even if the intent is clear. Their practical application in the context of the West Coast necessitates judgements, which may well be open to challenge.

For those parts of the coastal environment outside the CMA the Act contemplates that an activity is permitted - unless it is specifically prohibited by legislation or rules in a regional or district plan. By contrast, within the CMA, an activity is considered to be non-complying unless it is specifically approved in the regional coastal plan. For this reason, the regional coastal plan should be sufficiently embracing to include all existing and potential activities that do, or could, have an effect on the coastal environment.

In the CMA resource consents will be required for activities prohibited by the Act unless expressly permitted by a rule in the Regional Coastal Plan. Where the plan identifies activities as restricted coastal activities, as required under the NZCPS, the Minister of Conservation is the consent authority for resource consent applications. In such instances the Minister has the power to override the recommendations of the Regional Council, or, if there is an appeal from that recommendation, of the Environment Court.

The control which the Regional Council may exercise over discharges in the CMA is limited by legislation enacted to satisfy New Zealand's international obligations under the International Convention for Prevention of Pollution from Ships (MARPOL) and the Convention of Marine Pollution by Dumping of Wastes and Other Matter (The London Dumping Convention).

Accordingly, sections 15A, 15B and 15C of the Act specifically relate to discharges into the CMA (other than Biosecurity Act matters). Section 15A provides for restrictions on dumping and incineration of waste or other matter. Section 15B pertains to discharges of harmful substances or other contaminants. Section 15C prohibits the dumping of radioactive waste or matter.

The Resource Management (Marine Pollution) Regulations 1998 provide further controls for dumping, discharges and incineration in the CMA.

The discharge of ballast water from ships that has the potential to introduce foreign organisms is dealt with under the Biosecurity Act 1993. Because of this overriding national regime governing the introduction of such organisms to New Zealand waters, the RPS does not contain objectives, policies and methods to deal with this issue.

There are a number of other issues which are relevant to the coastal environment which have also been dealt with in other chapters of this RPS because their primary focus is elsewhere. A typical example is the issue of discharges to water.

The coastal environment contains culturally significant resources which are regarded as taonga by Poutini Ngai Tahu, including pingao and flax. These are highly valued as raw materials for weaving. Food resources, such as whitebait and shellfish, are also important.

The objectives, policies and methods in this RPS are intended to be consistent with the NZCPS, as required by section 62(2) of the Act. Should any doubts or inconsistencies arise between the two, the coastal policy will be considered to be authoritative. This also applies to any matters addressed in the NZCPS but not in this RPS.

A number of terms used in this chapter are explained in Figure 2 below. The seaward limit of entities extending to the left side of Figure 2 corresponds to the 12 mile limit.

*FIGURE 2 ARRANGEMENTS FOR COASTAL MANAGEMENT AND
EXPLANATION OF TERMS*

ISSUE 10.1:

- (a) Adverse effects of inappropriate subdivision, use and development on the natural character of the coastal environment and on outstanding natural features and coastal landscapes.**
- (b) Activities that may result in damage or destruction to significant areas of indigenous vegetation and significant habitats of indigenous fauna.**
- (c) Maintenance and development of the coastal environment for the benefit of people and communities.**
- (d) Restriction of public access to the coastal environment through subdivision, use or development.**
- (e) Adverse effects on the relationship between Poutini Ngai Tahu and their customary resources or values in the coastal environment.**

Activities may occur in the coastal environment, which have the potential to impact on the CMA. These include recreational activities, marine farming, reclamation and dredging associated with port maintenance and development, navigation, and subdivision. Land development in dune areas can cause increased coastal erosion or change sand deposition patterns, generating a wide range of consequential adverse effects.

Estuaries are sensitive ecosystems. Reclamations and the erection of structures have the potential to change current flow and patterns of silt deposition and erosion in them. These can bring about profound changes in both their ecology and navigability. For example, training walls at the mouths of the Buller and Grey Rivers have resulted in accretion of the coastline adjacent to them.

Estuaries are wetlands and the preservation of wetlands from inappropriate subdivision, use, and development, is considered a matter of national importance under section 6 of the Act. Whitebait habitats are important estuarine resources on the West Coast. Their vulnerability to damage from reclamation and development is of particular concern.

The NZCPS requires plans and decisions relating to the area above mean high water spring tides to take into account potential adverse effects on the CMA.

Most ports on the West Coast are at the mouths of rivers. The frequently high sediment load in many rivers and longshore drift means that there is a constant battle to keep the harbours and river mouths free of gravel. In some instances this requires maintenance dredging. The subsequent disposal of spoil has the potential to affect the marine environment and its users. Some controls are therefore appropriate. The NZCPS notes that any activity involving the disturbance, removal or deposition of any material on the foreshore and seabed which involves quantities exceeding 50,000 cubic metres in any one site within any 12 month period in the CMA is a *restricted coastal activity*.

Normal harbour operations bring with them the potential for marine pollution, particularly oil spills. The Maritime Transport Act 1994 requires port authorities to prepare contingency plans to deal with these events. These are subject to approval by the Regional Council.

Coastal erosion and accretion are ongoing processes. However, on the West Coast there are areas where coastal erosion is inordinately severe and development is under threat. It is important to control further development in such areas.

Inundation of low lying areas near the coast remains a possibility if predictions of sea level rise prove to be correct.

OBJECTIVE 10.1: Allow appropriate subdivision, use and development in the coastal environment which avoids, remedies or mitigates adverse effects on the natural character of the coastal environment and on any outstanding natural features and landscapes.

COASTAL ENVIRONMENT POLICIES

POLICY 10.1.1

Preserve the natural character of the West Coast's coastal environment and protect it, and outstanding natural features and landscapes, from inappropriate subdivision, use and development.

In deciding whether subdivision, use and development are inappropriate matters to be considered will include those listed under the corresponding part of Habitats and Landscapes Policy 9.1 and the following:

- (a) The extent of noise generated by activities in the CMA;*
- (b) The contribution that open space makes to amenity values in the coastal environment; and*
- (c) The relevance of NZCPS policies 1.1.1-1.1.4.*

In determining whether a natural feature or landscape is outstanding matters to be considered will include those listed under the corresponding part of Habitat and Landscape Policy 9.1.

POLICY 10.1.2 *Recognise and provide for the protection of significant indigenous vegetation and significant habitats of indigenous fauna in the coastal environment.*

In determining whether indigenous vegetation and habitats of indigenous fauna are "significant" the matters to be considered will include those under the corresponding part of Habitat and Landscape Policy 9.2.

POLICY 10.1.3 *Enable the continued development and maintenance of ports, related facilities and infrastructure (including network utilities, and safe and efficient navigation within the coastal environment.*

Policy 10.1.3 correspond with Habitats and Landscapes policy 9.4.

POLICY 10.1.4 *Facilitate the maintenance and enhancement of public access to and along the coastal environment except where restrictions are necessary to:*

- a) Maintain or facilitate port development and operations;*
- b) Protect or maintain areas of significant conservation value;*
- c) Protect the cultural and spiritual values of Poutini Ngai Tahu, including mahinga kai;*
- d) Protect public health and safety;*
- e) Ensure a level of security consistent with the purpose for a resource consent;*
- f) In other exceptional circumstances sufficient to justify the restriction, notwithstanding the national importance of maintaining that access.*

Policy 10.1.4 corresponds with Habitat and Landscape policy 9.7.

Cross reference policy 10.1.1 and policy 10.1.2

Heritage policy 6; Soils and Rivers policy 7, Water policies 8.1.1, 8.2.1-2.3; Natural Hazards policies 11.1-1.3; Solid and Hazardous Waste policies 12.1.2, 12.1.6 and 12.3.1.

Cross reference policy 10.1.3

Network Utilities and Energy policies

Cross reference policy 10.1.4

Poutini Ngai Tahu policies, Heritage policies.

METHODS

10.1.1 Compile or support the compilation of inventories, schedules or maps of significant or outstanding areas within the coastal

environment.

- 10.1.2 Use these inventories, schedules and maps in the evaluation of resource consent applications in the coastal environment.
- 10.1.3 In consultation with Poutini Ngai Tahu, the West Coast Fish and Game Council, the Department of Conservation and other organisations, identify in the regional coastal plan coastal hazard areas that will need to be recognised and taken into account when considering activities in or around those areas.
- 10.1.4 Educate land owners through news media articles.
- 10.1.5 Consider adopting selected codes of practice as a means of ensuring compliance with rules in the regional coastal plan.
- 10.1.6 Consider the use of economic instruments and bonds.
- 10.1.7 Encourage territorial authorities to make provisions in their district plans for appropriate places for papakainga housing and marae development in the coastal environment.
- 10.1.8 In accordance with tikanga Maori, consult with Poutini Ngai Tahu in the preparation of the regional coastal plan and when considering resource consent applications in the coastal environment.
- 10.1.9 Provide coastal hazard information on a user pays basis.
- 10.1.10 Make available information to developers on their statutory responsibilities in the coastal environment.
- 10.1.11 Ensure that the regional coastal plan provides appropriate rules for development in areas prone to coastal hazards and the discharge of contaminants that may have an effect on the CMA.
- 10.1.12 Ensure that the regional coastal plan provides appropriate rules for activities that require a coastal marine area location.
- 10.1.13 Notify the Maritime Safety Authority and the Royal New Zealand Navy Hydrographic Office of new structures and works in the CMA at the time permission is given for their construction.
- 10.1.14 Have regard to any available alternatives (including the use of alternative sites), and the applicant's reasons for making the proposed choice when considering applications for reclamations, the removal of natural material, and rights to occupy the CMA.
- 10.1.15 In conjunction with territorial authorities promote, encourage and where necessary require the inclusion of appropriate mechanisms in regional and district plans and resource consents to take into account the need for maintaining and enhancing public access to and along water bodies.

EXPLANATION

The objective, policies and methods for managing the effects of the use, development and protection of natural and physical resources in the coastal environment apply equally to a wide range of land uses. These include disturbance of the land surface, gravel extraction, construction of structures in water bodies, erosion protection works and reclamations. While recognising that such land uses are important, appropriate checks and balances are required in order to ensure that the coastal environment is sustainably managed.

Because activities in the CMA should be integrated with those that apply on the land the policies correspond to their counterparts in Chapter 9 (Habitats and Landscapes).

Policies 10.1.1 and 10.1.2 include the terms *significant*, *outstanding* and *inappropriate*. To determine whether these terms are applicable, the Regional Council will use the matters to be considered under the complementary policies in Chapter 9 for assessing resource consent applications. This should provide consistency. The only exception to this is noise because the Regional Council is specifically responsible for managing its effects in the CMA under the Act.

Policies 10.1.1 and 10.1.2 also address most of the matters of national importance as required under section 6 of the Act.

The NZCPS states that this RPS should identify (in the coastal environment) “...*those scenic, recreational and historic areas, areas of spiritual significance, and those scientific and landscape features which are important to the region...*”. The location of these areas is described in the Proposed Regional Coastal Plan. They are still subject to submissions and therefore they are not yet finalised. Consequently, it is not possible to insert such a list in the RPS at this time.

Policy 10.1.3 recognises that social and economic goals and activities are necessary to people and communities. The Act enables these to be achieved, provided that natural and physical resources are sustainably managed as required by the Act - within the limits of the other policies in this document.

The maintenance and development of ports, other infrastructure and navigation is covered in recognition of the social and economic importance of fishing and maritime transport to the West Coast’s economy. Section 5(2) of the Act enables these activities to be provided for. The NZCPS requires the Regional Council to notify the Maritime Transport Authority and the Hydrographic Office of the Royal New Zealand Navy when it approves new structures or works in the CMA.

Policy 10.1.4 provides for the maintenance and enhancement of public access to, and along the CMA as a matter of national importance under the Act.

The compilation of inventories, schedules and maps, defining areas of significance in the coastal environment, will be useful. It will enable more efficient processing of resource consent applications. Subject to funding

being available, the Regional Council supports this activity.

Economic instruments are designed to achieve the objective through the application of resource use levies and bonds and the consideration of rates relief. For example, by monitoring of accretion or erosion from beaches used for sand and gravel supply, the Regional Council can set limits on extraction rates. Resource users may be levied to fund this monitoring.

The Regional Council will control the effects of activities in the coastal environment, for the purpose of protecting water quality and water quantity. This includes control of riparian areas, and avoidance and mitigation of natural hazards. Examples are the management of the ecological impacts of works in waterways such as gravel extraction, erosion protection works and port development. The Regional Coastal Plan provides the management framework within which activities may be located in the coastal environment.

In the CMA licences to prospect, explore and mine minerals are issued by the Ministry of Commerce under the Crown Minerals Act 1991. However, control of the environmental effects of these activities is gained through the application of the resource consent process.

Fisheries administration, including the establishment of *taiapure* and *mahinga mataitai reserves*, is the responsibility of the Ministry of Fisheries under the Fisheries Act 1983 and its various amendments.

The NZCPS requires that applications for coastal permits for reclamations, removal of natural materials for commercial purposes and rights to occupy should have regard to available alternatives and the reasoning behind the proposed choice. Resource consents for activities sought in the CMA are, under section 87(c) of the Act termed *coastal permits*.

ANTICIPATED ENVIRONMENTAL RESULTS

10.1.1 Ecological sustainability of areas of the coastal environment assured through the resource consent process.

10.1.2 Maintenance and enhancement of public access to and along the coastline.

10.1.3 The maintenance and improvement in amenity and landscape values, and of the relationship between Poutini Ngai Tahu and their customary resources or values in the coastal environment. .

ISSUE 10.2: The potential for damage to or destruction of whitebait habitats from land use activities.

Whitebait are partially covered in policies under Issue 1 of this chapter and in corresponding policies in Chapter 9 (Habitats and Landscapes). However, they are considered to be significant to the extent that they warrant coverage as a specific issue. As well as being an indigenous species whose habitat deserves protection, they are a part of West Coast lifestyle and folklore and have an important place in Poutini Ngai Tahu custom and

diet. They are also an important recreational and commercial resource. For example the sale of whitebait caught on the West Coast generates substantial local revenue (estimated by the Department of Conservation to be over \$7 million in 1991). The Department of Conservation is responsible for administering the current regulations relating to the whitebait fishery.

Whitebait are the juvenile form of five native fish (*Galaxias spp.*). The bulk of the catch are the offspring of the inanga, *Galaxias maculatus*. Peak spawning of inanga occurs in coastal wetlands at the interface between freshwater and the sea at high water spring tides in February, March and April. These tides are much higher than normal. Eggs are laid among the stream bank vegetation. The young hatch at the next high water spring tide and move out to sea.

Egg survival is dependent upon the availability of substantial mats of vegetation. Without these mats the eggs dry out and die. Recent experiments have shown that fencing off the spawning areas during the spawning season to prevent grazing and trampling, greatly enhances breeding success.

The West Coast has some of the best examples of coastal wetlands in New Zealand and, accordingly, some of the best whitebait habitats. Some of these are on freehold land and their voluntary protection under this tenure needs to be encouraged. The fact that spawning is known to take place in drains, suggests that it may be possible to artificially increase the number and quality of whitebait spawning areas and habitats.

The definition of the CMA in the Act includes whitebait habitats because they occur in areas covered by mean high water spring tides.

OBJECTIVE 10.2. The control of practices which damage whitebait habitats and the promotion of practices that enhance them.

COASTAL ENVIRONMENT POLICIES 10.2

POLICY 10.2.1 To avoid remedy or mitigate the effects of activities which have the potential to reduce whitebait habitats including:

- a) Further inappropriate, subdivision, use or development of relevant rivers, streams and wetlands and their margins (see Habitats and Landscapes Policy 9.1 for matters to be considered when determining what is inappropriate);***
- b) Drainage, impoundment, reclamation or diversion of water; and***
- c) Discharge of contaminants into water.***

POLICY 10.2.2 Ensure that the Department of Conservation and Poutini Ngai Tahu are consulted over all aspects of the protection and enhancement of habitat to support the whitebait fishery.

Cross reference policy 10.2.1
Poutini Ngai Tahu policies; Soil Conservation and Rivers policy 7; Water Policies 8.2.1 and 8.2.2 Habitat and Landscapes policy 9.2; Coastal Environment policy 10.1.2

Cross reference policy 10.2.2
Poutini Ngai Tahu policies

METHODS

10.2.1 Promote the protection of whitebait habitats through discussion with the public, territorial authorities, developers and land

owners/occupiers.

- 10.2.2 Consider the use of economic instruments.
- 10.2.3 Promote the practice of excluding grazing animals from whitebait spawning areas during February, March and April.
- 10.2.4 Liaise with territorial authorities and the Department of Conservation concerning management of the whitebait fishery.
- 10.2.5 Use a register of whitebait spawning areas and habitats for use in the consideration of resource consents.
- 10.2.6 Consult with Poutini Ngai Tahu over all aspects of the protection and enhancement of the whitebait fishery.
- 10.2.7 Consider applying levies on whitebait stand permit holders to fund the protection of whitebait habitats.

EXPLANATION

It is appropriate to control modification and damage of whitebait habitats through the resource consent process. Policy 10.2.1 lists a number of adverse effects that should be considered when assessing resource consent applications. Some land uses can also have indirect effects on water and/or habitat quality (for example higher turbidity and nutrient levels in water and in-stream effects such as siltation).

Policy 10.2.2 recognises the importance of whitebait to Poutini Ngai Tahu custom. Their involvement in the management of whitebait habitats to support the fishery is, therefore, important.

Promotion and education are considered very important. Central to this is the need to inform developers and land owners of problems the fisheries face if unrestricted grazing and other damaging uses continue. This could be done in conjunction with the Department of Conservation, which has statutory responsibility for administering the regulations relating to whitebait fisheries. This would also consist of informing land managers of the extent of whitebait habitats, including spawning areas, which are on their property, of the habitat requirements of inanga and the problems that may occur if unrestricted grazing or other damaging land uses takes place. Inventories and schedules of whitebait habitats, could be used as checklists when processing resource consent applications.

ANTICIPATED ENVIRONMENTAL RESULTS

- 10.2.1 Prevention of damage to whitebait spawning sites during the spawning season.
- 10.2.2 Reduction in adverse effects of activities on whitebait habitats.

ISSUE 10.3: Effects of whitebait stands on river bank stability.

The Regional Council administers over 600 coastal permits authorising construction and maintenance of whitebait stands on the rivers provided for in the Whitebait Fishing (West Coast) Regulations, during the period 15 August to 30 November (ie 15 days before and after the commencement and conclusion of the season respectively). Renewals are processed as resource consent applications under Section 94 of the Act.

As the boundaries are currently defined, the bulk of whitebait stands lie within the CMA and will require coastal permits. Stands which lie upstream of the CMA will require land use consents.

OBJECTIVE 10.3: Prevent riverbank and bed erosion arising from the location of whitebait stands.

COASTAL ENVIRONMENT POLICY 10.3

POLICY 10.3. Avoid, remedy or mitigate river bank damage from whitebait stand construction and operation.

**Cross reference
policy 3.1
Soils and Rivers
policy 7.**

METHODS

- 10.3.1 Informing the public of the requirement for land use consents or coastal permits, to be obtained from the Regional Council for the purpose of erecting whitebait stands.
- 10.3.2 Repair damage to banks and recover costs from permit holders.
- 10.3.3. Conditions applying to the erection, operation and removal of whitebait stands will be attached to land use consents or coastal permits in accordance with rules in the regional coastal plan.
- 10.3.4 Co-ordinate with the Department of Conservation on whitebait fishery management.
- 10.3.5 Consult with Poutini Ngai Tahu over whitebait stand licensing and management policy.
- 10.3.6 Encourage stand and licence holders to operate in a manner consistent with the Whitebait (West Coast Fishing) Regulations 1994 and subsequent amendments.

EXPLANATION

The objective and policy are intended to avoid the occurrence of erosion as a result of erection and operation of whitebait stands.

Stands are temporary, lasting only for the duration of the whitebait season. It is necessary to monitor them to ensure they are located and constructed correctly and removed from the riverbed at the end of each season. These requirements will be part of the conditions placed on land use consents or coastal permits. As stands may also cause bank erosion, Regional Council officers will need to monitor this and if necessary effect repairs to the riverbank at the permit holder's cost.

The imposition of bonds and use of codes of practice to prevent erosion and ensure the timely removal of structures from riverbeds has been considered. However, the incidence of non-compliance is too low to warrant this approach.

The Department of Conservation is responsible for monitoring and policing the fishery itself.

ANTICIPATED ENVIRONMENTAL RESULT

10.3 Reduced erosion of riverbanks and beds and timely removal of structures at the conclusion of each whitebait season.

ISSUE 10.4.1: Environmental and property losses as a result of erosion and inundation.

ISSUE 10.4.2: Adverse effects caused by responses to coastal hazards, including transfer of hazards elsewhere, and inappropriate or unnecessary works.

The West Coast shoreline is a high energy environment in which the processes of accretion and erosion are accentuated. Interference with these processes can cause rapid perturbations in otherwise natural cycles of erosion or accretion. There are many instances in which coastal erosion threatens the integrity of the road system and there is an obvious need for this to be avoided. This aside, buildings, farmland and structures have been damaged or lost in the past. Some areas of the coastal environment currently known to be under threat from natural hazards include areas in or around Little Wanganui, Mokihinui River, Granity, Orowaiti, Westport, Okari, Tiromoana, Punakaiki, Barrytown, Coast Road, Rapahoe, Cobden, Greymouth, Karoro, Hokitika, Okarito, Hunts Beach, Bruce Bay, Okuru and Hannahs Clearing (Benn and Neale 1992). More specific details, including site identification is provided in the Regional Coastal Plan.

Inundation can be caused by blockage of river mouths. Okarito is a well known example.

The effects of any development or protection work will vary from place to place. It is therefore considered appropriate for it to require a coastal permit. An exception is made in the case of maintenance by network utility operators in an emergency, for example in the case of damage to roads. Each site needs to be considered on a case by case basis and in some situations, the Regional Council may not consider such work to be consistent with the purpose of the Act.

Removal of sand and gravel from the CMA of over 50,000 cubic metres per site per 12 month period is defined in the NZCPS to be a *restricted* coastal activity. The mechanism for regulating restricted coastal activities is defined in section 12 of the Act.

This section of the chapter is closely related to Chapter 11 (Natural Hazards).

OBJECTIVE 10.4 The avoidance of environmental and property losses due to erosion and inundation.

COASTAL ENVIRONMENT POLICIES 4

POLICY 10.4.1 To avoid those forms of new development in the coastal environment that are likely to contribute to, or cause coastal erosion, or are likely to be subject to erosion or inundation, recognising that some natural features may migrate inland as the result of dynamic coastal processes (including sea level rise).

POLICY 10.4.2 Ensure that coastal protection works in areas of current development achieve the desired outcome while avoiding adverse environmental effects, including consequential erosion, accretion or inundation elsewhere.

Policies 10.4.1 and 10.4.2 are intended to complement and/or correspond to Natural Hazards policies 11.1 to 11.4.

POLICY 10.4.3: Ensure that the best practicable options for the future are adopted to manage coastal hazards.

POLICY 10.4.4: Avoid uses and developments that increase coastal hazards.

POLICY 10.4.5: Adopt a precautionary approach towards proposed activities where their effects are as yet unknown or little understood, or where the effects of coastal processes on those activities are as yet unknown or little understood.

Cross reference policies 10.4.1-4.2
Habitat and Landscape policies 9.1-9.3; Coastal Environment policies 10.1.1-10.1.4; Natural Hazards policies 11.1-1.8 and Air Quality policies 13.1 and 13.2.

Cross reference policies 10.4.3-4.5
All Natural Hazards policies

METHODS

10.4.1 Advise resource users about the need to control development within the coastal environment and make available known information on the implications of developing within the coastal environment, the need for controls and the protection measures that can be implemented.

10.4.2 Provide coastal hazards information to territorial authorities for use in determining hazards.

10.4.3 Monitor the likelihood of threats to the integrity of the coastal environment if sea level rise occurs.

10.4.4 Promote the inclusion of provisions in district plans that restrict

development along shorelines at risk from coastal erosion, and inundation.

10.4.5 Exchange information on coastal erosion and inundation with territorial authorities and other agencies.

10.4.6 Provide a design and build service for coastal protection works in cases where this is a cost effective option.

10.4.7 Regulate coastal development according to rules in the regional coastal plan.

10.4.8 Consider the use of economic instruments, such as differential rating.

EXPLANATION

Policy 10.4.1 is intended to avoid types of development within the coastal environment that contribute to, or cause, or may be subject to coastal erosion and/or that are subject to inundation, while recognising that some other types do not have such adverse effects. The Regional Council can also provide hazard information to territorial authorities. This should help ensure that inappropriate subdivision, use and development does not take place in the coastal environment. In addition Policy 10.4.1 gives effect to policies 3.4.4 and 3.4.5 of the NZCPS, while allowing non-harmful forms of development to proceed.

The Regional Council's records on areas prone to coastal erosion and inundation are continually being added to. With the exception of hard rock and elevated shorelines it is not possible to categorically predict that certain areas will be unaffected. To avoid subsequent damage and/or the need for expensive protection works, future developments should only be allowed to proceed where the risk is reduced to an acceptable level. Communication between the Regional Council, territorial authorities and relevant agencies is an effective means of aiding this assessment.

Policy 10.4.2 aims to ensure that protection works are effective, appropriate, and necessary and do not simply create another problem elsewhere. They will be funded on a user pays basis. The Regional Council may use differential rating for this purpose.

Promotion and education should be accorded priority as a means of reducing development in areas of coastal hazard and directing it towards less vulnerable areas. Policy 3.4.6 in the NZCPS states that where existing subdivision, use or development is threatened by a coastal hazard, coastal protection works should proceed only where they are the best practicable option for the future. The abandonment or relocation of existing structures should be considered among the options. Where coastal protection works are the best practicable option, they should be located and designed so as to avoid environmental effects to the extent practicable. This RPS supports that approach which is reflected in Policy 10.4.3.

Policy 10.4.4 aims to achieve section 5 of the Act, which requires the sustainable management of the coastal environment. Developments that

would increase coastal hazards are not consistent with the sustainable management of the coastal marine area.

Policy 10.4.5 has been included to give effect to Policy 3.3.1 of the NZCPS.

If the Regional Council did not have policies and methods for the management of coastal hazards and protection works, there would be no consistency in the processing of resource consent applications. This would result in uncertainty, increased costs and *ad hoc* decision making. It would also result in conflict with the concept of sustainable management of the coastal environment.

ANTICIPATED ENVIRONMENTAL RESULT

10.4 Avoiding loss of life, property and other values by inundation or erosion in the coastal environment.

ISSUE 10.5

Deterioration of coastal water quality arising from discharge of contaminants from activities at sea and/or on land.

Coastal water quality may be degraded from a variety of sources. Discharges from ships at sea include sewage, fish offal and rubbish. There is a possibility of oil spills, both from vessels running aground or colliding near the coast, and from port operations. These spills and the discharge of other contaminants from land (sewage etc) have the potential to adversely affect the coast. In addition, the siting of rubbish dumps near the coast and rivers, and the practice of disposal of wastes of various kinds on beaches can have adverse effects on marine ecology.

Biological contamination of coastal water by exotic organisms is a special issue. There are recorded instances of foreign organisms being introduced to New Zealand waters from foreign vessels either from ballast water discharge or anchor chain mud. Contamination of this nature is recognised as being quite different from most other pollution issues with which the Regional Council deals because once the infestation occurs there are generally no practical means of containing or removing the problem. However discharges of ballast water will be enforced under the Biosecurity Act 1993, not via provisions in this RPS.

Water quality issues in the coastal environment have much in common with Issue 8.2 in Chapter 8 (Water).

OBJECTIVE 10.5 To safeguard the life supporting capacity of the region's coastal water resources by:

- a) Avoiding, remedying or mitigating adverse effects of the discharge of contaminants and the deposition of substances in the coastal environment;**
- b) Preventing contamination of the marine environment by discharges from ships as far as is practicable, having regard for the needs of shipping to take, use and discharge coastal water; and**
- c) Recognising and providing for the relationship of Maori and their**

culture and tradition with their ancestral lands, water, sites, waahi tapu and other taonga.

COASTAL ENVIRONMENT POLICIES 10.5

POLICY 10.5.1 To maintain, enhance or restore water quality in the coastal environment, taking into account:

- a) The public use of water resources.***
- b) The sensitivity of the receiving environment to adverse effects.***
- c) The current state of technical knowledge of treatment and disposal options for discharges.***
- d) Existing lawful discharges.***
- e) The relationship of Poutini Ngai Tahu and their culture and traditions with water.***
- f) The setting of progressively higher water quality standards in water bodies that are unacceptably degraded***
- g) The need for ships to discharge water, whilst avoiding risks associated with contamination.***

Policy 10.5.1 corresponds with Water policy 8.2.2

POLICY 10.5.2 Ensure that the sea and the coastline remains as free from rubbish as possible.

POLICY 10.5.3 Protect marine life by prohibiting the dumping of non biodegradable rubbish.

POLICY 10.5.4 Avoid, remedy or mitigate any adverse environmental effects of depositing substances in the CMA.

POLICY 10.5.5 Allow the taking and use of coastal water and discharge of coastal water provided that:

- a) Adverse effects are avoided, remedied or mitigated and***
- b) It is not inconsistent with other policies in this RPS.***

POLICY 10.5.6: Encourage the adoption of land management practices that improve the quality of water in the coastal environment.

POLICY 10.5.7: Prepare and implement a Tier 2 Oil Spill Plan.

Cross reference policy 10.5.1
Water policy 8.2.1 –8.2.3 Habitat and Landscape policies 9.1-9.4, Soils and Rivers policy 7 and 1.2 and Solid and Hazardous Wastes policies 1.1-1.6, 12.2.1, 12. 2.4 and 12.3.1.

Cross reference policies 10.5 2 and 10.5.3
Solid and Hazardous Waste policies 12.1.6, 12.2.1, 12.2.4 and 12.3.1.

Cross reference policy 10.5.4
Soils and Rivers policy 7.

Cross reference policy 10.5.5
All other policies in this RPS.

Cross reference policy 5.6
Soils and Rivers policy 7 and Habitat and Landscape policy 9.5

Cross reference policy 10.5.7
Water policies 9.2.1 and 9.2.2

METHODS

10.5.1 Encourage relevant authorities to inform the public of the dangers of eating polluted food gathered from the coastal environment.

10.5.2 Prepare publications or guidelines, in conjunction with territorial authorities, industry and other interested parties, covering:

- a) Deposition of substances in the coastal marine area;
- b) Oil spill contingency planning and cleanups; and
- c) The importance of environmentally sound waste disposal methods.

10.5.3 Monitor water quality in the CMA.

- 10.5.4 Consult with Poutini Ngai Tahu over water quality priorities in the CMA.
- 10.5.5 Promote the adoption of adequate sewage-treatment by land based or other methods as appropriate, subject to NZCPS Policy 5.1.2.
- 10.5.6 Advocate that the Crown support the negotiation of an international convention to control the discharge of ballast water from all ships.
- 10.5.7 Work with businesses who supply or use hazardous substances and foster the interest of groups in developing means of collection or recycling.
- 10.5.8 Consider the use of selected codes of practice such as those which are currently used by commercial fishermen to restrict dumping at sea, as a means of establishing standards of good practice to protect coastal water quality.
- 10.5.9 Consider classifying waters in the coastal environment as provided by the Third Schedule of the Act.
- 10.5.10 Establish performance standards for the deposition of substances, taking and discharge of water and discharge of contaminants in the CMA in the water management plan and regional coastal plan. When these performance standards have been established, the Regional Council will, subject to sections 128, 129, 130, and 131 of the Act, review all permits to discharge a contaminant into water in the coastal environment and, where appropriate, attach new conditions to them.
- 10.5.11 Prohibit the disposal of non-biologically degradable wastes and slowly degrading wastes (such as fuel oil) through rules in the Regional Coastal Plan. Vessel and port operators will be advised of this prohibition.
- 10.5.12 Consider the use of economic instruments.
- 10.5.13 Use regional plans and the resource consent process to regulate discharges

EXPLANATION

Policy 10.5.1 recognises that it is important to manage water quality in the coastal environment. It recognises that some waters are already degraded and that their quality needs to be improved. The discharge of raw sewage into some of the region's rivers is an example of this. Section 386(3) of the Act provides for upgrading of those discharges. However, because of excessive cost or practical difficulty, it is recognised that it may not be realistic to eliminate all unsatisfactory discharges in the short term. The discharge of human sewage direct into coastal water (see Method 10.5.6) without passing through land is subject to the requirements of NZCPS Policy 5.1.2.

Because coastal water quality issues have much in common with water

quality issues elsewhere, policy 10.5.1 (a) to (e) corresponds with Water Quality policy 8.2.2 in Chapter 8 (Water). The Explanation in Chapter 9 (Habitats and Landscapes) under Issue 9.2, provides further elaboration.

One option for the Regional Council in the management of coastal waters is to classify them according to the Third Schedule of the Act. While the Regional Council has no plans at present to classify specific areas, consideration of this option is intended to signal resource users that they may well have to comply with water quality standards in the future.

Policies 10.5.1 and 10.5.5 allow for discharge of water from vessels. The Regional Council does not have authority to prevent discharges of ballast water. This is at present covered by Ministry of Agriculture (MAF) Regulatory Guidelines. The Regional Council would like to see those guidelines become mandatory and it believes that foreign vessels should be required to exchange ballast water outside New Zealand's Exclusive Economic Zone.

Policies 10.5.2 and 10.5.3 address the siting of landfills near the coast and rivers and the practice of dumping wastes of various kinds on beaches and at sea.

Although the easiest control option for the Council would be to require avoidance of all waste disposal at sea, it is accepted that some wastes, notably fish wastes, are biologically degradable and, in low concentrations, not particularly harmful. For this reason it is considered that the disposal of some biodegradable waste by-products from maritime activities be allowed, subject to rules in the Regional Coastal Plan. On the other hand, the disposal at sea of non-biodegradable or hazardous wastes, should not be permitted. It is noted that commercial fishermen have developed their own code of practice to restrict dumping at sea. It seems reasonable to incorporate some of it into the regional coastal plan.

While the disposal of untreated sewage continues from communities adjacent to the Buller and Grey rivers it is unreasonable to place a restriction on vessels in the CMA from doing likewise. For this reason it is proposed that the disposal of sewage from boating operations be allowed subject to rules in the regional coastal plan.

Carcasses of drowned livestock are periodically washed up on beaches. In situations where these are considered to be a nuisance or pose health risks, for example if washed up adjacent to a town, arrangements have been made for territorial authorities to dispose of them on a shared cost basis with the Regional Council. Carcasses of marine mammals will be disposed of by the Department of Conservation. Rules for these activities will be contained in the regional coastal plan.

Disposal of livestock carcasses in riverbeds upstream of the CMA is addressed in the *Discharge of Contaminants to Land Plan*.

Normal harbour operations have the potential for marine pollution, particularly from oil spills. The Maritime Safety Authority has jurisdiction over the use of the type of dispersants used to clean up oil spills. The Regional Council will keep a list of acceptable dispersants for use by an *on*

scene commander for clean up operations. The Maritime Transport Act 1994 requires the preparation of oil spill contingency plans. Tier 1 plans are required to be prepared by harbour and vessel operators and apply to harbours, oil rigs and spills that occur in the immediate vicinity of vessels. Tier 2 contingency plans prepared by the Regional Council apply to internal waters and territorial sea. Tier 3 plans apply to the sea beyond the twelve mile limit. It is proposed to house equipment for dealing with oil spills at all West Coast ports. If an oil spill cannot be dealt with at the local or regional level it becomes a national issue administered by the Maritime Safety Authority.

Policy 10.5.4 covers activities such as dumping of dredge waste which has the potential to affect the marine environment and its users. The NZCPS specifies that the deposition of substances in the CMA of more than 50,000 m³ at any one site in any twelve month period is a *restricted coastal activity*.

Policy 10.5.5 recognises that coastal vessels take and discharge water for a variety of purposes. These include water for cooling of propulsion and auxiliary equipment, in heat exchange equipment such as air conditioning, refrigeration and condensers, for cleaning, for production of freshwater by distillation, desalination or other processes, for ballast and for emergency needs such as fire fighting or chemical clean-up. The transitional provisions of the Act allow these uses to continue until such time as the regional coastal plan provides otherwise.

Policy 10.5.6 is included to give effect to Policy 3.2.7 of the NZCPS. The Regional Council has control over land use practices such as the discharge of contaminants and the disturbance of land, and this provides an opportunity to improve the quality of coastal water as well.

Under the Maritime Transport Act the Regional Council is required to prepare a Tier 2 Oil Spill Plan for the region, and Policy 10.5.7 reiterates this requirement.

The Regional Council considers education, liaison, and consultation with territorial authorities, port operators, the Maritime Safety Authority, Ministry of Fisheries, the Department of Conservation and resource users as important ways to achieve coastal water quality objectives.

The Regional Council in conjunction with the Minister of Conservation has control of the discharge of water into water and contaminants into or onto water in the CMA under section 30(1)(d)(iv) of the Act.

ANTICIPATED ENVIRONMENTAL RESULTS

10.5.1 Maintenance and enhancement of water quality in the coastal environment.

10.5.2 Reduced contamination of West Coast coastal waters caused by water discharge from vessels in the CMA.