

Bay of Plenty Regional Coastal Environment Plan

Update Record

Date	Change/Update	Provisions affected
22 March 2011	Removal of Restricted Coastal Activities references – giving effect to Policy 29 of the New Zealand Coastal Policy Statement 2010	<ul style="list-style-type: none"> • Chapter 2: 2.3.5 last paragraph; 2.4 fifth bullet point amended • Chapter 3: 3.2.6 • Chapter 9: 9.2.4, 9.2.4(i) • Chapter 12: 12.2.4, 12.2.4(d) • Chapter 13: 13.2.4, 13.2.4(r), 13.2.4(s) • Chapter 14: 14.2.4, 14.2.4, 14.2.4(t), 14.2.4(w), 14.2.4(y), 14.2.4(z), 14.2.4(za) • Chapter 15: 15.2.4, 15.2.4(f), 15.2.4(g) • Chapter 16: 16.2.4, 16.2.4(e) • Summary of Rules: Rules 9, 21, 42, 43, 67, 72, 73, 74, 80, 81; 86 Summary of rules affecting Port of Tauranga works specified in the 8th Schedule (Port Outline Development Plan) • First Schedule • Eight Schedule S8.1.1.3, S81.1.4 • Glossary of Terms: RCA, Restricted Coastal Activity
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BAY OF PLENTY REGIONAL COASTAL ENVIRONMENT PLAN

Volume 1

1 July 2003

Updated with amendments on 22 February 2011
giving effect to Policy 29 of the New Zealand Coastal Policy Statement 2010,
in accordance with Sections 55 and 57 of the Resource Management Act 1991

Bay of Plenty of Regional Council

RESOURCE MANAGEMENT ACT 1991

ENVIRONMENT BAY OF PLENTY BAY OF PLENTY REGIONAL COUNCIL

BAY OF PLENTY REGIONAL COASTAL ENVIRONMENT PLAN

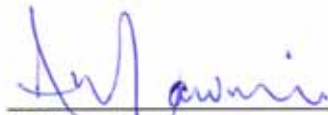
The Bay of Plenty Regional Coastal Environment Plan was prepared by the Bay of Plenty Regional Council under section 64 and the First Schedule to the Resource Management Act 1991

The Bay of Plenty Regional Council approved that part of the plan that is not part of the coastal marine area and adopted that part of the plan in the coastal marine area by resolution of the Council on the 12th day of December 2002 in accordance with Clauses 17 and 18 of the First Schedule of the Resource Management Act 1991.

The Common Seal of the **BAY OF PLENTY REGIONAL COUNCIL** was affixed hereto this 12th day of December 2002 in the presence of:




John Cronin
Chairman



A W Lawrie
Acting Chief Executive



The Minister of Conservation approved that part of the Bay of Plenty Regional Coastal Environment Plan relating to the coastal marine area by signing it in accordance with clause 19 of the First Schedule to the Resource Management Act 1991 on



Chris Carter
Minister of Conservation

RESOURCE MANAGEMENT ACT 1991

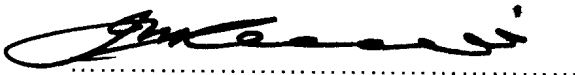
**ENVIRONMENT BAY OF PLENTY
BAY OF PLENTY REGIONAL COUNCIL**

BAY OF PLENTY REGIONAL COASTAL ENVIRONMENT PLAN – Chapter 11

Chapter 11 of the Bay of Plenty Regional Coastal Environment Plan was prepared by the Bay of Plenty Regional Council under section 64 and the First Schedule to the Resource Management Act 1991

The Bay of Plenty Regional Council approved that part of chapter 11 that is not part of the coastal marine area and adopted that part of chapter 11 in the coastal marine area by resolution of the Council on the 14th day of August 2003 in accordance with Clauses 17 and 18 of the First Schedule of the Resource Management Act 1991.

The Common Seal of the **BAY OF PLENTY REGIONAL COUNCIL** was affixed hereto this 14th day of August 2003 in the presence of:

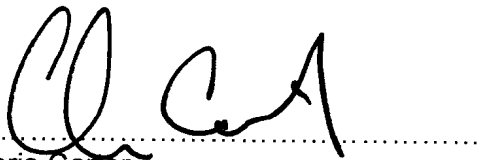


John Cronin
Chairman



Jeff Jones
Chief Executive

The Minister of Conservation approved that part of Chapter 11 relating to the coastal marine area by signing it in accordance with clause 19 of the First Schedule to the Resource Management Act 1991 on 6 November, 2003.



Chris Carter
Minister of Conservation

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PART I

PLAN

FRAMEWORK

On 1 October 1991 the Resource Management Act (the Act) came into being. Under this Act Environment Bay of Plenty (the Bay of Plenty Regional Council) is required to produce a Regional Coastal Plan. This document includes that plan.

The purpose of Part I of this plan is to provide a background by:

- (a) Outlining the purpose of the plan;
- (b) Defining the geographic coverage of the plan;
- (c) Defining the topic coverage of the plan;
- (d) Describing the structure of the plan.

1 Preamble

1.1 Citation

This regional plan may be cited as the Bay of Plenty Regional Coastal Environment Plan. It has been prepared by Environment Bay of Plenty (the Bay of Plenty Regional Council). Any reference in this regional plan to Environment Bay of Plenty is to be read as a reference to the Bay of Plenty Regional Council.

This plan incorporates the Regional Coastal Plan (as required to be prepared by regional councils) as well as issues pertaining to the landward part of the coastal environment. Section 2.1 defines the geographic coverage of this plan.

1.2 Purpose

The purpose of this plan is to enable Environment Bay of Plenty to promote the sustainable management of the natural and physical resources of the Bay of Plenty coastal environment. Sustainable management is defined in section 5 of the Act as:

Managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety while –

- (a) *Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) *Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and*
- (c) *Avoiding, remedying or mitigating any adverse effects of activities on the environment.*

1.3 Relationship to Other Documents

Nothing in this plan removes the need for all people to fully comply with the provisions of all other statutes, regulations, plans, bylaws and any other such articles which are relevant to any activities which are being undertaken or which are proposed to be undertaken within the coastal marine area.

2 Plan Coverage

2.1 Geographic Coverage

2.1.1 Introduction

The plan extends to include all of the coastal environment. The coastal environment includes the coastal marine area (defined in section 2.1.2 below) and the landward edge to this (i.e. it covers wet and dry areas).

The term “coastal environment” is defined in case law. That law requires the extent of the coastal environment to be defined on the ground, on a case by case basis.

2.1.2 The Coastal Marine Area

The coastal marine area is defined in the Act 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 that 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.*

The first map in Volume 2 shows the coastal marine area for the Bay of Plenty region. Refer to the Second Schedule – River Mouths, and the maps for details of the landward extent of the coastal marine area within the rivers of the Bay of Plenty.

2.1.3 The Coastal Environment

Regional councils are required by the Act to prepare a regional plan only for the coastal marine area. However, restricting attention to issues confined to this area fails to recognise the integrated nature of the coastal environment. The elements which comprise the coastal environment are inextricably linked, regardless of where they lie in relation to mean high water springs (MHWS), and should be treated as an entity.

Important values and issues include natural character, significant areas of flora and fauna, natural features and landscapes, cultural values, public access and natural coastal hazards. It would be difficult to effectively manage those qualities which exist within the coastal marine area, in isolation from those existing on the land. Coastal hazards are mostly caused by processes such as erosion, which are generated by the sea, but the effect is nearly always felt on the land.

For this reason, the natural values and natural hazards of both sea and land areas of the coast need to be managed in an integrated way. The Act allows for such an approach by empowering regional councils to develop objectives, policies and methods in order to achieve the integrated management of natural or physical resources.

With specific regard to the coastal environment section 64(2) of the Act states:

A regional coastal plan may form part of a regional plan where it is considered appropriate in order to promote the integrated management of a coastal marine area and any related part of the coastal environment.

Environment Bay of Plenty has taken this approach. Accordingly this plan deals with resource management issues within the coastal environment. In this way it is possible to ensure that the objectives, policies and methods that have been developed within this plan are consistent in regard to both the sea and land areas of the coast.

2.2 Topic Coverage

The topics covered in this plan include all resource management issues relating to the coastal marine area and issues pertaining to the coastal environment (see section 2.1 above for details).

The following subjects are dealt with:

- (a) the use of zoning in this plan
- (b) natural character
- (c) outstanding natural features
- (d) significant areas of flora and fauna
- (e) public access
- (f) tangata whenua interests
- (g) coastal discharges
- (h) taking, using, damming or diversion of coastal water
- (i) coastal hazards
- (j) occupation of space
- (k) structures
- (l) disturbance, deposition and extraction
- (m) reclamations
- (n) exotic plants and animals
- (o) hazardous substances
- (p) historic and cultural heritage
- (q) recreation, and
- (r) noise

The plan further deals with two advocacy matters, these being:

- (a) fishing, and
- (b) marine protected areas (including marine reserves).

The plan then lists the environmental results that are anticipated as a result of the successful implementation of the policies and methods.

In addition the plan deals with matters of process including:

- (a) information requirements for coastal permit applicants
- (b) financial contributions
- (c) cross-boundary issues, and
- (d) plan monitoring and review.

The final part of this plan contains all the schedules and maps.

Discharges of contaminants to air in the coastal marine area are addressed in the Bay of Plenty Regional Air Plan.

2.3 Responsibilities of Local Authorities and Crown Regulatory Agencies

Historically the management of the coastal marine area has been fragmented between a number of organisations, each acting under different statutes. The Act has largely replaced this situation by setting out a new structure which integrates the management of resources within the coastal marine area. However, it is important to note that there are still certain functions and duties within the coastal marine area and the coastal environment that are the responsibility of other agencies. These are outside the scope of this plan to deal with, and for the purposes of clarity are outlined below.

2.3.1 District Councils

District councils are responsible for preparing district plans and the consideration of resource consents for most land uses and subdivision. Exceptions are large scale earthworks, structures in rivers, taking of water and discharges of contaminants, which are the responsibility of Environment Bay of Plenty.

District councils are also responsible for the implementation of bylaws for intertidal areas and land within their territories. These bylaws deal with short-term environmental management issues such as litter, dog control, public health and safety. In some areas, the bylaws regulate activities in harbours and estuaries, and out to mean low water springs on the open coast.

Under the Reserves Act, district councils are responsible for the management of certain coastal reserves. This includes the preparation of reserve management plans.

District councils provide services such as stormwater outfalls and pipelines, public wharfs, jetties, reclamations, protection works and recreational facilities. All these have an effect on the management of the coastal environment.

2.3.2 Maritime Safety Authority

The Maritime Safety Authority is an agency which replaces the former Ministry of Transport Maritime Division. The Maritime Safety Authority is responsible for navigation and safety outside harbour limits and also for coordinating oil spill response planning. This includes preparation and review of a national marine oil spill contingency plan under the Maritime Transport Act 1994.

2.3.3 Ministry of Fisheries

Management of coastal fisheries is the responsibility of the Ministry of Fisheries. This is principally achieved through the Quota Management System, which is aimed at ensuring that fisheries are managed on a sustainable basis.

In addition, the Ministry of Fisheries may place restrictions on the fishing of certain species, or on using certain fishing techniques, or on fishing in certain areas, or on a combination of these. It may also place controls on recreational catch numbers, and may also specify equipment regulations (such as net mesh size or net soakage time).

The Ministry of Fisheries is also responsible for the establishment of taiapure and mataitai. These are areas of the coast of special significance to iwi which are managed for cultural purposes by locals for the general enjoyment and use by all.

2.3.4 Department of Conservation

A number of statutes give the Department of Conservation responsibilities within the coastal marine area. The main such statutes are the Conservation Act, the Marine Reserves Act, the Wildlife Act, the Foreshore and Seabed Endowment Revesting Act and the Marine Mammals Protection Act.

The primary responsibilities of the department include the protection of marine mammals, supervising whale and dolphin rescues (including the care or disposal of sick or injured marine mammals), general wildlife protection, establishing and administering marine reserves, and statutory advocacy (i.e. providing a conservation perspective on the development of regional and district plans and on the consideration by councils of consent applications).

The department also has a responsibility to service the Minister of Conservation in his or her functions and duties under the Resource Management Act.

2.3.5 The Minister of Conservation

The Minister of Conservation represents the Crown's interest in the management of these lands within the coastal marine area for which the Crown has vested ownership to itself through legislation such as the Foreshore and Seabed Endowment Revesting Amendment Act.

The Minister, as representative of the Crown, also has specific functions under the Resource Management Act.

The Minister is required to prepare and implement the New Zealand Coastal Policy Statement (refer to section 2.4).

The Minister is the final approving authority for all plans that have a coastal marine area component, specifically the regional coastal plan. This includes those parts of this plan concerning the coastal marine area and those parts of the Bay of Plenty Regional Air Plan covering the coastal marine area.

2.3.6 Ministry for the Environment

The Ministry for the Environment has the responsibility for promulgating regulations under the Resource Management Act. This includes the making of regulations controlling marine dumping and discharges from vessels.

2.4 New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement (NZCPS) was gazetted in May 1994. The NZCPS is a national policy statement that the Minister of Conservation is required to prepare and monitor under the Resource Management Act. The purpose of the NZCPS is to provide a policy framework that will promote the sustainable management of the natural and physical resources of the coastal environment. Individual policies within the NZCPS address:

- *National priorities for the preservation of the natural character of the coastal environment including protection from inappropriate subdivision, use and development.*
- *The protection of the characteristics of the coastal environment of special value to tangata whenua including waahi tapu, tauranga waka, mahinga maataitai and taonga raranga.*
- *Activities involving the subdivision, use or development of areas of the coastal environment.*

- *The Crown's interests in land of the Crown in the coastal marine area.*
- *The matters to be included in any or all regional coastal plans in regard to the preservation of the natural character of the coastal environment.*
- *The implementation of New Zealand's international obligations affecting the coastal environment.*
- *The procedures and methods to be used to review the policies and monitor their effectiveness.*

All regional policy statements, regional plans, and district plans cannot be inconsistent with the New Zealand Coastal Policy Statement; this includes the Bay of Plenty Regional Coastal Environment Plan.

2.5 Bay of Plenty Regional Policy Statement

The Bay of Plenty Regional Policy Statement contains policies on the region's environment. Chapter 9 – The Coastal Environment, and chapter 11 – Natural Hazards, are of particular relevance, as is section 5.3 on resource management practice. The Bay of Plenty Regional Policy Statement is consistent with the New Zealand Coastal Policy Statement. This plan is consistent with both the New Zealand Coastal Policy Statement and the Bay of Plenty Regional Policy Statement.

3 Plan Structure

3.1 Overview

The Regional Coastal Environment Plan consists of two volumes. Volume 1 (this volume) contains a number of chapters divided into seven parts. Part I provides a background to the plan and sets out its framework. It specifies the purpose of the plan and outlines the spatial and topic coverage.

Parts II and III deal with the key resource management issues which need to be addressed in this plan, grouping them under two broad headings:

- Matters of National Importance; and
- Activities and Effects.

Part II – Matters of National Importance expressly deals with the matters listed in section 6 of the Act, which all councils must recognise and provide for. In addition to these matters of national importance there are other matters (listed in section 7 of the Act) which all councils must have particular regard to. These other matters are not dealt with explicitly in this plan – rather they are dealt with implicitly, in that implementation of the policies and methods contained within Parts II and III of this plan will inherently provide for them.

Part III – Activities and Effects encompasses all of the restrictions on the use of the coastal marine area as specified in sections 12, 14 and 15 of the Act, as well as the coastal marine area functions of regional councils. It places these in a user-friendly format, listing them under activities which applicants should find easy to recognise.

Part IV relates to issues in which Environment Bay of Plenty has no statutory functions nor obligations but in which it intends to play an advocacy role in line with the sustainable management of coastal resources.

Part V lists the environmental outcomes that are expected as a result of the successful implementation of the provisions contained within this plan.

Part VI sets out the rules applying to the coastal marine area of the Bay of Plenty.

Part VII contains the schedules to Volume 1.

Volume 2 contains the planning maps for the Bay of Plenty Regional Coastal Environment Plan.

3.2 Plan Format

3.2.1 Introduction

In Parts II-IV of this plan the format of each chapter is in accordance with the requirements of the Act, stating the following:

- an explanation of the policies and the principal reasons for adopting them and their associated methods (this also serves as a useful summary to the various aspects of the topics being addressed in each particular chapter);
- the issues to be addressed;
- the objectives sought to be achieved;

- the policies in regard to these objectives;
- the methods (including rules) to be used to implement the policies.

Each of these aspects is described in more detail below.

3.2.2 **Explanation/Principal Reasons**

In order to facilitate a clear understanding of the objectives, policies and methods of implementation contained within the plan, each chapter begins with an introductory section. These sections provide a background to the subject matter or topics being discussed, an explanation of the policies that apply to them, and the principal reasons for the adoption of those policies and methods.

These sections make clear many of the issues associated with the topic in question. They may include comment on the statutory obligations of Environment Bay of Plenty with regard to the management of the natural and physical resources of the coastal environment and a description of the manner in which these duties have been (or will be) met. They all include comment on the adverse environmental effects associated with each topic which need to be avoided, remedied or mitigated.

The principal reasons for the inclusion of the objectives, policies and methods all contribute to fulfilling the statutory obligations of Environment Bay of Plenty. They are all linked in some way to the avoidance, remedy or mitigation of the actual or potential adverse effects associated with each of the topics in question while at the same time fulfilling all requirements of Part II of the Act (in particular that of section 5(2)).

3.2.3 **Issues**

The issues that are listed within the plan are in the main derived directly from the regional community. They were identified during extensive public consultation in early 1992, a process which culminated in the production of a 65-page document entitled "*Regional Coastal Plan: Coastal Issues Identification*". This report is available for viewing at Environment Bay of Plenty upon request. Rather than being repeated verbatim within this plan, the issues have been summarised and grouped into over-riding issues. These over-riding issues are to a large degree elaborated on in the Explanation/Principal Reasons section of each chapter of this plan.

3.2.4 **Objectives, Policies and Methods**

The provisions of each chapter of this plan are to be read in conjunction with all other relevant provisions of this plan. This plan contains the means by which Environment Bay of Plenty will be undertaking the requirements of Part II of the Act, managing the restrictions of sections 12, 14 and 15 of the Act, and performing its functions under section 30 of the Act. These means are in the form of objectives, policies and methods of implementation.

This accords with section 67 of the Act, which stipulates that all regional plans must state:

- (b) *The objectives sought to be achieved by the plan; and*
- (c) *The policies in regard to the ... objectives ...; and*
- (d) *The methods being or to be used to implement the policies, including any rules.*

For the purposes of this plan each of these is defined as follows:

- An objective is a desirable and achievable condition or position toward which effort is to be directed. Progress towards an objective needs to be regularly evaluated.
- Policies define the boundaries within which decisions can be made, and they guide the development of courses of action directed towards the accomplishment of objectives. They are guides to action.
- Methods (of implementation) describe the procedure or course of action to be followed, in accordance with the policies, in order to achieve the objective. They detail what is to be done and by whom.

Methods may include the making of rules. However, it is important to note the restrictions of section 68 of the Act (Regional Rules), as follows:

(1) *A regional council may, for the purpose of –*

(a) *Carrying out its functions under this Act (other than those described in paragraphs (a) and (b) of section 30(1)); and*

(b) *Achieving the objectives and policies of the plan –*

include in a regional plan rules which prohibit, regulate or allow activities.

The key terminology here is “*other than those described in paragraphs (a) and (b) of section 30(1)*”. This translates into empowering Environment Bay of Plenty to make rules (as a method of implementation) for all issues within the coastal marine area, since the functions of a regional council are described in section 30(1)(d).

However, it is not so empowering with regard to issues within the landward part of the coastal environment. The plan addresses a number of issues on land in the coastal environment. Environment Bay of Plenty cannot make regulations that apply on land to provide for public access and natural character. These matters can only be regulated by district plans. For this reason, in dealing with the natural values of the coastal environment this plan uses rules only within the coastal marine area, being restricted to other methods (such as advocacy) with regard to the landward part.

Environment Bay of Plenty can make rules on land controlling discharges of contaminants and soil conservation. Accordingly, discharges of contaminants and soil conservation will be regulated by other regional plans when necessary.

Refer to chapter 11 – Coastal Hazards for an explanation of the relative roles of Environment Bay of Plenty and the district councils in management of coastal hazards.

3.2.5

Effects

It is important to recognise that the Act deals with the effects of activities rather than the activities themselves.

This is not to say that the Act does not empower regional and district councils to control activities. However, the controls that are placed on activities need to be focused on the avoidance, remedy or mitigation of the adverse environmental effects associated with them.

The term “effect” is defined in section 3 of the Act, as follows:

- (3) *In this Act, unless the context otherwise requires, the term “effect” includes –*
- (a) *Any positive or adverse effect; and*
 - (b) *Any temporary or permanent effect; and*
 - (c) *Any past, present or future effect; and*
 - (d) *Any cumulative effect which arises over time or in combination with other effects –*
regardless of the scale, intensity, duration, or frequency of the effect, and also includes –
 - (e) *Any potential effect of high probability; and*
 - (f) *Any potential effect of low probability which has a high potential impact.*

This means that Environment Bay of Plenty is not only concerned with the immediate effects of activities but also with those which may occur in the future and which may be cumulative.

3.2.6

Activity Classes

The Act recognises that adverse effects may be far greater for some activities than they would be for others and may also differ from place to place in terms of the values existing at a specific place at a particular time. Accordingly, in managing applications for the use of natural and physical resources the Act has set a number of use categories. Each of these categories relates to the anticipated magnitude of effects which will result from the proposed activity. These categories are termed activity classes. All activities which are regulated within this plan have been grouped into one or other of these classes. These activity classes (as set by the Act) are as follows:

“Permitted Activity” means an activity that is allowed by a plan without a resource consent if it complies in all respects with any conditions (including any conditions in relation to any matter described in section 108 or section 220) specified in the plan.

“Controlled Activity” means an activity which –

- (a) *Is provided for, as a controlled activity, by a rule in a plan or proposed plan; and*
- (b) *Complies with standards and terms specified in a plan or proposed plan for such activities; and*
- (c) *Is assessed according to matters the consent authority has reserved control over in the plan or proposed plan; and*
- (d) *Is allowed only if a resource consent is obtained in respect of that activity.*

“Discretionary Activity” means an activity –

- (a) *Which is provided for, as a discretionary activity, by a rule in a plan or proposed plan; and*
- (b) *Which is allowed only if a resource consent is obtained in respect of that activity; and*

- (c) Which may have standards and terms specified in a plan or proposed plan; and
- (d) In respect of which the consent authority may restrict the exercise of its discretion to those matters specified in a plan or proposed plan for that activity. (In the case where the Council has restricted its discretion, the activity is termed a limited discretionary activity in this plan).

“Non-complying activity” means an activity which –

- (a) Is provided for, as a non-complying activity, by a rule in a plan or proposed plan; or
- (b) Contravenes a rule in a plan or proposed plan –

and is allowed only if a resource consent is obtained in respect of the activity.

“Prohibited Activity” means an activity which a plan expressly prohibits and describes as an activity for which no resource consent shall be granted; and includes any activity prohibited by section 105(2)(b) of the Historic Places Act 1993 and any prospecting, exploring, or mining for Crown owned minerals in the internal waters (as defined in section 4 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977) of the Coromandel Peninsula, other than those prospecting, exploration, or mining activities set out in section 61(1A) of the Crown Minerals Act 1991.

The order in which these activities have been placed above signifies their corresponding level of expected adverse environmental effects, from low for permitted activities up to unacceptable for prohibited activities.

For the purposes of clarity wherever an activity is described in this plan as being a prohibited activity then no resource consent shall be granted for that activity.

3.3 Plan Mechanisms

3.3.1 Introduction

To implement the provisions of the Act and the New Zealand Coastal Policy Statement this plan utilises a number of different planning mechanisms. Some of these are specifically provided for by the Act (such as the use of standards and terms) while others are traditional planning methods (such as the use of zoning and port outline development plans). The mechanisms utilised within this plan are described below.

3.3.2 Zoning

This plan utilises the planning tool of zoning, in recognition of the different values and specific needs of various parts of the Bay of Plenty coastal marine area. Zones are the equivalent of management areas, having specific provisions which apply only within their boundaries. These provisions in turn are based upon the significance of the values within the zone boundaries, and upon the degree of existing modification within those boundaries.

In areas where there is a high level of existing modification, then new uses and development may have a relatively low impact. Conversely however, the siting of new development in unmodified areas of the coast will be likely to result in greater impacts on the values within those areas. In this way zoning is used to provide greater certainty, by identifying “generally not appropriate” as well as “possible”, and “generally appropriate” areas within which new development or activities may proceed.

Within the Bay of Plenty coastal marine area four zones have been delineated, these being the Coastal Habitat Preservation Zone, the Coastal Management Zone, the Port Zone and the Harbour Development Zone. These are marked on the maps of this plan.

3.3.2(a) **Coastal Habitat Preservation Zone**

The purpose of the Coastal Habitat Preservation Zone is the preservation in perpetuity of its constituent habitats. These are recognised as being essential to the natural character of the coastal environment and contributing significantly to the unique identity of the regional coastline. The emphasis is on excluding all activities which may have any actual or potential adverse effects on the habitats in this zone.

Environment Bay of Plenty has undertaken detailed research into the botanical conservation values of the inter-tidal habitats of the coastal marine area. In so doing it has recognised a number of discrete habitats as being of either international, national, regional, district or local significance. Whether of international or local significance these sites are recognised as deserving some degree of protection. Similarly, the Department of Conservation has recently completed a survey of marshbird habitat for both Tauranga and Ohiwa harbours. In so doing the survey team identified key areas which support marshbird species of special concern (due to either their declining numbers or placement already on one of the IUCN “at risk” categories).

However, it is not appropriate that a uniform level of protection (and therefore conservation effort) be applied. Rather, such effort should be directed in a more focused manner. To this end all habitats identified by Environment Bay of Plenty as being of either international, national or regional ecological conservation value have been grouped together separately from those of district and local significance. The former group, where identified are included within the Coastal Habitat Preservation Zone, whereas the latter have been included in the Coastal Management Zone, but with extra protection effort being afforded to them (i.e. they are all Sites of District or Local Significance – refer to section 3.3.3). The sites identified as being of botanical significance are included in the Seventh Schedule – Significant Indigenous Vegetation Areas. Sites identified as Areas of Significant Conservation Value on the planning maps and described in the Third Schedule also contain values that may be of international and national significance which will be considered on a case by case basis.

Likewise, all habitats identified in the Department of Conservation wildlife survey as supporting significant numbers of “at risk” marshbird species have also been included in the Coastal Habitat Preservation Zone. Those habitats which were found to support reasonable (but not significant) numbers of these species have been marked within this plan as Sites of District or Local Significance (refer to section 3.3.3). The sites identified as being of marshbird significance are included in the Sixth Schedule – Significant Marshbird Habitat Areas.

There exist other components of the coastal marine area which have yet to be surveyed (in particular inter-tidal mudflats and all of the sub-tidal area). Any habitats identified as being of international, national or regional conservation value as a result of such research will need to be subsequently added to the Coastal Habitat Preservation Zone.

3.3.2(b) Port Zone

The purposes of the Port Zone are to:

- (a) Enable efficient use of existing port area, so that the regional community may meet its social and economic needs;
- (b) Concentrate major new structural development in an area already modified, so that development is guided away from other coastal areas of higher natural character, recreational value, and cultural value; and
- (c) Minimise potential conflict between port activities and other activities.

The Port Zone is located within Tauranga Harbour. The Port Zone is defined as set out in the maps to this plan. It includes the main navigation channels through the harbour entrance up to the harbour bridge and all the berthing areas associated with the Sulphur Point and Mount Maunganui wharfs.

The Port Zone and adjacent land are characterised by existing development associated with commercial port activities. This includes dredged navigation channels and berth areas, wharfs, reclamations, cranes, warehouses, and road and rail links. This zone also includes some public and recreational facilities such as the marina and boat ramps adjacent to the harbour bridge.

The port has developed incrementally over the past century starting with development of reclamations and wharfs on the Mount Maunganui shore. More recently a major reclamation was undertaken at Sulphur Point to provide more berth and cargo handling space. Further works are proposed to complete and upgrade the wharfs, berth areas and navigation channels. These are designed to provide for more efficient use of the existing port area. Details of proposed works are contained in the Eighth Schedule to this plan – Outline Development Plan Port of Tauranga 1994-2004.

The Port of Tauranga is pivotal to the regional economy and is a significant component of the national economy. While there may be some ecological values remaining in the Port Zone, the natural character of the area is limited by the extent of existing development.

The port outline development plan contained in the Eighth Schedule to this plan – Outline Development Plan Port of Tauranga 1994-2004, provides the regional community with an understanding of the extent of works, considered to be appropriate in the context of Section 6 of the Act, to achieve the purpose of the Port Zone. The rules of the plan require that coastal permits be obtained for all the works proposed (or any others) in the port outline development plan in order that specific effects caused by particular works may be assessed and appropriate control exercised. There are specific policies which relate to the Port Zone in other chapters. These policies will provide guidance in the consideration of coastal permit applications. Some applications for permits to erect structures in the area of the section 384A Resource Management Act occupation permit will not require public notification. In addition, some of the port dredging and reclamation identified in the Eighth Schedule to this plan will not require public notification.

3.3.2(c) Harbour Development Zone

The purposes of the Harbour Development Zone are to:

- (a) Enable the development of vessel related tourism and recreational activities, so that the local community can meet its social and economic needs;
- (b) Concentrate structural development in areas already modified, so that development is guided away from other coastal areas of higher natural character and cultural value;
- (c) Maintain and enhance public access to and enjoyment of the waterfront;

- (d) Maintain and enhance amenity, historical and cultural values;
- (e) Enable the development of vessel related facilities for the commercial fishing industry;
- (f) Maintain the natural character values of the Whakatane Harbour entrance.

The Harbour Development Zone is restricted to three locations within the coastal marine area.

One is adjacent to the central business district of Tauranga city. The zone is defined as set out in the maps to this plan. It includes the coastal marine area extending in a strip 60 metres wide from mean high water springs, starting at the northern side of the end of Elizabeth Street and ending at the south-east corner of the Mission Cemetery on Merrielees Road.

This recognises the effort of the Tauranga District Council to provide a waterfront focus for the downtown area and enable vessel-related tourist and leisure activities. The waterfront and adjacent harbour area is extensively modified, with few remaining ecological values, and reduced natural character. There are, however, significant cultural, historical and amenity values to be taken into account.

Concept designs for this area are contained in the "Tauranga Waterfront Discussion Document", 1995 (which is not part of this plan).

The second area is located in the Whakatane River estuary. The zone is defined as set out in the maps to this plan. It includes the main river channel to the south of the estuary and extends from east side of the strand extension pump station, along the river and out through the river entrance.

This area was a significant commercial port for coastal shipping earlier this century. Today the area has shifted towards commercial fishing, recreational and tourism vessel related use, which Whakatane District Council wishes to encourage. Further information on proposed development in this area is contained in "Whakatane Harbour Management Development Plan", 1988 (which is not part of this plan), and the Fifteenth Schedule – Whakatane Harbour Development Zone Outline Plan.

The extent of the Harbour Development Zone at Whakatane reflects the extent of harbour-related activities at the time of preparing this plan. New harbour-related activities outside the Harbour Development Zone will be considered on a case by case basis through the resource consent (coastal permit) procedures of the Resource Management Act 1991. This procedure provides for detailed and specific environmental assessment and consultation. Where consents are granted and any new harbour related activities are established outside the current extent of the Harbour Development Zone, the Regional Council will consider initiating a plan change to the zone boundaries for the purpose of ensuring appropriate provisions apply to the activities.

The southern side of the zone is extensively modified as a result of reclamation and existing wharf facilities. Natural character values have been significantly reduced. However the zone area has high cultural, amenity and recreational values that need to be taken into account. In addition, the north side of the estuary has had some modification but still has some areas in a relatively natural state. The area is of high cultural significance to Ngati Awa.

The third area is located in the Waioeka River Estuary at Opotiki. The zone is defined as set out in the maps to this plan. It includes the coastal marine area extending in a strip adjacent to the existing wharf area. Opotiki was the first port in the Eastern Bay of Plenty and was a significant commercial port for coastal shipping in the 19th and early 20th centuries. Natural character is diminished by existing wharfs, reclamations and other facilities. The zone has high cultural and recreational values and there is potential for tourism related activities.

Selection of these three areas for the Harbour Development Zone provides for the concentration of new development in modified areas adjacent to existing public services. At the same time development is guided away from more sensitive locations such as Ohiwa Harbour.

3.3.2(d) **Coastal Management Zone**

The purpose of the Coastal Management Zone is to manage activities within it based on a case by case approach having regard to the values of the site and to allow developments to be considered in accordance with their actual and potential effects on the environment. Accordingly most activities in this zone are specified as discretionary activities.

The zone comprises the remainder of the coastal marine area (i.e. that part which is not contained within any of the other three zones). It encompasses the open coast area and most of the estuaries and sheltered coastal waters (including most of the intertidal mudflats, bays and beaches). The total area of this zone constitutes more than 95% of the Bay of Plenty coastal marine area.

Much of this zone is either unmodified or relatively unmodified, with high ecological values and with its natural character very much intact. Furthermore, the zone has significant amenity, visual and intrinsic values. However, it needs to be recognised that there may well be uses and developments which would be appropriate within this zone.

3.3.3 **Additional Areas and Sites of Significance in the Coastal Marine Area**

In addition to the zones described in 3.3.2 above, the plan identifies other ecologically significant areas and sites in the coastal marine area. These fall into one of two groups as set out below.

First, there are sites of district or local significance. These have been identified on the basis of their botanical value or marshbird habitat value. These sites are small in total extent and mostly comprise saltmarsh or estuarine habitat on the margins of estuaries. Further details of these areas are contained in the Sixth Schedule – Significant Marshbird Habitat Areas, the Seventh Schedule – Significant Indigenous Vegetation Areas, and the maps. The rules that apply to these are generally those of the underlying zoning. Chapter 4 – Natural Character, and chapter 6 – Significant Areas of Flora and Fauna, contain specific policies that relate to these sites.

Second, areas of significant conservation or cultural value have been identified to include sites or areas of significance:

- as subtidal marine or estuarine habitat;
- as marine mammal habitat;
- as underwater landscapes;
- as geological features;
- for their cultural value to tangata whenua;
- as historical features;
- as areas important to endangered or nationally rare species; or
- areas important to wading birds, and migratory species in particular.

Further details are contained in the Third Schedule – Areas of Significant Conservation Value, and the Fourteenth Schedule – Areas of Significant Cultural Value, and the maps. The rules that apply to these areas are the same as those of the underlying zoning. Chapter 4 – Natural Character, and chapter 6 – Significant Areas of Flora and Fauna, contain specific policies that relate to these areas. It is the values and habitats contained within the areas of significant conservation or cultural value that are important. The plan controls adverse effects in order to protect these values and habitats.

3.3.4 **Terrestrial Sites of Significance**

Environment Bay of Plenty and the Department of Conservation have also identified a large number of sites of high conservation value within the terrestrial component of the coastal environment. These sites are of interest due to either their botanical conservation values or their significance as habitat for marshbird species of special concern. Because of their location outside of the coastal marine area the rules of this plan cannot extend to afford them protection. Rather it is the district councils alone which have the mandate to control effects on such sites, by way of appropriate conditions on land use consents and appropriate provisions within their district plans.

Notwithstanding this, Environment Bay of Plenty has included these sites in the plan maps. The expectation is that with these sites identified, the district councils will take appropriate steps when determining consent applications which may have adverse effects upon them, and ultimately will put in place appropriate rules in their district plans which afford these sites lasting protection.

3.3.5 **Notification of Coastal Permit Applications**

Applications for coastal permits may or may not be publicly notified, depending upon the particular circumstances of each application. When they are notified there are delays in the processing of the application until after the statutory time period for the general public to make submissions. Alternatively applications do not have to be publicly notified in certain circumstances, as spelt out in section 94 of the Act. These circumstances are not detailed in the plan, but any interested parties are advised to consult the relevant section(s) of the Act.

PART II

MATTERS

OF

NATIONAL IMPORTANCE

This part of the plan addresses the matters of national importance listed in section 6 of the Act. Section 6 of the Act states that:

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

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

4 Natural Character

4.1 Explanation/Principal Reasons

The natural character of the coastal environment is pervasive, and embodies both features and processes.

Outstanding natural features and landscapes together with areas of significant indigenous vegetation and significant habitats of indigenous fauna are all key components of natural character. These are afforded special consideration under section 6(b) and section 6(c) of the Act, and in recognition of this they are treated separately within this plan under their own specific chapters (chapters 5 and 6).

The natural character of the coastal environment does not comprise particular landscape features, or ecologically significant sites only. It also includes the ecological and hydrological systems that collectively sustain the natural functioning of the environment (refer to policy 1.1.4 of the New Zealand Coastal Policy Statement (NZCPS)).

For example, new urban development in sensitive locations such as the Tauranga Harbour and Ohiwa Harbour can have effects other than just altering the visual appearance of the harbour. Urban development could contribute contaminants, which can accumulate in sheltered harbours over decades, and eventually reach levels which will affect the life supporting capacity of the harbours. A reduction in the life supporting capacity of harbours also reduces their natural character (see also chapter 9 – Coastal Discharges).

Environment Bay of Plenty recognises that all of the coast has natural character to some degree, with this occurring along a continuum from areas which remain in a largely natural state to areas where few natural attributes persist. The approach required by the Act is to protect the attributes which give an area its natural character from inappropriate use and development.

Providing such protection may not be a straightforward task, however, as many activities carried out in the coastal environment will affect natural character to some degree. Further, some of the effects of the activities on natural character may not be immediately noticeable, instead being gradual but inevitably resulting in a degradation of values. Notwithstanding this, it is believed that the policies and methods contained within this plan (in particular those of Parts II and III) will achieve an overall outcome in accordance with the preservation of the natural character of the coastal environment.

In the region, concentration of new development in and around areas already compromised by existing development is an effective means of limiting the overall cumulative loss of natural character in the coastal environment (refer to policy 1.1.1 of the NZCPS). The plan adopts this strategy through the use of zoning in the coastal marine area, and other provisions that guide the location of intensive development.

The harbour development and port zones enable and control vessel-related development that has a functional need for a coastal location. These zones include areas already developed to a significant degree. In these areas it is appropriate that the remaining natural character give way to development where necessary. A more detailed description of these zones is given in chapter 3 – Plan Structure, and the maps.

Other parts of the coastal environment have high natural character. Areas having particular natural character values are identified through the maps and schedules, which show significant sites and natural areas. The most sensitive areas are those

enclosed harbours and estuaries which have not been substantially modified. In these areas it is appropriate that a precautionary approach be applied to new development that could cause serious or irreversible adverse effects.

4.2 Issue, Objective, Policies and Methods

4.2.1 Key Issue

There is ongoing and often incremental loss and degradation of natural character through inappropriate subdivision, use, and development in the coastal environment.

4.2.2 Objective

The preservation of the natural character of the coastal environment and its protection from inappropriate subdivision, use and development.

4.2.3 Policies

4.2.3(a) To recognise that there are areas of exceptional natural character which require preservation and for which no development is appropriate. These include but are not limited to the Coastal Habitat Preservation Zone (see chapter 6 – Significant Areas of Flora and Fauna, and the maps).

4.2.3(b) To recognise that most of the coast has some degree of natural character which needs to be protected from inappropriate use and development. The following plan provisions should be used as a guide to the relative weight to be attached to the protection of natural character in particular localities:

- The purpose of the zones as set out in chapter 3 – Plan Structure.
- Policies 4.2.3(f), 4.2.3(i), 5.2.3(a), 5.2.3(b), 6.2.3(a) and 6.2.3(b).
- Policies 13.2.3(b), 13.2.3(c) and 13.2.3(d).
- The outstanding and regionally significant landscapes and natural features identified in the maps and the Fourth Schedule – Natural Features and Landscapes.
- The sites of ecological significance and areas of significant conservation or cultural value identified in the maps, the Third Schedule – Areas of Significant Conservation Value, the Sixth Schedule – Significant Marshbird Habitat Areas, the Seventh Schedule – Significant Indigenous Vegetation Areas, and the Fourteenth Schedule – Areas of Significant Cultural Value.
- Fifth Schedule – Management Guidelines for Natural Features and Landscapes.

4.2.3(c) To recognise that all remaining areas of indigenous vegetation and habitats in the coastal environment contribute to the overall natural character of the environment. Cumulative adverse effects on these areas should be avoided.

4.2.3(d) To recognise the important ecological interconnections that are necessary to sustain species and their habitats. Cumulative and irreversible adverse effect on these interconnections should be avoided.

4.2.3(e) To encourage other agencies to preserve the natural character of the coastal environment and protect it from inappropriate subdivision, use and development.

- 4.2.3(f) New subdivision, use and development should be located in areas already modified by development. It should also be compact, not add to sprawl or sporadic development, and minimise further loss of the remaining natural character of the areas. In particular, further urban development of the coastal environment in western areas of Tauranga Harbour, Ohiwa Harbour, and Waiotahi Estuary, should be avoided unless it can be demonstrated that there will not be cumulative effects on the natural character and life supporting capacity of these areas.
- 4.2.3(g) Natural character must be restored where appropriate in areas where it has been degraded.
- 4.2.3(h) To promote the appropriate protection and management of privately-owned areas within the coastal environment in order to maintain or enhance natural character values.
- 4.2.3(i) New development requiring a coastal marine location should be located in the port and harbour development zones, in preference to other areas. The remaining natural character in these zones should be retained to the extent consistent with achieving the purposes of the zones as set out in chapter 3 – Plan Structure, and the need to avoid sprawling development through the wider coastal environment.
- 4.2.3(j) Esplanade reserves or strips adjacent to the coastal marine area should be required as a condition of subdivision or major development.

4.2.4 **Methods of Implementation - Services**

Environment Bay of Plenty will recognise and provide for natural character values when undertaking coastal margin protection and/or retirement works.

4.2.5 **Methods of Implementation - Advocacy**

- 4.2.5(a) Refer to 6.2.5(d) and (e).

- 4.2.5(b) Environment Bay of Plenty will promote the use of indigenous species, and in particular the use of local genetic stock, in all natural character rehabilitation strategies or other operational works within the coastal environment unless otherwise appropriate.

4.2.6 **Methods of Implementation - Education**

Environment Bay of Plenty will be actively involved by way of education and promotion in raising the awareness of the regional community regarding the natural character values of the Bay of Plenty coastal environment.

5 Natural Features and Landscapes

5.1 Explanation/Principal Reasons

Environment Bay of Plenty has commissioned research to identify outstanding and regionally significant natural features and landscapes of the coastal environment. The technical report resulting from its research is one of the supporting documents to this plan. The details of the methodology used in the assessment are contained within that report. They included factors such as visual quality, sensitivity, absorption capability, intactness and coherence. The identified areas are shown in the maps of this plan and are listed in the Fourth Schedule - Natural Features and Landscapes. Collectively they embody a key component of the natural character of the coastal environment.

Almost all the landscapes and natural features which were identified as being of outstanding or regional significance are on the landward margins of the coastal environment. The protection of these landscapes and natural features is, therefore, a shared responsibility between Environment Bay of Plenty and the district councils. The primary means for managing activities which may have adverse effects on these natural features and landscapes are through the provisions of district plans, and (to a lesser degree) through the provisions of the Regional Land Management Plan.

District plans may also identify coastal landscapes and natural features of district or local significance (in addition to those of outstanding and regional significance as identified in this plan). They may also contain objectives, policies and methods with regard to the general management of all landscapes and natural features on the landward margins of the coastal environment. Environment Bay of Plenty will encourage the district councils to undertake such initiatives.

A specific survey of offshore subtidal landscapes and features has not been undertaken, and it would be very expensive to do so. However, the Tauranga and Ohiwa harbours, including their subtidal components, are identified as outstanding natural landscapes while Waihi and Waiotahi estuaries, including their subtidal components, are identified as being regionally significant landscapes. In addition, known off-shore sub-tidal landscapes of significance to recreational divers are identified in the Third Schedule – Areas of Significant Conservation Value. As further information becomes available on underwater landscape values it will be possible to include that information by way of plan changes, or in the first review of the plan. In the meantime the provisions of this plan provide adequate protection of sub-tidal landscapes through the coastal permit process.

While it is not appropriate to set out in this plan the specific criteria by which outstanding or regionally significant subtidal landscapes and natural features will be determined they will nevertheless all need to be outstanding or regionally significant on account of either:

- (a) their visual quality including the factors of intactness, vividness and coherence (e.g. Astrolabe Reef and Laissons Pinnacle);
- (b) their being the best representative example of a landscape type or natural feature (e.g. the ebb tide delta off the Bowentown entrance to Tauranga Harbour);
- (c) their rarity (e.g. the bubble vents south of Moutohora Island).

5.2 Issue, Objective, Policies and Methods

5.2.1 Key Issue

There is ongoing degradation of the physical integrity and aesthetic values of natural features and landscapes, including those that are outstanding and/or of regional significance, through inappropriate subdivision, use, and development within the coastal environment.

5.2.2 Objective

The maintenance of the quality of the outstanding and regionally significant landscape features.

5.2.3 Policies

- 5.2.3(a) To ensure the visual quality, and the physical and ecological integrity of the outstanding and regionally significant natural features and landscapes of the coastal environment are maintained. The guidelines contained in the Fifth Schedule – Management Guidelines for Natural Features and Landscapes, will be applied.
- 5.2.3(b) To recognise and provide appropriate protection for natural features and landscapes of district or local significance in the coastal environment. The guidelines contained in the Fifth Schedule – Management Guidelines for Natural Features and Landscapes, should be applied.
- 5.2.3(c) Adverse visual effects on the outstanding and regionally significant natural features and landscapes identified in the Fourth Schedule – Natural Features and Landscapes, and the significant sub-tidal scenery identified in the Third Schedule – Areas of Significant Conservation Value, should be avoided or remedied.
- 5.2.3(d) To maintain significant public views and visual corridors associated with the outstanding and regionally significant natural features and landscapes identified in the Fourth Schedule – Natural Features and Landscapes. This includes views from within the landscapes or features, and views of the landscape and features.
- 5.2.3(e) To avoid damage to visually significant vegetation such as Pohutukawa and other native vegetation on headlands, coastal cliffs, and margins of the outstanding and regionally significant landscapes and features identified in the Fourth Schedule – Natural Features and Landscapes.
- 5.2.3(f) Wilderness values should be protected.
- 5.2.3(g) To protect the cumulative landscape qualities of channels, tidal flats, beaches, coastal margins, vegetation and the land backdrop.
- 5.2.3(h) Reclamations and seawalls must reflect natural coastal landforms (curves, embayments and headlands) rather than straight lines and rectangular shapes.
- 5.2.3(i) New development should be of a design, materials and colours which blend the development with the surrounding environment, and maintain amenity values. Markers or high visibility materials may be required to provide for safety where relevant.

5.2.4 **Methods of Implementation - Advocacy**

Environment Bay of Plenty will:

- 5.2.4(a) Contribute to a community based coast care programme and may contribute to other programmes.
- 5.2.4(b) Encourage landowners and other agencies to provide appropriate protection and management of privately owned areas within the coastal environment which have outstanding or regionally significant natural features and/or landscape values.
- 5.2.4(c) Encourage the appropriate agencies to undertake research for the purposes of identifying the outstanding and regionally significant sub-tidal natural features and landscapes.
- 5.2.4(d) Promote and encourage the identification, protection and enhancement of other natural features and landscapes within the landward component of the coastal environment significant at the district and local level.

6 Significant Areas of Flora and Fauna

6.1 Explanation/Principal Reasons

Environment Bay of Plenty and the Department of Conservation have already identified many areas of significant indigenous vegetation and some significant habitats within the Bay of Plenty coastal environment. The research undertaken in this exercise involved a survey of marshbird habitats within the Ohiwa and Tauranga harbours, a survey of the wetland vegetation of Ohiwa and Tauranga harbours, and an assessment of the botanical conservation value of that vegetation within the Bay of Plenty coastal environment for which information existed. However, the research into botanical or wildlife conservation values did not extend to include intertidal mudflats nor sub-tidal vegetation. The research employed evaluation criteria for the ranking of vegetation and habitats that had been developed by the Department of Conservation for the purposes of identifying "significant" areas. The technical reports relating to these studies are supporting documents to this plan. A summary of the values of the sites is contained in the Sixth Schedule – Significant Marshbird Habitat Areas and the Seventh Schedule – Significant Indigenous Vegetation Areas.

The sites within the coastal marine area that were identified as being significant in either a botanical or wildlife context have either been included within the Coastal Habitat Preservation Zone or otherwise identified as being sites of district or local significance. The sites shown on the maps above the line of mean high water springs are also recognised as being of significant conservation value, but it is beyond the scope of this plan to provide rules for their protection. That must be left to the district councils. Each of the sites identified requires special protection effort, including the prevention or fullest practicable mitigation of adverse effects as well as the allocation of remedial or protective operational works (such as fencing).

Negotiation will need to be entered into with landowners regarding those significant sites located on private land, the intention being to offer incentives or compensation in exchange for protective covenanting. This is something which Environment Bay of Plenty, the Department of Conservation and the district councils need to be involved with.

So far only marsh vegetation has been surveyed for significant habitat (wildlife) values, and only in two harbours. All other estuaries will need to be surveyed in the future, as will other wildlife habitats (such as sand dunes, spits, inter-tidal mudflats and sub-tidal areas).

Further, it is emphasised that the investigations into botanical conservation value were restricted to areas for which botanical information existed. More information on additional sites will doubtlessly be available in the future and in all probability more sites of significance will be subsequently identified.

6.2 Issue, Objective, Policies and Methods

6.2.1 Key Issue

There is ongoing loss and degradation of significant vegetation and significant habitats of indigenous fauna within the coastal environment through inappropriate subdivision, use and development.

6.2.2 Objective

The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna within the coastal environment.

6.2.3 Policies

6.2.3(a) To preserve the ecological values of the Coastal Habitat Preservation Zone by avoiding adverse effects on those values, and encouraging restoration and enhancement of those values where appropriate (a summary of those values is provided in the Sixth Schedule – Significant Marshbird Habitat Areas and the Seventh Schedule – Significant Indigenous Vegetation Areas).

6.2.3(b) To avoid or remedy adverse effects on the values of the sites and areas of significance in the Coastal Management Zone. The sites and areas are shown on the maps, and a summary of values is provided in the Third Schedule – Areas of Significant Conservation Value, the Sixth Schedule – Significant Marshbird Habitat Areas, and the Seventh Schedule – Significant Indigenous Vegetation Areas. Remediation can be achieved by means of a financial contribution, where appropriate, as set out in the Tenth Schedule – Financial Contributions.

6.2.3(c) To promote and encourage the appropriate protection and management of all sites of significance on land within the coastal environment, as identified in the maps, the Sixth Schedule – Significant Marshbird Habitat Areas, and the Seventh Schedule – Significant Indigenous Vegetation Areas.

6.2.3(d) To afford an appropriate level of protection to significant indigenous vegetation and habitats of indigenous fauna which are not specifically identified in this plan.

6.2.3(e) To ensure that all Environment Bay of Plenty planning, decision-making and operations within the coastal environment provide for the protection of significant sites of indigenous vegetation and significant habitats of indigenous fauna as matters of national importance.

6.2.3(f) To promote the undertaking of the further studies necessary in order to complete the identification of all areas of significant indigenous vegetation and significant habitats of indigenous fauna within the coastal environment.

6.2.3(g) To encourage landowners or lease holders in the development of conservation strategies for the significant sites identified in the maps and shown in the Sixth Schedule – Significant Marshbird Habitat Areas and the Seventh Schedule – Significant Indigenous Vegetation Areas and to work with them in the development of these strategies.

6.2.3(h) To encourage district councils to take into account the adverse effects that domestic dogs and cats have on the wildlife of the Coastal Habitat Preservation Zone and other sites of significance identified in this plan, when preparing district plans which regulate urban development and public access.

6.2.4 Methods of Implementation - Services

6.2.4(a) The relevant provisions of the Biosecurity Act will be used to facilitate the management of pest problems in the Coastal Habitat Preservation Zone and other sites of significance.

6.2.4(b) Environment Bay of Plenty with district councils will prioritise remedial actions to address unauthorised activities in the Coastal Habitat Preservation Zone and other sites of significance identified in this plan.

6.2.5 **Methods of Implementation - Advocacy**

Environment Bay of Plenty will:

- 6.2.5(a) Encourage research on marshbird habitats within the Maketu, Little Waihi, Waiohau, Waiaua and Waioeka/Otara estuaries.
- 6.2.5(b) Encourage research on other wildlife habitats within the coastal environment, with particular regard to sub-tidal areas, intertidal mudflats, beaches, spits and fresh water wetlands.
- 6.2.5(c) Encourage further botanical research for the purpose of identifying any additional areas of significant indigenous vegetation within the coastal environment.
- 6.2.5(d) Encourage district councils to seek the protection of the natural character of the coastal environment, and sites of ecological significance within the landward component of the coastal environment by way of:
- appropriate provisions within district plans;
 - the purchase of land for reserves;
 - the acquisition of land through reserves contributions;
 - the use of heritage protection orders;
 - the use of conservation covenants or other voluntary agreements;
 - incentives (such as rating relief);
 - the use of operational works (such as fencing);
 - the inclusion of appropriate conditions on resource consents;
 - any other appropriate technique or mechanism;
 - reserve management plans.
- 6.2.5(e) Encourage the Department of Conservation to develop and implement appropriate strategies for the purposes of protecting areas of significant indigenous vegetation and significant sites of indigenous fauna within the coastal environment, including:
- appropriate provisions within conservation management strategies;
 - the development and implementation of management plans for coastal reserves (where applicable);
 - the purchase of land for reserves;
 - the use of conservation covenants or other agreements;
 - the use of operational works (such as fencing);
 - any other appropriate technique or mechanism.
- 6.2.5(f) Encourage landowners to provide appropriate protection and management of privately-owned areas within the coastal environment which have significant indigenous vegetation or significant habitats of indigenous fauna.

6.2.6

Methods of Implementation - Education

Environment Bay of Plenty will be involved in education programmes to raise community awareness of the need, and means to maintain significant indigenous vegetation and fauna in the coastal environment. This includes the Coastcare programme.

7 Public Access

7.1 Explanation/Principal Reasons

Public access is an issue which spans the interface between the coastal marine area and its landward edge. For this reason, Environment Bay of Plenty and the district councils need to work together to address the issue of public access.

There is a need to provide for a range of coastal recreational experiences including remote or wilderness type experience. However right of legal access would need to be negotiated with landowners.

It is recognised that both structures and activities can create obstacles to public access. Hence, in the granting of permits for structures within the coastal environment, the relevant consent authority will need to make an assessment of the likely impact that such structures will have on public access.

Furthermore, access to the coast should be provided for in a positive way. Therefore, where appropriate, esplanade reserves or strips should be provided for. In addition to this, district councils and the Department of Conservation should consider identifying and purchasing areas which should be publicly owned to improve access to popular coastal areas. Conversely however, it is also appropriate to recognise areas which are important for ecological or cultural reasons. These are areas to which access should be discouraged or at the very least not positively encouraged.

It is also important to recognise that uncontrolled public access can cause the destabilisation of sensitive dune systems. In many places the public have created an informal accessway to popular beach areas. Over time, these accessways tend to grow wider and encroach further and further into the protective vegetative cover of the dunes, making them steadily more susceptible to both wind and storm erosion.

Another related problem is the use of motor vehicles along the coast, especially in dune systems. Vehicle traffic in these areas causes extensive damage by breaking up the protective mat of vegetation and by physically moving sand.

In order to overcome these problems, it is necessary to educate the public with regard to the dangers associated with informal accessways and vehicle tracks.

Chapter 14 – Disturbance, Deposition and Extraction, discusses the effects of vehicle use on beaches and contains rules controlling the use of vehicles on the foreshore and seabed. Some district councils also have specific bylaws regulating vehicle use on beaches.

In 1994 the Port of Tauranga was granted a permit under section 384A of the Act, to provide for occupation of the coastal marine area adjacent to the port-related commercial undertaking, i.e. the wharfs. This permit authorises the Port Company to exclude other persons who do not have a right of occupation. Planning map 11d shows the area subject to the occupation permit.

7.2 Issue, Objective, Policies and Methods

7.2.1 Key Issue

Provision of access to the coast is not always adequate, although in some cases uncontrolled and/or inappropriate access can cause degradation of the coastal environment, including destabilisation of dune systems and habitat modification.

7.2.2 Objective

The maintenance and enhancement of appropriate public access to and along the coastal marine area.

7.2.3 Policies

7.2.3(a) To promote public access to and along the coastal marine area and ensure that public access is restricted only where necessary:

- To protect areas of significant indigenous vegetation and/or significant habitats of indigenous fauna;
- To protect Maori cultural values;
- To protect public health or safety;
- To ensure a level of security consistent with the purpose of a resource consent; or
- In other exceptional circumstances sufficient to justify the restriction notwithstanding the national importance of maintaining that access.

Further provision for and enhancement of public access to and along the coastal marine area will, as far as practicable, avoid any adverse effects on other values.

The provisions of chapter 3 – Plan Structure, chapter 4 – Natural Character, the Third Schedule – Areas of Significant Conservation Value, the Sixth Schedule – Significant Marshbird Habitat Areas, the Seventh Schedule – Significant Indigenous Vegetation Areas, the Fourteenth Schedule – Areas of Significant Cultural Value, and the maps, should be used as a guide to the relative sensitivity of the coastal environment to public access.

7.2.3(b) To promote the use of a limited number of official accessways to and along the coastal marine area in sensitive areas.

7.2.3(c) Esplanade reserves or strips adjacent to the coastal marine area should be required as a condition of subdivision or major development.

7.2.3(d) New facilities should be designed to maximise public use and access as well as private use.

7.2.3(e) Public access onto and alongside the commercial wharfs at the Port of Tauranga should be restricted where reasonably necessary to provide for security and public safety.

7.2.4 Methods of Implementation - Services

7.2.4(a) Environment Bay of Plenty will undertake consultation and research to identify areas or circumstances where public access through the coastal marine area may need to be restricted for the purposes of policy 7.2.3(a). Consultation will include iwi, district councils, the Department of Conservation, user organisations, community groups, landowners, conservation groups and public.

- 7.2.4(b) Environment Bay of Plenty will contribute to a community based coastcare programme for beaches.
- 7.2.4(c) District councils should monitor the effects of recreational access to the coast. This includes effects on private land as well as effects on the environment generally.
- 7.2.4(d) District councils should manage the cumulative effects of recreation on the coastal environment by:
- Rationalising the large number of informal access tracks through dune and saltmarsh areas and replacing them with appropriately designed access ways at appropriate locations.
 - Ensuring that formal access is well marked, and the public is well informed about the need to avoid damage to dunes, saltmarsh or property.
 - Restricting vehicles from beaches and dunes and other sensitive coastal sites, except in special circumstances and for vessel launching.
 - Reducing the effects of informal boat launching by considering the provision and maintenance of formal boat launching facilities in appropriate locations.
- 7.2.4(e) District councils should exercise their functions under section 35(5)(ja) of the Act; to keep public record of the location of legal public access to the coast. District councils may wish to consider including this information in district plans.

7.2.5 **Methods of Implementation - Advocacy**

Environment Bay of Plenty will:

- 7.2.5(a) Encourage appropriate agencies to provide for access to and along the coastal marine area by purchasing areas or formulating agreements such as easements and walkways.
- 7.2.5(b) Encourage district councils to ensure, as far as practicable and where appropriate, that the siting of new structures or activities on land adjoining the coastal marine area will not restrict or impede public access.

8 Tangata Whenua Interests

8.1 Explanation/Principal Reasons

Section 6(e) of the Act requires regional councils to recognise and provide for the relationship of Maori with their ancestral lands, waters, sites, waahi tapu and other taonga. These can include places, sites, areas or objects that have special value or significance to Maori. They may also include well-defined areas from which food is obtained (mahinga maataitai), and natural resources valued for other reasons, such as plants used in weaving (taonga raranga). It is important that these places, values and resources are identified and protected in accordance with tikanga Maori.

In addition to section 6(e) of the Act, section 7(a) of the Act ("Other Matters") further requires regional councils to

Have particular regard to ... kaitiakitanga.

In addition, section 8 of the Act makes specific reference to the Treaty of Waitangi, requiring regional councils to:

Take into account the principles of the Treaty of Waitangi.

Tangata whenua are kaitiaki (or guardians) of their coastal resources. As such they have assumed the responsibility to ensure that the mauri (or life essence) of these resources is safeguarded. The mauri of a resource embodies a spiritual as well as a physical essence. From a Maori perspective, damaging the physical essence of a resource also causes spiritual damage. It is even possible to damage resources (through pollution or despoliation) to the extent that they can lose their mauri entirely. Protecting the mauri, on the other hand, ensures the maintenance of its integrity and the protection of supply for future generations.

Water in particular has high spiritual, social and cultural value to Maori. In the spiritual sense it is viewed as life-giving, as a living entity to be respected and nurtured. In social terms it is used extensively for mahinga maataitai and recreation, and in cultural terms there are specific areas of the coastal marine area which have their own mana, taniwha and waahi tapu which need to be protected. Maintaining the integrity of waitai (coastal water) is thus an issue of paramount importance to tangata whenua. As kaitiaki for this water they have concern for protecting its mauri and are particularly upset by practices which result in waimate (polluted water). These practices include the discharge of human sewage into waitai, rural discharges, industrial and urban run-off, leachate from land disposal sites and disposal of dredging spoil.

Further provision for addressing Maori concerns could include recognition of the role of tangata whenua as kaitiaki for particular stretches of the coastal environment, and consideration of providing for some form of joint management or transfer of powers in some cases. It could also include clear acknowledgement of traditional Maori values with respect to such things as water quality and waste disposal. However, each tribe has the right to have control over defining its particular interests and concerns and to determine for itself its preferences for coastal management within its tribal boundaries.

To date Environment Bay of Plenty has spent considerable effort in ensuring that an appropriate process has been established in order to recognise and provide for tangata whenua interests. These efforts have culminated in the formation of three consultative committees, these being the Eastern, Western and Southern Maori Regional Representative Committees. The primary purpose of these committees is to provide a communications link between Environment Bay of Plenty and the

tangata whenua of the region. Environment Bay of Plenty will cooperate with tangata whenua in identifying those who exercise mana whenua over particular areas.

In some cases particular areas or values of importance have been identified in the plan at the request of particular tangata whenua. These are identified in the maps and the Fourteenth Schedule – Areas of Significant Cultural Value, to facilitate their protection. However there are many other areas of significance to tangata whenua that are not at present identified in the plan. Adverse effects to areas and values of significance to tangata whenua must be avoided, remedied or mitigated, whether or not they are specifically identified in this plan. If further consultation with tangata whenua results in a request from tangata whenua for additional areas or values to be identified in the plan, a plan change can be initiated to achieve that. The methods of chapters 8 – Tangata Whenua Interests, and 18 – Historic and Cultural Heritage, are intended to facilitate the process of identifying and managing areas of cultural significance in a manner consistent with tikanga Maori.

Iwi authority planning documents prepared to date have been considered in the preparation of this plan. These include the Ngati Pukenga Resource Management Plan, Ngaiterangi Iwi Resource Management Plan, Tawharau o Nga Hapu o Whakatohea, and Nga Aukati Taonga of Tapuika me Waitaha. These documents describe tangata whenua policy on resource management issues.

8.2 Issue, Objective, Policies and Methods

8.2.1 Key Issue

Degradation of coastal resources and the lack of recognition of the role of tangata whenua as kaitiaki of this resource can adversely affect the relationship of Maori and their ancestral lands, waters, sites, waahi tapu and other taonga.

8.2.2 Objective

- 8.2.2(a) The involvement of tangata whenua in management of the coastal environment.
- 8.2.2(b) The protection of the characteristics of the coastal environment of special spiritual, cultural and historical significance to tangata whenua.
- 8.2.2(c) Sustaining the mauri of coastal resources.

8.2.3 Policies

- 8.2.3(a) To recognise the significance of the coastal environment to tangata whenua, and to provide for customary uses and management practices relating to the natural and physical resources of the coastal environment, including mahinga mataitai, waahi tapu and taonga raranga, in accordance with tikanga Maori.
- 8.2.3(b) To recognise the role of tangata whenua of the Bay of Plenty as kaitiaki of the region's coastal resources, and the right of each iwi to define their own preferences for coastal management within their tribal boundaries.
- 8.2.3(c) To avoid, remedy or mitigate adverse effects on resources or areas of special spiritual, historical or cultural significance to tangata whenua. This includes, but is not limited to, those areas and values identified in the maps and Fourteenth Schedule – Areas of Significant Cultural Value.
- 8.2.3(d) To provide for papakainga housing in the coastal environment in a manner consistent with other relevant provisions of this plan.

8.2.4 Methods of Implementation

Environment Bay of Plenty and the iwi of the region will:

- 8.2.4(a) Develop methods to protect the mauri of the natural and physical resources of the coastal marine area.
- 8.2.4(b) Develop procedures which will give effect to the tangata whenua role as kaitiaki of their coastal taonga and enable the practice of kaitiakitanga.
- 8.2.4(c) Protect, through both the plan and consent processes, those characteristics, sites, features, resources or attributes of the coastal marine area which are either of cultural value or special significance to tangata whenua (where these are known).
- 8.2.4(d) Facilitate the development of an appropriate system for the release by tangata whenua of culturally sensitive information to Environment Bay of Plenty.
- 8.2.4(e) Develop processes in accordance with tikanga Maori to facilitate effective consultation with tangata whenua about proposals for the use or development of coastal resources.
- 8.2.4(f) Have regard to any local resource management strategies or plans prepared by tangata whenua and consider their incorporation within plan changes or the Regional Coastal Environment Plan First Review.
- 8.2.4(g) Consider the transfer of resource management functions, duties and/or powers to iwi authorities where such is appropriate to the circumstances and to both parties, having regard to the requirements of section 33 of the Act.
- 8.2.4(h) Maintain and make available a register of contact persons for the iwi of the region to assist applicants in their consultation with tangata whenua.
- 8.2.4(i) Allocate appropriate resources to enable the implementation of these methods in order of priority.

Environment Bay of Plenty will:
- 8.2.4(j) Require all applications for coastal permits to have sufficient evidence of consultation with all tangata whenua that are likely to be affected by the proposed activity or those who otherwise have tribal jurisdiction over the intended location of the proposed activity.
- 8.2.4(k) In accordance with section 104(1)(i) of the Act, have regard to iwi management plans when considering applications for coastal permits.

PART III

ACTIVITIES

AND

EFFECTS

This part of the plan deals with the range of activities which are restricted by sections 12, 14 and/or 15 of the Act. Most such activities are prohibited by the Act unless otherwise expressly allowed by a coastal permit or by a rule in the coastal plan.

It also addresses the coastal marine area functions of regional councils as listed in section 30 of the Act. Environmental issues relating to these functions are dealt with under the following chapter headings:

- (a) coastal discharges;
- (b) taking, use, damming or diversion of coastal water;
- (c) coastal hazards;
- (d) occupation of space;
- (e) structures;
- (f) disturbance, deposition and extraction;
- (g) reclamation;
- (h) exotic plants and animals;
- (i) hazardous substances;
- (j) historic and cultural heritage;
- (k) recreation; and
- (l) noise.

A typical coastal activity will have a range of adverse effects which are addressed individually in these chapters. For example a typical marina development will usually involve *disturbance* and *excavation* of the seafloor, *deposition* on the seafloor, erection of *structures* (piles, pontoons), *reclamation*, *discharges*, *occupation* of space; and in some case *taking* of seawater, and the *extraction* of sand for other uses. For this reason it is likely that more than one chapter will need to be consulted to find out all the objectives and policies relevant to a particular activity of interest. For convenience all the rules have been amalgamated into a table in Part VI of the plan.

This approach of assessing the component parts of activities may be unfamiliar to some. However it is an essential part of the Resource Management Act, which focuses on managing the effects of activities on the coastal environment. It assists in ensuring that specific adverse effects on the environment are not overlooked, and can be managed in an integrated way.

Part III of the plan is complementary to Part II which addressed the relative sensitivity of the different parts of the coastal environment to adverse effects. The provisions of Part II of this plan are overarching provisions relevant to all activities dealt with in Part II of the plan.

9 Coastal Discharges

9.1 Explanation/Principal Reasons

The maintenance of good coastal water quality is essential to the social, recreational, economic, cultural and spiritual needs of the community, as well as for protecting the overall health of the environment. However, maintaining the quality of coastal water is a difficult issue, since a great many contaminants that end up in the sea are derived from land. These include urban and rural run-off, seepage from septic tanks and landfills, sediment from farming or forestry operations, and authorised discharges of contaminants into rivers upstream from the coastal marine area. Obviously these activities cannot be controlled directly by the coastal plan. Instead the focus for dealing with these must be within other (land-based) plans which will help protect the quality of coastal waters. The preparation of a number of such plans by Environment Bay of Plenty is already underway. The first of these plans to become operative is the On-Site Effluent Treatment Regional Plan, which addresses the effects of septic tank systems on coastal water quality.

However, in addition to the indirect impact of catchment land uses, there are a number of activities which occur within the coastal marine area that have direct impacts upon coastal water quality. These include the direct discharge of contaminants and a range of other activities such as dredging and disposal of spoil, marinas and moorings, sand and mineral extraction, reclamations, foreshore works and structures, aquaculture and so on. This chapter of the coastal plan deals mainly with the direct discharge of contaminants into the coastal marine area.

Direct discharges to the coastal marine area include stormwater, industrial and sewage outfalls, the discharge of farm-based effluent, the discharge of sewage and ballast water from vessels, the discharge of contaminated bilge water from boats, and contamination from boat cleaning and maintenance activities. Each of these is briefly discussed below.

Outfalls located within the coastal marine area are essentially still associated with catchment land uses. However, since these discharges are directly into coastal waters they can be controlled by the provisions of this plan.

The discharge of farm-based effluent is an activity which Environment Bay of Plenty has been bringing under control over recent years, with many farms having been converted to land based disposal of effluent. However, point discharges of such effluent which still enter the coastal marine area directly are showing significant localised effects, and need to be regulated.

The discharge of sewage from boats appears to be a problem mainly limited to recreational vessels, as most commercial ships have holding tanks and discharge outside of inner coastal waters. The effects of these discharges appear to be mainly cultural and aesthetic, as research has shown that where there have been high concentrations of recreational vessels without holding tanks the surrounding waters have still been suitable for recreational use. Nevertheless it is desirable that the practice of discharging sewage from boats directly into inner coastal waters (in particular harbours and estuaries) be discouraged. The Resource Management (Marine Pollution) Amendment Regulations 2002 control most sewage discharges from vessels. These regulations should be consulted. A rule in this plan extends the effect of the regulations to include a prohibition of discharges of untreated sewage from vessels into harbours and estuaries. Refer also to policies 13.2.3(q) and (r) which relate to the installation of vessel waste disposal facilities.

With regard to the discharge of ballast water from vessels, the issue is predominantly one of preventing the introduction of exotic marine organisms including toxic dinoflagellates that have been picked up in ballast water taken on,

board in overseas ports. Control of ballast water discharges is exercised by the Ministry of Fisheries in accordance with the Biosecurity Act 1993. Consequently, this plan does not control ballast water discharges.

Boat maintenance or repair can cause contamination of water and harbour sediments. Toxic anti fouling coatings and cargo residues can accumulate in sediments or affect water quality. Cleaning and repair of vessels hulls and cargo holds should be undertaken in a way that ensures that toxic anti fouling coating residues and cargo residues do not contaminate coastal waters and sediments. Accordingly the plan controls discharges from vessel cleaning and maintenance except for that permitted by the Resource Management (Marine Pollution) Regulations 1998.

Vessel bilge water may contain diesel and oil, which can have adverse effects if discharged in significant quantities. The Resource Management (Marine Pollution) Regulations 1998 permit discharges of oily water from vessels provided that specific conditions are met. If these conditions are not met then section 15B of the Act applies.

One of the more popular methods that has been used in the past to manage water quality is to set water quality standards (also termed water classifications). This technique sets minimum standards for a defined area of water.

In setting water quality standards Environment Bay of Plenty is mindful that it is consequently obliged to routinely monitor the waters that have been so classified. Monitoring is an expensive undertaking, especially if micro-biological standards are part of the classification. In view of this, Environment Bay of Plenty has developed two sets of water quality standards which will apply within the coastal marine area. The first of these is taken from section 107(1) of the Act and applies throughout all coastal waters of the Bay of Plenty. It will be readily apparent whether these standards are being met, since they deal with obvious things such as colour, smell, and conspicuous floatables.

The second set of standards applies only to all harbours, estuaries and (on the open coast) out to 400 m offshore. The standards that apply in this area include those from section 107(1) of the Act but in addition they require the maintenance of water quality at levels sufficient for contact recreation and maintenance of shellfish quality at levels suitable for consumption. The reasoning for the limited extent of the area covered by this second classification is two-fold.

First, it includes that area of the Bay of Plenty which is most commonly used for contact recreation and shellfish gathering (it is noted that the waters that are excluded are well used for fishing, but it is considered that the standards which apply [i.e.: those of section 107(1) of the Act] are sufficient in themselves to safeguard these fisheries).

Second, it is feasible to adequately monitor these areas for contact recreation suitability and shellfish quality (they are already routinely monitored as part of Environment Bay of Plenty's Natural Environment Regional Monitoring Network [NERMN]). However, outside these areas it would not be cost-effective to monitor the micro-biological variables and factors associated with standards set for contact recreation and shellfish gathering.

The way the classification works is that Environment Bay of Plenty will take the standards into account when considering consent applications. Discharge which cannot meet the water quality standards specified in the classification are unlikely to be granted a permit. However, where the discharges can meet these standards they may be granted a consent.

The standards set are minimum standards. Where existing water quality significantly exceeds that of the standards set in this plan, Environment Bay of Plenty may require that a particular discharge meet a higher standard, to maintain appropriate water quality (refer to section 69(3) of the Act).

The standards are set out in the Thirteenth Schedule – Water Quality Standards. In some instances the quantitative standards are those set by the Act (e.g. the natural temperature of water shall not be changed by more than 3° C; the concentration of dissolved oxygen shall exceed 80% of saturation concentration), in accordance with the certainty that failure to meet these thresholds will result in significant adverse environmental effects.

However, in many cases the Act only sets qualitative standards (e.g. “any significant adverse effect on aquatic life”). To provide greater certainty the plan sets quantitative standards that will be used to measure whether or not the qualitative standards specified in the water classification set in this plan are being met. These are a combination of some set by other government agencies, and others set by overseas agencies which are recognised as being leaders in this field (e.g. United States Environmental Protection Agency, Australian and New Zealand Environment and Conservation Council).

The use of other standards is allowed by the plan when it can be demonstrated that different standards would be appropriate in achieving the purpose of the Act. This recognises that the sensitivity of the environment varies from place to place and that it is not possible to create a complete and exclusive list of standards for potential contaminants.

A classification does not mean that the waters will always be of the standards specified. There are a number of reasons why coastal waters may not meet the classification standards at a particular place or time.

- Section 107(2) of the Act provides for grant of consent to discharge in breach of the standards set out in section 107(1) of the Act, when:

there are exceptional circumstances, or the discharge is of a temporary nature; or, is associated with necessary maintenance work.
- Section 330 of the Act provides for temporary regulatory exemptions for the purpose of *emergency works*.
- The Act recognises that contaminants, discharged into the coastal marine area are often in a concentrated state and are unlikely to meet the water quality standards set in section 107(1) of the Act or others set in this plan at their point of discharge. Accordingly provision has been made in the Act for the *reasonable mixing* of contaminants with sea water before they must comply with the specified water quality standards. The size of each reasonable mixing area will be set on a case-by-case basis as appropriate to the particular type of discharge concerned.
- The Act also recognises that, for purely natural reasons, classified waters may not, and do not have to, meet the required standards. For example, if a volcanic eruption releases arsenic into the coastal marine area, then that contamination is referred to as a *natural perturbation* of the classified waters.
- In many instances it is the discharge of contaminants on to land or into rivers that causes the coastal water quality to be below the standards set in this plan. Because this plan does not regulate discharges outside of the coastal marine area, the standards in this plan can be applied only when a consent to discharge to land or freshwater, is required under Section 15 of the Act or in another regional plan. At present diffuse runoff, seepage and drainage from intensively farmed areas are causing some coastal waters in river mouths to breach microbial water quality standards.

- Although Environment Bay of Plenty can (and has) prosecuted discharges that breach the standards, enforcement action does not alter the fact that for a while at least, specific coastal waters may not meet the standards.

The coastal marine area in the vicinity of the Tarawera River is an example where coastal water quality may at times not meet the standards of the plan.

Where there is a significant breach of the water quality standards, Environment Bay of Plenty shall inform the Medical Officer of Health who may choose to issue public health warnings. Environment Bay of Plenty will also inform district councils when doing so would be relevant to their public health functions.

Maintenance of water quality is of particular importance to tangata whenua, for the reasons given in chapter 8 – Tangata Whenua Interests. This includes both the physical quality and the Mauri (spiritual essence) of coastal waters. Discharge of human sewage to the sea, whether or not treated, is highly offensive to tangata whenua. The harbours and estuaries are of particular significance to tangata whenua (refer to the Fourteenth Schedule – Areas of Significant Cultural Value). For this reason discharge of human sewage into harbours and estuaries is a prohibited activity unless it has passed through soil or wetland first. This prohibition does not apply to discharges of sewage from vessels which are subject to national regulations. Discharges of human sewage off the open coast (ocean outfalls) will be considered on a case by case basis as discretionary activities.

Urban stormwater discharges are becoming an increasingly significant source of contaminants as urban areas grow. They can contribute sediment from subdivisions, which accumulates in harbours and estuaries. In addition they carry contaminants such as heavy metals and hydrocarbons from cars and other urban activities. If discharged into estuaries, these contaminants can accumulate in the estuary sediments over time and build up to levels at which they can have a significant adverse effect on the life supporting capacity of estuaries. For this reason all stormwater discharges must meet minimum standards before they can be discharged into harbours or estuaries as a permitted activity.

It is important that new urban subdivisions and stormwater systems are designed to minimise contaminant loads on harbours and estuaries. This requires an integrated approach at the time subdivisions are planned. Control of subdivision and associated infrastructure is a function of district councils. Therefore, the plan contains policy guidelines for district council planning of subdivision and stormwater development, and consideration of discharge permit applications by Environment Bay of Plenty.

Wetlands and saltmarsh play an important role in maintaining coastal water quality. They act as a physical and biochemical filter which removes contaminants entering estuaries through groundwater and streams. Therefore, it is important that they are not drained or otherwise damaged.

9.2 Issue, Objective, Policies and Methods

9.2.1 Key Issue

Coastal water resources and ecosystems and their mauri are being adversely affected by direct and indirect discharges of contaminants into coastal water.

9.2.2 Objective

Maintenance and enhancement of the water quality and mauri of the Bay of Plenty coastal marine area.

9.2.3 Policies

9.2.3(a) To integrate the management of water quality in the coastal marine area with the management of land use and freshwater.

9.2.3(b) Discharges must not have significant adverse effects on aquatic life, habitats, feeding grounds, ecosystems or amenity values in the coastal marine area. This policy applies whether or not the actual point of discharge is in the coastal marine area.

Environment Bay of Plenty will apply the classifications and standards contained in the Thirteenth Schedule – Water Quality Standards, unless other standards can be demonstrated to be more consistent with the purpose of the Act. When existing water quality significantly exceeds the classification standards, a higher standard may be applied.

9.2.3(c) Discharges must not cause water quality to be unsuitable for the purposes of contact recreation, and shellfish gathering for human consumption, throughout harbours and estuaries and on the open coast out to a distance of 400 metres from the line of mean high water springs. This policy applies whether or not the actual point of discharge is in the coastal marine area.

Environment Bay of Plenty will apply the classifications and the standards contained in the Thirteenth Schedule – Water Quality Standards, unless other standards can be demonstrated to be more consistent with the purpose of the Act. When existing water quality significantly exceeds the classification standards, a higher standard may be applied.

9.2.3(d) Urban land use will be managed to ensure that stormwater does not cause estuarine and harbour water quality to fail the standards set in policies 9.2.3(b) and (c) or cause accumulation of contaminants in harbour or estuary sediment at levels which have adverse effects on marine life. The following techniques should be considered:

- source control;
- integrated management of whole stormwater catchments;
- minimising the total area of impermeable catchment surfaces;
- maximising disposal of stormwater to ground, except where this would cause flooding, instability or groundwater contamination;
- minimising the possibility of cross contamination of stormwater systems with sewage;
- the installation of stormwater treatment devices in new or upgraded stormwater systems;
- ensuring that the layout of subdivision and services facilitates the retention of riparian margins and wetlands.

9.2.3(e) Activities which could result in the accumulation of persistent toxic contaminants in sensitive receiving environments, should be avoided.

9.2.3(f) To have regard to the following matters when considering what constitutes reasonable mixing:

- acute and chronic toxicity effects;
- efficient mixing of the effluent with the receiving waters;

- minimising the area of water that does not meet the classification standards;
- the purposes for which coastal waters are classified.

- 9.2.3(g) Discharge of human sewage into coastal waters, that has not passed through, land, soil or wetland, may only occur where there has been full consideration of the objectives and policies of this plan, following consultation with tangata whenua, and where it better meets the purpose of the Act. For the purpose of clarity, policy 9.2.3(d) is to be applied to the discharge of stormwater.
- 9.2.3(h) To continue to monitor and report on the water quality of the Bay of Plenty coastal marine area.
- 9.2.3(i) To discourage the discharge of untreated sewage, bilge water and other contaminants from vessels within harbours and estuaries and close to beaches (see rule 9.2.4(e) which applies to untreated sewage).
- 9.2.3(j) To maintain a response capability with regard to unauthorised or accidental discharges or spills of contaminants into the coastal marine area.
- 9.2.3(k) To promote or otherwise require that facilities are available for the appropriate shore based disposal of contaminants associated with the operation or maintenance of vessels.
- 9.2.3(l) To ensure as far as practicable that the discharge of ballast water within the coastal waters of the Bay of Plenty does not result in the introduction of harmful substances or organisms.
- 9.2.3(m) In conjunction with all other appropriate agencies, as circumstances permit Environment Bay of Plenty will identify areas where it is unsafe for either contact recreation or shellfish gathering, and shall:
- inform the Medical Officer of Health, and where relevant, the district council; and
 - investigate the cause of the problem; and
 - where the cause is due to consented activities, take all necessary remedial actions.

9.2.4 Rules

Note: The rules are set out in this chapter to assist readers who wish to view the rules in the context of relevant objectives and policies. These are the rules that are to be applied for regulatory purposes. A summary table of all the rules is provided in Part VI for convenience, but that summary table is not intended to be used for regulatory purposes. A diagram of the Port area is also provided to give guidance on the application of port zone rules. Again this is not to be used for regulatory purposes.

The rules are to be read subject to the following definitions:

The rules apply to activities in the coastal marine area only. They do not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Where an activity is classified as a prohibited activity in the rules of this plan, it shall be read as an activity for which no resource consent shall be granted (refer to section 2 of the Resource Management Act 1991).

Where a rule refers to the discharge of contaminants, it does not include a discharge of contaminants to air (refer to the Bay of Plenty Regional Air Plan).

Where the substance being discharged falls within the definition of a hazardous substance, refer to Chapter 17.

Note: Any dumping, discharging, or incineration from ships, aircraft or offshore installations may be subject to the provisions of sections 15(A), (B) and (C) of the Act and to any regulations made under those sections.

Coastal Marine Area (All Zones)

- 9.2.4(a) The discharge of stormwater to the coastal marine area is a permitted activity provided that:
- the suspended solids concentration of the water discharged does not exceed 150 g.m^{-3} ; and
 - the water discharged is substantially free of grease, oil, scums and foam; and
 - the maximum discharge does not exceed 80 litres per second for a 20% AEP storm event (5 year return period storm).
- 9.2.4(b) Except as expressly provided for or prohibited by other rules to this plan, any discharge is a discretionary activity.
- 9.2.4(c) The discharge of human sewage, other than from vessels, into the coastal marine area of harbours and estuaries, which has not passed through soil or wetland (in addition to other treatment), is a prohibited activity (Note: rule 9.2.4(e) applies to discharges of untreated sewage from vessels).
- 9.2.4(d) Discharge of seawater from live-fish holding tanks is a permitted activity provided that:
- the concentration of suspended solids in the discharge does not exceed 10 gm^{-3} ; and
 - the concentration of ammonia in the discharge does not exceed 5 gm^{-3} .
- 9.2.4(e) The discharge of untreated sewage from vessels in the Tauranga and Ohiwa harbours, is a prohibited activity within 500 metres seaward of the harbour entrances and within 500 metres of a marine farm or a gazetted Mataitai reserve. For the purpose of this rule, the entrances are defined respectively as:
- Lines drawn across the Katikati and Tauranga entrances at U13 748 109, U13 763 091, U14 883 926 and U14 902 926 respectively.
- A line drawn across the Ohiwa Entrance at W15 738 492, W15 760 487.
- Note: This rule extends the application of the Resource Management (Marine Pollution) Amendment Regulations 2002.
- 9.2.4(f) The discharge of any contaminant from cleaning of the exterior of the hulls of ships or offshore installations below the load line, or parts of a ship used for carrying cargo, is a discretionary activity.

Port Zone

9.2.4(g) Discharge resulting from the erection, reconstruction, placement, alteration of any structure expressly controlled by rule 13.2.4(o), is a non-notified limited discretionary activity. Environment Bay of Plenty restricts the exercise of its discretion to the following matters:

- the quantity, location and timing of discharge,
- coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan,
- the review of conditions and the timing and purpose of that review,
- the amount and type of any financial contribution,
- compliance monitoring,

Applications will be considered without the need to obtain the written approval of affected persons.

9.2.4(h) Discharge resulting from the following reclamation or following disturbance of the foreshore or seabed, both as expressly described in the Eighth Schedule to this plan - Outline Development Plan Port of Tauranga 1994-2004:

- construction of the Sulphur Point Wharf Extension North, and adjacent sitting basin,
- construction of the Sulphur Point Wharf Extension South, and adjacent sitting basin,
- construction of the Mt Maunganui Wharf Extension South and the adjacent Sitting Basin between the existing Mt Maunganui Wharf and the southern face of the petrochemical wharf,
- the Mount Maunganui Wharfs Future Berth Deepening as shown on plan 270-25A,
- maintenance dredging,

is a non-notified limited discretionary activity. Environment Bay of Plenty restricts the exercise of its discretion to the following matters:

- the quantity, location and timing of discharge,
- coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan,
- the review of conditions and the timing and purpose of that review,
- the amount and type of any financial contribution,
- compliance monitoring,

Applications will be considered without the need to obtain the written approval of affected persons.

9.2.5 **Methods of Implementation - Services**

Environment Bay of Plenty will:

- 9.2.5(a) Continue to routinely undertake its triennial surveys of bathing beach suitability and shellfish contamination.
- 9.2.5(b) Continue to operate the coastal component of its Natural Environment Regional Monitoring Network, in accordance with the provisions of its annual plan.
- 9.2.5(c) Continue to undertake projects and investigations into coastal water quality matters as the need arises.
- 9.2.5(d) Continue to routinely monitor authorised discharges to the coastal marine area, and take all necessary steps to ensure continuing compliance with the conditions of each consent.
- 9.2.4(e) Continue to investigate complaints related to discharges or spills to the coastal marine area, and take all steps, as appropriate, to:
- stop the continued discharge of the contaminant; and
 - ensure as far as practicable the adverse effects of the discharge or spill are remedied (including removing or neutralising the contaminant), in the first instance by the person or agency responsible for the discharge or spill but failing such by Environment Bay of Plenty staff or its agents; and
 - recover all costs associated with attendance, investigation and any clean-up operation if Environment Bay of Plenty or its agents undertook such actions; and
 - ensure as far as practicable that steps are taken to prevent a reoccurrence of the particular discharge or spill.
- 9.2.5(f) Continue to use its erosion control and soil conservation programmes for the direct or indirect protection of water quality within the coastal marine area, principally by way of farm plans and the requirement for and/or promotion of the retention of riparian strips, both on river or stream margins as well as along the coastal edge.
- 9.2.5(g) Investigate the appropriateness of establishing additional water classifications for other areas with specific management needs.

9.2.6 **Methods of Implementation - Information**

Environment Bay of Plenty will:

- 9.2.6(a) Make available the results of the investigations described in methods 9.2.5(a)-(d) inclusive by way of both technical reports and news media releases.
- 9.2.6(b) Provide information on the location of facilities for the land disposal of both sewage and bilge water from vessels as these become available.
- 9.2.6(c) Make available information on threats to the quality of the coastal waters of the Bay of Plenty and the means to avoid or mitigate such threats, principally by way of displays, pamphlets and news media releases.

9.2.7 **Methods of Implementation - Integrated Management**

Environment Bay of Plenty will:

Integrate water quality concerns in the coastal marine area with all relevant land based protocols, codes of practices, standards, criteria and guidelines that it may prepare, as well as with all land or river based pollution abatement work that it may undertake.

9.2.8 **Methods of Implementation - Advocacy**

Environment Bay of Plenty will:

- 9.2.8(a) Encourage the use of non-toxic or less toxic antifoulants on vessels.
- 9.2.8(b) Encourage practices for boat maintenance which will prevent significant quantities of toxic or harmful substances from entering the sea.
- 9.2.8(c) Encourage practices which will prevent vessels from discharging significant quantities of contaminated bilge water and other contaminants into the sea.
- 9.2.8(d) Encourage the boat industry to introduce compulsory sewage holding tanks for all vessels which provide accommodation.
- 9.2.8(e) In conjunction with district councils, promote or otherwise ensure adequate provision is made for the collection, treatment and appropriate disposal of vessel maintenance and cleaning residues, as well as sewage from vessel holding tanks and contaminated bilge water.

9.2.9 **Methods of Implementation - Education**

Environment Bay of Plenty will be actively involved by way of educational material and promotion in raising the awareness of the regional community regarding the need to, and means of, maintaining and/or enhancing the quality of the coastal waters of the Bay of Plenty. Where practicable, education effort will be coordinated with those of other interested parties.

10 Taking, Using, Damming or Diversion of Coastal Water

10.1 Explanation/Principal Reasons

Section 14 of the Act places certain restrictions on the taking, use, damming and diverting of water in the coastal marine area.

With regard to the taking, use and damming of water in the coastal marine area, the Act draws a distinction between “coastal water” and “open coastal water”. “Coastal water” is all seawater including that with a substantial freshwater component, and that which is in estuaries, fiords, inlets, harbours and embayments. “Open coastal water” is all seawater that is remote from estuaries, fiords, inlets, harbours and embayments.

No person may take coastal water other than open coastal water, unless it is for domestic or recreational uses (and where there will be no associated adverse effects), for firefighting purposes, or unless otherwise allowed by a resource consent or a rule in the coastal plan. With regard to open coastal water, no person may take, use, dam or divert it in a manner which contravenes a rule in the coastal plan, unless allowed to do so by a resource consent or by section 20 of the Act (Certain Existing Lawful Activities Allowed).

However, it is important to note that these restrictions relating to the taking and use of seawater (either coastal or open coastal) do not apply to the operational needs of ships, boats and vessels where prior to 1 October 1991 no authorisation or license was required.

Environment Bay of Plenty considers there is no need to control the taking or use of coastal water remote from harbours or estuaries. There is so much coastal water that taking any of it is unlikely to have adverse effects. However, within harbours and estuaries the taking of coastal water may result in adverse effects, depending both on the quantity and the rate it is taken. Consequently taking coastal water from these places is regulated in this plan.

In addition, the damming of coastal water within harbours and estuaries may also have adverse effects, in particular, it may alter the physical properties of seawater, such as temperature and dissolved oxygen. This is another reason for regulating the taking of coastal water from these places.

In most cases it is likely that the taking or damming of coastal water will require the placement or construction of structures within the coastal marine area and the disturbance of foreshore or seabed (and in certain circumstances may also involve associated discharges of used seawater). These associated activities are managed by the provisions in other chapters (specific to the activities in question) of this plan.

Diversion of water in the coastal marine area is an activity which is normally related to altering the location of river mouths. Such diversions may be necessary as a result of the dynamic nature of some river mouths which meander across beaches and threaten property or other values. Diversions may also be necessary when river mouths become either partially or fully blocked. Such diversions would involve either making a new cut through to the sea (diversion) or excavating out the blocked area (dredging). The former activity is governed by the provisions of this chapter of the plan, whereas the latter (dredging) is governed by the provisions of chapter 14. In some cases diversion will also involve closing the existing river

mouth in order to make a new cut effective. Chapter 14 of this plan deals with activities of this kind.

In some instances the partial blocking of a river mouth can have serious upstream consequences. This becomes most apparent with flood protection or drainage schemes, where impediments to flow will cause water to build up. This in turn compromises the integrity of flood protection works or the ability of drains to perform efficiently.

The movement of river mouths (or their blockage) can be seen in part as a natural process which results from a combination of coastal, climatic and fluvial variables. However, this natural process is often affected by non-natural events (both historic and current) which tend to increase the frequency or amount of river mouth movement. In such circumstances the movement cannot be held to be entirely natural, and some remedial action (i.e. diversion) may well be appropriate.

However, the diversion of rivers in the coastal marine area is an activity which may have adverse environmental effects, depending on the size of the river and the magnitude of the diversion. The adverse effects of diversion could harm habitat (e.g. shellfish beds) and natural character as well as trigger the need for further control (or maintenance) works in the future.

Conversely, however, some positive effects could also result, such as increasing river flow which could, in turn, improve flushing capability and enhance water quality upstream. Diversions may also prevent erosion of dunes and so have a positive effect in protecting these coastal hazard buffers.

10.2 Issue, Objective, Policies and Methods

10.2.1 Key Issue

Activities associated with the allocation of coastal water, such as taking, diverting and damming, can adversely affect the coastal marine area. In some circumstances, coastal water diversion, can adversely affect the environment, including habitat and natural character.

10.2.2 Objective

10.2.2(a) No significant changes in marine ecosystems from the taking, diversion or damming of water.

10.2.2(b) The diversion of natural watercourses only where necessary to protect human safety.

10.2.3 Policies

10.2.3(a) Coastal water should not be taken in a quantity or at a rate that would cause adverse effects on marine fauna or ecosystems.

10.2.3(b) Damming or diversion of coastal water should not adversely affect ecosystems, the natural character of the coastal environment, or increase the danger of flooding.

10.2.3(c) Where estuaries are being adversely affected by existing flood protection and drainage works, then remedial work should be undertaken, where practicable, when maintenance or additional works are undertaken.

10.2.3(d) The integrity of major flood protection schemes is to be protected.

10.2.4 Rules

Note: The rules are set out in this chapter to assist readers who wish to view the rules in the context of relevant objectives and policies. These are the rules that are to be applied for regulatory purposes. A summary table of all the rules is provided in Part VI for convenience, but that summary table is not intended to be used for regulatory purposes.

The rules are to be read subject to the following definition:

The rules apply to activities in the coastal marine area only. They do not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Coastal Marine Area (All Zones)

- 10.2.4(a) The use of any coastal water or open coastal water is a permitted activity.
- 10.2.4(b) The taking of open coastal water is a permitted activity.
- 10.2.4(c) The taking of coastal water from within harbours or estuaries is a permitted activity, provided that no more than 15 cubic metres is taken each day.
- 10.2.4(d) The taking of coastal water from within harbours or estuaries at rates or quantities greater than 15 cubic metres a day is a discretionary activity.
- 10.2.4(e) The damming of coastal water or open coastal water is a discretionary activity.
- 10.2.4(f) Diversion of coastal water to maintain existing diversions which are in the flood protection or drainage schemes presently maintained by Environment Bay of Plenty or its agents and the Waihi Drainage District Society Incorporated, is a controlled activity subject to the following standards:
- the diversion is not in the Coastal Habitat Preservation Zone;
 - refuelling, lubrication or fuel storage must not take place on the foreshore or within 30.0 metres of any coastal water;
 - all material excavated must be placed either into the former river channel or spread over the foreshore (sand only).
- The matters over which Environment Bay of Plenty reserves control are these:
- the duration of the consent;
 - the effects on indigenous flora and fauna, natural character and cultural values;
 - remediation of damage to estuaries and wetlands;
 - the design, dimensions and location of the diversion;
 - the timing of the diversion works;
 - information and monitoring requirements;
 - the administrative charges payable.
- 10.2.4(g) Any diversion of coastal water not expressly provided for by rule 10.2.4(f), is a discretionary activity.

11 Coastal Hazards

11.1 Explanation/Principal Reasons

Coastal hazards are an issue of regional significance within the Bay of Plenty, and consequently need to be addressed under the requirements of sections 30(1)(b) and 30(1)(c)(iv) of the Act.

Most natural processes which cause coastal hazards originate at sea, but the major effects of these processes are nearly always felt on land. Natural coastal hazards are an example of an issue which straddles the administrative boundary between land and sea. Thus the management of coastal hazards needs to be integrated between Environment Bay of Plenty and the relevant district councils (in accordance with sections 30(1)(a) and 31(a) and (b) of the Act).

Both Environment Bay of Plenty and the district councils have responsibilities as set out in the Act, the New Zealand Coastal Policy Statement and the Bay of Plenty Regional Policy Statement. Environment Bay of Plenty is responsible for setting out in this plan objectives, policies and methods that provide a regional framework for management of coastal hazards. Environment Bay of Plenty is not responsible for making rules which control subdivision and building. Control of subdivision and building is the responsibility of district councils. The relevant district council should be contacted if more information on regulation of subdivision and building is required.

This plan does regulate the construction of protection works within the coastal marine area. The rules are necessary to provide a regulatory framework which ensures that the adverse effects of protection works are avoided, mitigated or remedied. In addition, the Bay of Plenty Regional Land Management Plan contains provisions controlling the effects of vegetation removal and earthworks on land adjacent to the sea.

The types of natural hazards that are generated in the Bay of Plenty coastal marine area include tsunami, storm erosion and storm flooding. The most serious of these are storm erosion and storm flooding. Erosion is actually a natural process, as coastlines are dynamic features which periodically shift between phases of accretion and erosion. Similarly, flooding (or storm inundation) is also a natural process, although it is restricted to low lying areas. Both erosion and flooding have become serious issues within the past decade as a result of people's desire to locate near the coast, an event which turns such natural cycles into coastal hazards.

It is important to take into account the combined effects of storm erosion and flooding. This is because the extent of flooding will be influenced by the amount of erosion. In other words, if the flood height of a storm was not sufficient by itself to overtop the foredune it could well become so if the foredune is eroded down during the storm.

Storm induced coastal flooding is a significant coastal hazard in this region. It is caused by the temporary local rises in sea level that accompany storms and also causes storm wave run-up. This phenomenon is known as 'storm surge'. The combination of a powerful storm surge and a high spring tide can cause particularly bad flooding. The extent of storm surge can vary from one location to another. For example, in the case of Cyclone Fergus in 1997, the storm surge at Moturiki was 0.6 metres, whereas at Whakatane it was 1.0 metres. Within enclosed harbours and estuaries, storm surge is often the dominant coastal hazard.

The prospect of global climate change has added an extra dimension to the coastal hazards issue in recent years. Most scientists believe that climate change, with a

consequent rise in sea level, is likely in the future. The rising sea will flood very low lying areas, and accelerate beach and cliff erosion. Dunes and saltmarsh which provide natural protection will also be affected.

The International Panel on Climate Change (IPCC) publishes projections of future sea level rise. Not all scientists agree with these projections. However, a prudent council exercising the appropriate duty of care would be unwise not to adopt those projections. Accordingly this plan advocates the application of the most recent IPCC best estimate for sea level rise, which is currently the IPCC 1995 IS92a scenario projection, when identifying coastal hazard areas.

Information on the coastal hazards of the region and the coastal hazard assessment methods used in the preparation of this plan can be found in the following background reports: J G Gibb, *Initial Assessment of Areas Sensitive to Coastal Hazards for Selected Parts of the Bay of Plenty Coast*, Bay of Plenty Regional Council 1994; R A Warrick and others, *Section 32 Analysis Bay of Plenty Draft Coastal Hazards Policy*, University of Waikato, 1993; A Swales and K Smith, *A Comparison of Coastal Hazard Zone Studies for Coastal Land Use Management in the Bay of Plenty*, NIWA 1994; J G Gibb, *Review of Selected Factors for Assessment of Areas Sensitive to Coastal Hazards – Bay of Plenty Region*, Bay of Plenty Regional Council, 1999. These are available from Environment Bay of Plenty. In addition, Environment Bay of Plenty maintains a regional coastal processes monitoring programme, and historical data on shoreline positions. Specific research has been conducted for some beaches and is available from either Environment Bay of Plenty or the district council.

Management of coastal hazards needs to be on the basis of reasonable scientific information of the occurrence and extent of coastal hazards. It is important that the same general scientific standards and principles are applied in identifying and mapping the extent of coastal hazards. The result, otherwise, would be inconsistent identification of coastal hazard areas. It is conceivable that, in the absence of any agreed standards, the high financial returns to be gained from coastal development could provide an incentive to select methods that underestimate the degree of risk from coastal hazards. These problems could, in turn, lead to inconsistent or inappropriate policy formulation. Having general standards ensures that, in future, coastal property developers will face similar development standards throughout the region, and that district councils and coastal property owners will have access to information of equivalent quality throughout the region.

Environment Bay of Plenty has commissioned much scientific research and undertaken lengthy consultation with experts, practitioners and district councils on the methods to use for scientific identification of coastal hazard areas. Consequently, the plan lists factors that should be taken into account in the calculation of coastal hazard areas. It also sets quantitative standards when the research has been detailed enough to satisfy Environment Bay of Plenty that the figures set are appropriate.

It is important that research costs are paid for by the community that gains the most benefit, and ideally should be incurred at the start of urban development proposals rather than after the development has been carried out. The cost of conducting scientific research to define coastal hazard areas is relatively minor in comparison to the costs of damage to property and infrastructure if coastal hazards are ignored. However, the cost of that research is not insignificant.

It would be too costly to identify in detail the coastal hazard areas for the entire coastline of the region in this plan. It is feasible, however, for Environment Bay of Plenty to indicate to the public and developers those areas which may be subject to coastal hazards, and which should be subject to detailed research. These areas are called areas sensitive to coastal hazards (ASCH) in this plan and are shown in the maps in Volume Two of this plan. Background information on the ASCH is contained in the reports: J G Gibb, *Initial Assessment of Areas Sensitive to Coastal Hazards for Selected Parts of the Bay of Plenty Coast*, Bay of Plenty Regional

Council 1994 and J G Gibb, *Review of Selected Factors for Assessment of Areas Sensitive to Coastal Hazards – Bay of Plenty Region*, Bay of Plenty Regional Council, 1999.

The ASCH do not define an area within which rules in this plan control or prohibit activities. The purpose of the ASCH is to define those areas of the open coast where caution should be exercised when considering subdivision use and development. This should involve district councils undertaking or requiring resource consent applicants to undertake detailed research on coastal hazards. For land on the open coast but inland of the ASCH, the risk of coastal hazards is so low that it is not necessary to incur the costs of coastal hazard research, or any consequent constraints on development.

There are existing urban areas within the ASCH. These include for example, Waihi Beach, Papamoa and Ohope. As these areas have already been subdivided and developed, conducting individual coastal hazard assessments for each property would not be cost effective or very practical. Consequently, the plan advocates that the relevant district councils commission research to identify the coastal hazard areas for existing urban areas within the ASCH. To achieve consistency, district councils need to include those areas that they have zoned for future urban development as well as existing urban areas.

For new subdivisions conducting the detailed coastal hazard research prior to application for resource consent is appropriate in order that subdivision can be designed to ensure that buildings and infrastructure will not be located in the coastal hazard area. Therefore the plan advocates that applications for new urban subdivisions include an assessment identifying the coastal hazard area, if the proposed subdivision is within an ASCH but not in an existing urban area. For consistency, both applications for resource consents and applications for private plan changes, should meet this requirement.

A large part of the coast with the ASCH is rural land. It is not considered necessary to make regional policy to protect non residential land uses such as forestry or farming from coastal hazards, because the average value of the assets and the risk to life per unit area are low. However, some of this land may be developed for residential or commercial purposes in the future. In that situation the value of new assets and infrastructure, and the resulting population density, could create a significant risk in a coastal hazard area.

Once coastal hazard areas have been identified, they should be included in district plans along with appropriate policies and rules regarding development within those areas so that the district councils can exercise their statutory responsibilities. Councils need to address two different circumstances. First, what needs to be done about existing development in coastal hazard areas. Second, what policies should apply to new development.

In the past, the common reaction to coastal hazard threats to existing property has been to build protection works. However, New Zealand and international experience indicates that protections work often fail to achieve their intended purpose, and usually have significant adverse effects on public access to, and enjoyment of the natural character of the beach. Consequently it is necessary to consider other options such as doing nothing, abandoning or relocating at risk assets, as well as considering the option of protection works. When considering options, the preservation of natural features in the Bay of Plenty, such as dune systems and saltmarshes, are important in acting as a natural means of protection from coastal hazards, such as sea level rise and coastal flooding.

The requirement to adopt the best practicable option for the future is clearly set out in policy 3.4.6 of the New Zealand Coastal Policy Statement. It is not possible for this plan to predetermine what is the best practicable option for individual beachfront settlements. Each beach is subject to different coastal processes, and the form and value of beachfront development may vary from place to place. Also,

substantial research and consultation will be required, which is beyond the scope of this plan.

Given that the district councils are responsible for control of urban development, it is appropriate that district councils address the matter of defining the best practicable option for those areas of existing development at risk from coastal hazards in the near future. This process should be done in consultation with the local community and other interested parties to ensure that all options and view points are adequately considered. Because it takes time to consult and conduct scientific investigations, the process should be applied pro-actively rather than being left until actual storm damage occurs.

Protection works come in two broad categories known respectively as 'hard protection works' and 'soft protection works'.

Hard protection works include seawalls made of concrete, rock, wood, steel or other hard materials. The intent is to provide a physical barrier to waves and thereby protect the land behind the wall from erosion. However, the underlying erosion process will continue. Where this is a trend of erosion (including, in future, as a result of sea level rise) the beach in front of the seawall will become narrower as the whole beach profile moves landwards, until there is no dry beach remaining. The loss of the beach buffer also enables larger waves to reach the seawall, which increases undermining and damage to the seawall, leading to high maintenance and upgrading costs over time. Many people find the appearance of hard protection works unattractive and inconsistent with the protection of the natural character of the coast. The placement of seawalls on a beach can also cover or reclaim part of the beach and can affect access to the beach.

Seawalls can therefore have direct and indirect adverse effects on natural character, landscape values, amenity values and public access.

Soft protection works are designed to maintain and enhance the natural capacity of beaches, dunes and vegetation to absorb and disperse wave energy. Soft protection works include dune care programmes designed to restore damaged dunes, importation of sand on to beaches, and the establishment of saltmarsh or mangroves on harbour margins. The costs of soft protection works vary considerably.

Soft protection works are generally more consistent with recreational use and the natural character of beaches. For these reasons they are increasingly preferred to hard protection works. However, soft protection works are not a universal panacea. For example, once dunes have been covered by roads or buildings, dune care programmes could not be applied to restore the dunes. Also they may not be effective on beaches undergoing long term sand loss from erosion or which are subject to severe wave attack. Likewise, artificial beach replenishment depends on an ongoing source of suitable sand at an acceptable cost.

Experience to date indicates that it is very difficult to provide long term protection to properties from coastal hazards at a reasonable cost and without significant effects on beaches. For this reason Policy 3.4.5 of the New Zealand Coastal Policy Statement requires that new development should be so located and designed that the need for hazard protection works is avoided.

For that reason this plan advocates that new development not be located within coastal hazard areas on the open coast identified by district councils. To do so would increase the total risk, and would lead to the need for, or at least a demand for, protection works. This policy applies to further subdivision and redevelopment of existing areas for such purposes as infill residential, high rise and commercial development. This should not affect any existing buildings or other existing activities that have existing use rights as described in section 10 of the Act.

Some facilities have a functional need to locate on the coastal margins. This could for example include ports, boat ramps, dunecare fences, surf rescue facilities; subject to appropriate conditions to mitigate effects. The details of regulation are, however, best left to the relevant district council to formulate in consultation with interested parties.

One of the most effective means of avoiding or mitigating the effects of storm-induced inundation is to ensure buildings are situated high enough. In order to achieve this, it is necessary to set minimum ground levels upon which buildings (in particular dwellings and public utilities) may be built. If the ground level is below the minimum level, then earthworks can be used to build the ground up to the minimum level. However, earthworks may not always be appropriate. For example, they would not be appropriate in situations where the land is prone to erosion as well as flooding, or where the earthworks would block flood ways and ponding areas, impede the natural flow of surface water, or adversely affect the natural character of the coastal environment.

There are areas of rocky coastline not included in the areas sensitive to coastal hazards identified in this plan. These parts of the coast are composed of hard metamorphic and volcanic rocks that are relatively resistant to coastal erosion and have been excluded from the maps for that reason. Nevertheless, as many of these areas are relatively steep, there is a potential risk of instability or landslide. It is the responsibility of district councils to address the hazard of instability as they would with any other steep terrain in their districts. It is also important to ensure that the potential for instability is not made worse by inappropriate vegetation removal or earthworks. Vegetation removal and earthworks are controlled by Environment Bay of Plenty under the Bay of Plenty Regional Land Management Plan.

Finally, the opportunity exists to provide for other issues, such as sensitive natural areas, recreation, public access and areas of special significance to tangata whenua. This approach utilises what are commonly referred to as reserves or setback areas, of which the coastal hazard area is just one component. The boundaries of the two may coincide, or alternatively (depending on the extent of the ancillary values requiring protection), the setback area may extend further inland. By utilising setback areas it is possible to achieve integrated management of multiple issues, and hence this approach is supported by Environment Bay of Plenty.

For the purpose of integrated management, it is desirable to carry out research into recreational needs, cultural values and natural character, at the same time as conducting research on coastal hazards. This approach ensures that the reserves or setbacks adopted will adequately address all the relevant coastal values and hazards.

11.2 Issue, Objective, Policies and Methods

11.2.1 Key Issue

Coastal hazards pose a threat to human life, property and the environment, but they are difficult to predict, avoid and mitigate, they cross administrative boundaries, and they have not always been adequately provided for.

11.2.2 Objective

No increase in the total physical risk from coastal hazards.

11.2.3 Policies

11.2.3(a) To take a precautionary approach to the installation of coastal hazard protection works.

Where existing subdivision, use or development is threatened by a coastal hazard, coastal protection works should be permitted 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 adverse environmental effects to the extent practicable.

When considering the option of protection works, the option of using soft protection works such as dune care, beach replenishment, and restoration of estuarine vegetation, should be considered.

When a district council identifies coastal hazard areas that include urban areas it should proactively apply this policy in consultation with the local community, Environment Bay of Plenty and other interested parties. The best practicable option selected should be included in the district plan.

11.2.3(b) To provide an overview of those areas within the open coast which are sensitive to coastal hazards by identifying areas sensitive to coastal hazards (ASCH).

11.2.3(c) Where existing urban subdivision use and development falls within an area sensitive to coastal hazards (ASCH) shown in the maps to this plan, the relevant district council should commission research to identify a coastal hazard area, and include it in the relevant district plan. That research should comply with policy 11.2.3(f). Policy 11.2.3(c) applies to those areas zoned for future urban development as well as existing urban areas, but does not apply to urban subdivision and land use promoted in a private plan change. Once a coastal hazard area has been identified in a proposed district plan in accordance with policy 11.2.3(f) of this plan, the ASCH identified in this plan have no further relevance to the control of subdivision, use and development in those areas and the ASCH identified in this plan shall have no further relevance to the definition of an area sensitive to coastal hazards for that area.

11.2.3(d) The following matters should be taken into account when considering new subdivision, use and development within existing urban areas located in coastal hazard areas identified by district councils:

- Policy 3.4.5 of the New Zealand Coastal Policy Statement: “New subdivision, use and development should be so located and designed that the need for hazard protection works is avoided.”
- Policy 11.3.1(b)(x) of the Bay of Plenty Regional Policy Statement: “To ensure that new subdivision, use and development, and significant infrastructure are located and designed to avoid significant natural hazards, unless there is a particular functional need to locate in an area subject to significant risk. In particular, new development within existing settlements which are at risk from natural hazards, shall not result in increased vulnerability, and should aim to reduce net vulnerability over time.”
- The need to avoid compromising implementation of the best practicable option identified in accordance with policy 11.2.3(a) of this plan.
- The ability to manage the physical risk from coastal hazards through appropriate conditions on resource consents.

11.2.3(e) Applications of new subdivision, use and development which are proposed to take place within the areas sensitive to coastal hazard (ASCH) shown in the maps of this plan should be supported by a coastal hazards analysis of that proposed area of subdivision, use and development. The New Zealand Coastal Policy Statement policy 3.4.5 states that “New subdivision, use and development should be so located and designed that the need for hazard protection works is avoided.”

Policy 11.2.3(e) applies to both resource consents and private plan changes but does not apply to subdivision use and development in those parts of the ASCH in which policies 11.2.3(c) or 11.2.3(d) are to be; or have been applied by the district council.”

11.2.3(f)

The following standards and criteria should be applied to the identification of coastal hazard areas for the purposes of policies 11.2.3(c) and 11.2.3(e):

- Erosion impacts of sea level rise: The Intergovernmental Panel on Climate Change best estimate, presently the IPCC 1995, IS92a scenario estimates (this is 0.49 metres by the year 2100), should be used.
- Shoreline response to storm erosion and flooding: Scientifically appropriate models should be used, such as those based on, but not restricted to, the Bruun Rule.
- Planning horizon: A 100-year planning horizon should be used.
- Long term trend: This should be derived from cadastral, aerial photography, surveys, or other reliable historic data. The reference shore adopted should be the toe of the foredune where these land forms occur, or elsewhere should be the seaward limit of vegetation or some other datum as appropriate.
- Short term fluctuation: This should be derived from the most reliable records available at the time for particular stretches of the coast, and should err on the side of caution.
- Dune stability factor: This should be based on the angle of repose (AOR) of the dune sands as defined locally.
- Factor of safety: The coastal hazard area assessment should include an appropriate factor of safety, either built into the above criteria and standards, or added on in the final stage in the calculation.
- Any profiles (cross sections) should be carried out to accepted surveyors standards and practice. All levels must be in terms of mean sea level to Moturiki datum.

11.2.3(g)

For estuaries and harbours, the minimum ground levels or building platforms are to be determined by joint research by the relevant district councils and Environment Bay of Plenty. The following standards and factors should respectively be applied and taken into account:

- sea level rise which is currently 0.49 metres;
- minimum annual exceedance probability of 2% (1% is recommended);
- tide level;
- barometric set up;
- wind set up;
- estuary effects;
- factor of safety (0.5 is recommended).

Notes:

- 1 The sea level rise should be the official best estimate by the Intergovernmental Panel on Climate Change (currently the IPCC 1995, IS92a scenario estimate of 0.49 metres) over a 100-year planning horizon.
- 2 A 2% annual exceedance probability (AEP) means that those planning the development must design for a storm surge that has 2% chance of occurring in any one year (or on average, will occur once every 50 years). This is

specified as a minimum standard. It is recommended that the 1% AEP standard is adopted for large new subdivisions, or sites where the value of assets at risk is high (or difficult to insure), or where there is infrastructure (e.g. pumping stations, electricity substations) which is important to the wellbeing of the community.

- 3 It is recommended that the factors listed in bullets 3 to 5 are estimated as joint probabilities, by using an appropriate statistical technique. Environment Bay of Plenty has information that can assist in estimating these factors. An example of joint probability analysis is summarised in D Goring and others, *Extreme Sea Levels on the Mount Maunganui Shoreline* (Moturiki Island), NIWA, 1997. This is available from Environment Bay of Plenty. An alternative and simpler technique is to sum the individual maximums for each factor. However, this will usually give a higher estimate of storm surge height.
- 4 Estuary effects includes the dynamic effect of storm surge in estuaries, wave set up at the estuary mouth which forces water into estuaries and differential wind stress across estuaries. Allowance of 0.33 metres is recommended if specific information is not available.
- 5 The factor of safety allows for imprecision in estimates of the factors listed in 11.2.3(g), and any other factors not explicitly estimated, e.g. wave run up on to the shores of the estuary.

11.2.3(h) Until the work in 11.2.3(g) is completed for the landward margins of Ohiwa Harbour, the minimum ground level upon which buildings may be constructed should be 2.70 metres above Moturiki Datum plus the latest official IPCC best estimate of sea level rise (which is currently 0.49 metres), based on:

- maximum tide level of 1.00 metres;
- barometric set up of 0.33 metres;
- wind set up of 0.54 metres;
- estuary effects of 0.33 metres;
- factor of safety of 0.5 metres.

11.2.3(i) To ensure that any earthworks undertaken for the purposes of complying with policies 11.2.3(g) and 11.2.3(h) will not be subject to erosion, adversely affect the natural character of the coastal environment, or restrict flood drainage.

11.2.3(j) To protect natural values and features that provide natural hazard protection. This includes but is not limited to dunes, active offshore sand reservoirs and estuarine vegetation. Allowance should be made for the future inland migration of some natural features as a result of coastal processes (including sea level rise).

11.2.3(k) Lowering of foredunes is to be avoided.

11.2.3(l) To take into account the most recent mid range IPCC IS92a sea level rise scenario when considering the design and location of structures in the coastal marine area.

11.2.3(m) Buildings on the rocky open coast outside of the identified areas sensitive to coastal hazards, should be located so as to avoid the hazard of storm surge and wave run up. A minimum new building platform height of 6 metres above mean high water mark is recommended.

11.2.3(n) Buildings on the rocky open coast outside of the identified areas sensitive to coastal hazards, should be located so as to avoid the hazard of cliff or slope instability.

11.2.3(o) To discourage residential development adjacent to river mouths or other areas potentially at risk from river mouth meandering.

- 11.2.3(p) The ability of pohutukawa and other coastal cliff vegetation to maintain the stability of coastal cliffs is to be protected. Damage to any part of the plant, including the root systems, is to be avoided.
- 11.2.3(q) To encourage the incorporation of coastal hazard zones into wider building set backs or reserves established to provide for recreation, natural character, or waahi tapu. Where appropriate, research to identify coastal hazard areas should be carried out in conjunction with research on the other values of the coast.
- 11.2.3(r) To encourage and support initiatives designed to involve the community in Coast Care.
- 11.2.3(s) To promote consistency and integration with regard to future research on coastal hazards within the Bay of Plenty and neighbouring regions.

11.2.4 **Methods of Implementation - Facilitation and Coordination**

Environment Bay of Plenty will:

- 11.2.4(a) Promote and encourage community groups to become involved in the management (including Coast Care) of coastal hazards.
- 11.2.4(b) Promote and be fully involved in setting up an inter-regional forum in order to ensure both consistency of approach and data sharing between regional councils with regard to coastal hazards.
- 11.2.4(c) Encourage further research by other appropriate agencies into an integrated approach to the issues of coastal hazards.

11.2.5 **Methods of Implementation – Services**

Environment Bay of Plenty will:

- 11.2.5(a) Contribute on an equitable basis towards the costs of implementing a regional community coast care programme.
- 11.2.5(b) Undertake research on the issue of harbour shore erosion and the effects of harbour shore protection works.
- 11.2.5(c) Work with Opotiki District Council to carry out detailed coastal hazard research for those areas zoned for coastal residential purposes and will consider providing financial assistance for that research.

12 Occupation of Space

12.1 Explanation/Principal Reasons

The Act, in section 12(2)(a), clearly identifies the occupation of land within the coastal marine area (including the foreshore, seabed, water column, water surface and air space) as a specific activity requiring a coastal permit. The issues are competition for the use of space within the coastal marine area and the exclusion of public access from areas where a consent holder has been granted rights of occupation.

Section 122 of the Act provides further direction as to the nature of occupation permits. Also, Policy 3.5.1 of the New Zealand Coastal Policy Statement, May 1994, provides more specific guidance as to the circumstances in which it may be appropriate to restrict public access.

The granting of a permit to occupy gives the permit holder exclusive rights to occupy that area. This is the right to exclude the public from the coastal marine area addressed by the permit. A permit can specify either complete exclusion of the public, or partial exclusion. For example, a permit may specify the exclusion of the public from a wharf for part of the day only. Section 12(2)(a) of the Resource Management Act does not apply to private land. Therefore coastal permits cannot be obtained from Environment Bay of Plenty to occupy private land within the coastal marine area. Persons wishing to enter or occupy private land should contact the owner of that property.

Exclusive occupation can be unrelated to the erection of structures. For example it is conceivable that a recreational group may wish to exclusively occupy a part of the foreshore either temporarily for a particular event, or permanently for a particular activity.

The tradition of public access to and use of the coastal marine area is an important value in New Zealand society. The importance of maintaining public access is given extra status in section 6(d) of the Act. It is also given further emphasis in the policies of the New Zealand Coastal Policy Statement.

Accordingly, the discretion to grant exclusive rights of occupation within the coastal marine area should be exercised with particular regard to the value of public access to and use of the coastal marine area. This requires a case by case consideration of necessity, reasonableness and the public interest. Accordingly, all exclusive occupation is a discretionary activity with two exceptions.

One exception relates to short-term recreational events requiring exclusive occupation. In this case, it is unlikely that there would be a significant adverse effect on public access, provided that the standards are observed. In addition a requirement for a notified discretionary permit would probably render many recreational events impracticable because of the administrative cost and delay.

Vessel mooring has been controlled under the Harbours Act in the past and continuation of this approach is considered to be an administratively cost-effective and appropriate method of allocating scarce mooring space. For this reason the plan designates mooring areas in the maps. Within these areas occupation by mooring is a permitted activity. However, mooring users are required to adhere to all harbour bylaws regulating mooring. Outside of the designated mooring areas, coastal permits are required for occupation by mooring, and applications will be considered on a case by case basis.

In accordance with section 384A of the Resource Management Act, the Port of Tauranga Limited has obtained a coastal permit from the Minister of Transport to occupy the coastal marine area adjacent to its port-related commercial undertakings, from 30 September 1991. That permit expires on 30 September 2026. Any additional requests to occupy the coastal marine area for development after 1991 are subject to the normal coastal permit process.

12.2 Issue, Objective, Policies and Methods

12.2.1 Key Issue

Exclusive occupation of the coastal marine area can have adverse effects on public use of the coastal marine area and cultural values associated with particular areas.

12.2.2 Objective

Provision for the exclusive occupation of land and any related part of the coastal marine area while avoiding, remedying or mitigating any associated adverse environmental effects.

12.2.3 Policies

12.2.3(a) To recognise and provide for the benefits to the wellbeing of present and future generations of maintaining public access to the coastal marine area. Public access should only be restricted where the criteria in policy 7.2.3(a) apply, or specific areas have been identified in accordance with method 7.2.4(a).

12.2.3(b) Environment Bay of Plenty will take into account the environmental advantages of land-based aquaculture operations which avoid occupation of the coastal marine area.

12.2.4 Rules

Note: The rules are set out in this chapter to assist readers who wish to view the rules in the context of relevant objectives and policies. These are the rules that are to be applied for regulatory purposes. A summary table of all the rules is provided in Part VI for convenience, but that summary table is not intended to be used for regulatory purposes.

The rules are to be read subject to the following definitions:

The rules apply to activities in the coastal marine area only. They do not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Coastal Marine Area (All Zones)

12.2.4(a) The occupation of land and any related part of the coastal marine area, which is land of the Crown, or is vested in Environment Bay of Plenty, is a discretionary activity.

12.2.4(b) Notwithstanding rule 12.2.4(a), the occupation of land and any related part of the coastal marine area, which is land of the Crown, or is vested in Environment Bay of Plenty, for recreational events is a permitted activity provided that these conditions are met:

- the event does not involve occupation for more than seven days in any 12 month period;
- there is no occupation of the Port Zone, or the Coastal Habitat Preservation Zone;
- there must be consultation with the territorial authority which administers the adjacent land area;
- provisions are made to protect public safety;
- toilet facilities which do not dispose human waste into the coastal marine area are provided;
- any rubbish or other waste material resulting from the activity must be removed from the coastal marine area;
- the public must be notified about the proposed activity and any associated restrictions on the use of the area, at least seven days prior to the activity commencing;
- the activity must not obstruct other persons operating in accordance with an occupation permit.

If any of the standards listed above are not complied with, the recreational event is a discretionary activity.

12.2.4(c) Notwithstanding rule 12.2.4(a), occupation by mooring within the mooring areas shown in the maps to this plan, is a permitted activity.

13 Structures

13.1 Explanation/Principal Reasons

This chapter of the plan deals with the erection, reconstruction, placement, alteration, extension, removal and demolition of structures within the coastal marine area. It deals with all environmental effects associated with these activities except that of occupation of space (see chapter 12 – Occupation of Space) and that of the disturbance to foreshore or seabed which is associated with them (see chapter 14 – Disturbance, Deposition and Extraction).

Structures are defined in the Act. They exclude road causeways within the coastal marine area, as these are reclamations (see chapter 15 – Reclamation). However, they do include infrastructure such as bridges, culverts, sewers, water pipelines, gas pipelines, and telecommunication and electrical transmission lines (including pylons). Although the provision of these services is without doubt in the regional interest it does not override the need for them to avoid or mitigate any associated adverse environmental effects to the fullest extent practicable.

Some structures enable people and communities to provide for the safe and efficient use of resources and opportunities. However, the Act requires that the coastal environment be protected from “*inappropriate ... use and development*”. This implicitly requires that Environment Bay of Plenty must deal not only with new proposals for structures within the coastal marine area but also with the effects of existing structures (both authorised and otherwise). The large number of unauthorised reclamations that have occurred within the Bay of Plenty which have structures associated with them complicates this issue.

There are a large number of existing unauthorised structures within the coastal marine area of the Bay of Plenty. Most of these are erosion protection works such as sea walls. The impact of these may appear at first to be minor, yet they alter the visual quality (natural character) of the coastal environment, they may interfere with public access, and they may actually cause more erosion than they prevent (i.e. off-site effects). However, provided that they are not causing any such adverse effects it is appropriate that they be duly authorised to remain, provided they are maintained in a safe condition.

Derelict structures (whether authorised or not) which become safety hazards need to be either removed or repaired, at the expense of the owner or occupier. If an owner or occupier cannot be identified it is appropriate that responsibility for the repair and maintenance of these structures be vested in some other person or agency willing to undertake such work. Environment Bay of Plenty may, at its discretion, undertake the removal of such structures.

Environment Bay of Plenty has recently undertaken an inventory of all structures on the shoreline in all harbours, estuaries and river mouths along the coast. This inventory includes an assessment of their condition and hazard potential, and will be used as a basis for bringing all structures located within the coastal marine area up to acceptable safety standards.

Ports, by necessity, are located in the coastal marine area. The Port of Tauranga is a commercial port with a large number of facilities. Development of the port should take place in a planned manner. Environment Bay of Plenty considers that the most appropriate strategy is to manage structures (and all extensions, alterations and modifications thereto) associated with ports, by the use of zones, policies, rules and the outline development plan contained within the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004 of this plan. Such an approach allows for the orderly and timely development of the port as needs arise in the future (refer to chapter 3 – Plan Structure for more detail).

Additionally, Environment Bay of Plenty recognises that there are certain areas of the foreshore and seabed which form an integral part of long held district planning proposals regarding future development. This applies in particular to “downtown” areas where a waterfront focus is appropriate and in which businesses orientated towards recreation, leisure and tourism are seen as desirable. Environment Bay of Plenty considers provision should be made in this plan to recognise the special nature of such areas and to provide for their structural development in an appropriate manner (refer to chapter 3 – Plan Structure, for more detail).

The areas in which such development will be provided for are limited to well-defined places which are already extensively modified and which are considered appropriate locations for future development of a similar nature. The current understanding of the cumulative effects of a proliferation of structures, facilities and works on the coastal environment is quite limited. A single development by itself may have an insignificant impact, but when combined with other developments the cumulative effects may be considerable. Since currently relatively little is known about these sorts of impacts a cautious approach to authorising structures outside development areas is warranted.

Many structures, works and facilities have significant components both above and below mean high water springs. The district councils are the controlling authority for the landward parts of these structures. It is important to ensure that the policies and practices incorporated within this coastal plan are compatible with those adopted by the district councils in their district plans, in order that developments where the land meets the sea are appropriately located and designed.

Moorings and Marinas

Recreational boating is a significant leisure time pursuit within the Bay of Plenty coastal marine area. Although most vessels used in this activity are trailered craft, a significant number of craft use swing moorings and marina berths. In some of the estuaries and rivers of the region the numbers of moored vessels are at maximum capacity, yet demand for the establishment of further mooring areas and marinas appears to be ongoing. Ultimately, however, this continuing demand may not be able to be satisfied due to the lack of sufficient deep water in the Bay of Plenty harbours and the limited availability of suitable sites for the development of marinas.

Due to the scarcity of available space in the coastal marine area, it is important to encourage efficient means of storing vessels. For example, marinas use space more efficiently than swing moorings. Land based storage is more efficient still.

Both moorings and marinas may have a major adverse impact on the coastal environment. They may also conflict with other competing uses, such as other recreational activities.

However, their impact on water quality is not so readily assessed and indeed is the subject of considerable debate. Their greatest impact in this regard may be cumulative and long term, and because of this uncertainty it is therefore appropriate to adopt a precautionary approach in providing for them in the future. Environment Bay of Plenty will process all applications for marinas and moorings with regard to all policies and methods contained within this plan which govern the constituent activities that are associated with such ventures, e.g. structures, dredging, spoil disposal, reclamations, occupation of space.

Environment Bay of Plenty wishes to discourage the widespread dispersal of moorings within the coastal marine area and instead encourage their concentration. This will first require a review of all existing non-authorised mooring areas to assess their suitability. Some areas may be subsequently gazetted but others may be removed. However, in certain special circumstances individual moorings outside of designated mooring areas may be regulated by way of coastal permits.

It will be necessary to have regard to the provision of land based facilities for marinas and moorings. These include launching ramps, hard stand areas, clean down facilities, carparking, dinghy lockers, boat club buildings, and so on. In order to minimise the need for reclamation, only those facilities which are functionally necessary to the marina or mooring area, and for which alternatives are not available, will be permitted within the marina or mooring area.

Aquaculture

Aquaculture is an all-encompassing term which describes the cultivation of a wide range of species using a variety of techniques. Oyster farming on intertidal flats is practised at Ohiwa Harbour. However, the coastal environment can be used for variety of other types of aquaculture. For example, there is increased interest in mullet, paua and crayfish farming (these latter two are currently being trialled in the Bay of Plenty). Some of these activities may be proposed to take place on land adjacent to the sea,

The types of aquaculture which could be proposed for sheltered intertidal areas (such as oyster farms, mullet ponds, gracilaria harvesting) are likely to have greater impact on ecological processes and natural values than would the types which could be proposed for deep water areas (such as mussel rafts and scallop cages)). Conversely, these latter types of aquaculture are likely to have far greater social impacts. This is due in particular to their need for permanent structures which could present significant obstacles to both navigation within, and recreational usage of, the coastal marine area, especially if located in tidal channels within harbours and estuaries.

Environment Bay of Plenty believes there is sufficient existing recreational usage of all estuaries and harbours within the Bay of Plenty to warrant a prohibition of any structures (whether associated with aquaculture or not) which would have an adverse impact on navigation and recreational activities within tidal channels. Provision for this is included in the policies and methods contained within chapter 13 – Structures.

On the other hand, the coastal marine area is very extensive. The recreational, natural and cultural values are not so uniformly high that no aquaculture venture of any kind or scale would be acceptable. If this were the case, then many other structures with similar effects may also warrant a prohibited status including wharfs, jetties, boat ramps and boat sheds.

Environment Bay of Plenty must act in accordance with the Act, which is focussed upon controlling the adverse effects of activities on the environment while at the same time enabling communities to provide for their social, economic and cultural well-being. Environment Bay of Plenty must be reasonably confident about the actual or potential adverse effects of an activity in all circumstances and situations before making a rule to prohibit rather than to regulate an activity. Environment Bay of Plenty is not convinced that all types of aquaculture at all scales at all locations would have such unavoidable adverse effects as to require a "blanket" prohibition.

For these reasons Environment Bay of Plenty favours a policy which would allow aquaculture ventures to be assessed on the basis of their particular effects on the environment. All applications for aquaculture will be processed with regard to all policies and methods contained within this plan which govern the constituent associated activities in particular those relating to structures and occupation of space.

The approach to aquaculture in this plan is in accordance with the dynamic nature of the industry itself. There is currently much research and some trialling of new species and new techniques. Treating aquaculture structures as discretionary activity will ensure the flexibility required to accommodate such innovations (where appropriate).

However, Environment Bay of Plenty is aware that some aquaculture cultivation trials such as oyster farming have been undertaken within the Bay of Plenty in the past involving certain types of inter-tidal aquaculture. These trials have met with mixed success. In light of this, Environment Bay of Plenty will require all applications for aquaculture to be accompanied by a rigorous independent assessment of the physical viability of the operation at the intended location.

Land-based facilities associated with marine farms are the responsibility of the district councils. In order to promote an integrated assessment of any marine farm application, Environment Bay of Plenty will promote joint hearings.

Finally, there is the need to ensure that if a marine farm operation fails the associated structures will be removed. This should not be at a cost to the regional ratepayer, but rather to the farm operator. Bonds appear to be the most appropriate means of ensuring this.

13.2 Issue, Objective, Policies and Methods

13.2.1 Key Issue

The maintenance of existing structures and the provision of future structures within the coastal marine area can adversely affect the environment.

13.2.2 Objective

Any structures in the coastal marine area are to be appropriate.

13.2.3 Policies

13.2.3(a) To avoid all adverse effects of structures on the values of the Coastal Habitat Preservation Zone.

13.2.3(b) To recognise that those structures listed in the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004, are appropriate within the Port Zone provided that adverse effects are avoided, remedied or mitigated.

13.2.3(c) To take into account the purpose of the Port Zone set out in chapter 3 – Plan Structure, and activities that would significantly conflict with the achievement of that purpose should be avoided.

13.2.3(d) To recognise that those structures consistent with the purposes of the Harbour Development Zone, as expressed in section 3.3.2(c), are appropriate in the zone, provided that any adverse effects are avoided, remedied or mitigated.

13.2.3(e) To allow an activity in the Coastal Management Zone where it is appropriate having considered the actual or potential effects on the environment, including the values of the site.

13.2.3(f) Consideration will be given to the effects of any activity having regard to adjoining activities or activities located in an adjoining Harbour Development Zone.

13.2.3(g) To discourage the proliferation of structures in the coastal marine area and promote the efficient use of existing structures, facilities and network utility corridors.

Where practicable, new services and structures are to be located in or adjacent to existing infrastructure, provided that:

- they are not incompatible with the existing services or utilities; and
- the environmental effects of locating at an existing facility will be less than the effects of alternatives.

13.2.3(h) To avoid, remedy or mitigate any adverse effects of activities associated with structures in the Coastal Management Zone.

13.2.3(i) The effects of structures on coastal hydrological and geomorphic processes will be specifically taken into account.

13.2.3(j) Activities will not result in any nuisance to adjoining occupiers of the coastal marine area or nearby land, which is not controlled to acceptable levels or avoided altogether. Nuisance effects such as noise, dust, traffic, light, glare or smell are to be avoided, remedied or mitigated.

13.2.3(k) Stormwater outfall structures should be designed so that coastal erosion is minimised.

13.2.3(l) To recognise that structures that would adversely affect navigation and mooring within navigation channels and mooring areas are inappropriate.

13.2.3(m) Structures must not exceed the airport height restrictions identified in planning map 11d.

13.2.3(n) To encourage methods of vessel storage that use space in the coastal marine area efficiently.

13.2.3(o) Mooring areas will be concentrated, so as to leave some areas in a natural state free of boats, and to provide for efficient management of parking, storage and facilities.

13.2.3(p) Marinas are inappropriate in the following locations:

- Waiotahi Estuary;
- Ohiwa Harbour; and
- the Coastal Habitat Preservation Zone.

In other locations the appropriateness of marinas should be determined on a case by case basis.

13.2.3(q) All of the following should be installed at new marinas:

- oil spill containment and clean-up equipment;
- adequate provision for immediate isolation of fuel dispensers and reticulations in the event of leakage, rupture or general failure;
- hard-standing bunding and sumps in order to prevent the discharge to the coastal marine area of contaminants associated with boat careening, repair and maintenance;
- facilities for the collection of sewage, bilge water and rubbish and methods for their appropriate disposal.

- 13.2.3(r) Consideration should be given to the installation of vessel waste disposal facilities at frequently used boat ramps (see chapter 9 – Coastal Discharges).

13.2.4 Rules

Note: The rules are set out in this chapter to assist readers who wish to view the rules in the context of relevant objectives and policies. These are the rules that are to be applied for regulatory purposes. A summary table of all the rules is provided in Part VI for convenience, but that summary table is not intended to be used for regulatory purposes. A diagram of the Port area is also provided to give guidance on the application of port zone rules. Again this is not to be used for regulatory purposes.

The rules are to be read subject to the following definitions:

The rules apply to activities in the coastal marine area only. They do not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Where an activity is classified as a prohibited activity in the rules of this plan, it shall be read as an activity for which no resource consent shall be granted (refer to section 2 of the Resource Management Act 1991).

Where rules relating to the Port Zone refer to “existing” structures, these shall be those structures in physical existence as at 1 January 2002.

All zones except the Coastal Habitat Preservation Zone

Navigation Aids

- 13.2.4(a) The erection or placement, alteration, extension or removal of navigation aids by:

- Environment Bay of Plenty or its agents; or
- the Maritime Safety Authority or its agents;

is a permitted activity.

Structures in Permanently Navigable Harbour Waters

- 13.2.4(b) Erection or placement of the following structures:

- wharfs;
- boat ramps;
- structures for the specific purpose of providing public access to and along the coastal marine area;
- submarine cables and pipelines;
- structures for the specific purpose of providing vessel moorings or berths; and
- bridges;

within permanently navigable harbour water, is a discretionary activity. The erection or placement of any other structure within permanently navigable harbour waters is a prohibited activity.

For the purpose of this rule “permanently navigable harbour waters” means harbour or estuary that is covered by water at the lowest astronomical tide, but excluding: the open coast; the Port Zone, the Harbour Development Zone and the Coastal Habitat Preservation Zone.

13.2.4(c) Erection, construction or placement of swing mooring structures (excluding wharfs), within the mooring areas shown in the maps to this plan, is a permitted activity. Note: This rule does not remove the obligation in section 23 of the Act, to comply with all other applicable Acts, regulations, bylaws and rules of law.

13.2.4(d) Erection, construction or placement of swing mooring structures (excluding wharfs), outside the mooring areas shown in the maps to this plan, is a discretionary activity. This rule does not apply in the Port Zone.

13.2.4(e) The removal of any mooring structure by its owner is a permitted activity.

All Structures

13.2.4(f) The maintenance or alteration of any structure in the coastal marine area is a permitted activity, notwithstanding rule 13.2.4(o), provided that all of the following standards are complied with:

- There is no increase in the external length, width, or height of any structure, except for increases for the purposes of:
 - replacement, removal or alteration of existing aerial telecommunications or electricity cables, where these activities will not result in an increase in the design voltage and the new or altered cables will not be lower in height above the foreshore or seabed;
 - replacement, removal, alteration or addition of telecommunications or electrical insulators, circuits, earth wires, earth peaks and lightning rods;
 - replacement, removal, alteration or addition of bridge footpaths, bridge side rails, bridge road seal, bridge road signs, bridge road lighting, and cables or pipes attached to bridges, where these activities will not cause an increase in the flood levels for a 1% annual exceedance probability flood event; and

provided that any increase in height does not exceed the specified airport slopes and surfaces of Tauranga airport as shown on Planning Map 11d.

- Any alterations are structurally sound.
- There is no adverse effect on public access to, along and through the coastal marine area, other than temporary restrictions not lasting more than one week.
- Alterations will not be for the purposes of new or additional capacity for transport through the coastal marine area of sewage, petroleum products or hazardous substances.

Any maintenance or minor alteration that does not comply with these standards is a discretionary activity. This rule does not permit the erection or reconstruction of structures, which are controlled by rule 13.2.4(h).

Coastal Management Zone

- 13.2.4(g) Notwithstanding rules 13.2.4(i) and (k), the erection, reconstruction, placement, alteration, extension, removal or demolition of temporary maimai within the Coastal Management Zone is a permitted activity, provided that:
- the structures are erected no earlier than one month before the beginning of each annual shooting season; and
 - the structures are dismantled and completely removed within one month following the end of each relevant annual hunting season; and
 - indigenous vegetation is not used in the construction of maimai; and
 - no clearance of vegetation occurs, other than that immediately underneath the maimai, and the minimum clearance necessary to maintain single file foot access to the maimai; and
 - the structures are maintained in good order and repair for the season.

- 13.2.4(h) The erection, reconstruction, placement, alteration, extension, demolition, removal or abandonment of structures in the Coastal Management Zone not expressly provided for or prohibited by other rules of this plan, is a discretionary activity.

Abandoned Structures

- 13.2.4(i) Notwithstanding rule 13.2.4(h), the removal of any structure by Environment Bay of Plenty or its agents, which is derelict or abandoned and for which no person or agency can be found who is willing to take responsibility for the ownership and maintenance of the structure, is a permitted activity, provided that the structure is not registered as being of historic value, and that there shall be no adverse effect on the Sites of District or Local Significance (CMA) demarcated on the maps, or any of the values for areas of significant conservation value identified in the Third Schedule to this plan – Areas of Significant Conservation Value.

Coastal Habitat Preservation ZoneMaimai

- 13.2.4(j) The erection, reconstruction, placement, alteration, extension, demolition or removal of temporary maimai within the Coastal Habitat Preservation Zone is a permitted activity, provided that:
- the structures are erected no earlier than one month before the beginning of each annual shooting season; and
 - the structures are dismantled and completely removed within one month following the end of each relevant annual hunting season; and
 - indigenous vegetation is not used in the construction of maimai; and
 - no clearance of vegetation occurs, other than that immediately underneath the maimai, and the minimum clearance necessary to maintain single file foot access to the maimai; and
 - the structures are maintained in good order and repair for the season.

Other Structures

- 13.2.4(k) Notwithstanding rule 13.2.4(l), the erection, reconstruction, placement, alteration or extension, of any of the following structures within the Coastal Habitat Preservation Zone is a discretionary activity:
- structures for the specific purpose of providing protection for the values associated with such areas; or
 - structures for the specific purpose of providing educational, scientific or passive recreational opportunities; or
 - structures for network utilities, and navigational aids; or
 - structures erected, reconstructed, placed, altered, or extended prior to the date on which this plan was publicly notified.

- 13.2.4(l) Erection, reconstruction, placement, alteration, or extension of any structure within the Coastal Habitat Preservation Zone, on or after the date on which this plan became publicly notified, is a prohibited activity.

- 13.2.4(m) The demolition, or removal of structures within the Coastal Habitat Preservation Zone is a discretionary activity.

Harbour Development Zones

- 13.2.4(n) Erection, reconstruction, placement, alteration, extension, removal or demolition of any structure, in the Harbour Development Zone, not expressly provided for by another rule, is a discretionary activity.

Port Zone

- 13.2.4(o)(i) With the exclusion of the Sulphur Point North Facing Berth area and the area south of the petrochemical wharf at Mount Maunganui as shown on Map 1 of the Eighth Schedule to this plan, the erection, reconstruction, placement, alteration, extension, removal or demolition of any structure (excluding cranes) within the area that the Port of Tauranga Limited has been granted a section 384A occupation permit as shown on Planning Map 11d, is a non-notified limited discretionary activity.

Environment Bay of Plenty restricts the exercise of its discretion to the following matters:

- the compatibility of the structure and its intended use with the purpose of the Port Zone,
- the finished visual appearance when viewed from a public place,
- the effects of glare and lighting,
- structural integrity,
- effects on the hydrodynamic and geomorphic regime of the harbour,
- effects during construction on other harbour users, aviation, navigation and public safety,
- the review of conditions and the timing and purpose of that review,
- the amount and type of any financial contribution,
- compliance monitoring.

Applications will be considered without the need to obtain the written approval of affected persons.

13.2.4(o)(ii) If the erection, reconstruction, placement, alteration or extension of any building or structure exceeds the specified airport slopes and surfaces of Tauranga airport as shown on Planning Map 11d then it is a limited discretionary activity, subject to normal notification procedures and discretion is limited to the matters listed above (in 13.2.4(o)(i)) with the following addition:

- the effects of the activity on the flight safety and operations of aircraft into and out of Tauranga airport.

Note: Any requirements of the Civil Aviation Authority, the Civil Aviation Act 1990 and the Civil Aviation rules including in relation to lighting and marking of any structure will need to be met.

Wharf Cranes – Port Zone

Note: All wharf cranes will need to meet any requirements of the Civil Aviation Authority, the Civil Aviation Act 1990 and the Civil Aviation Rules including in relation to lighting and marking of any structure.

13.2.4(p)(i) Subject to 13.2.4(p)(ii), the erection, reconstruction, placement, alteration or extension of any wharf crane that exceeds the specified airport slopes and surfaces of Tauranga airport as shown on Planning Map 11d is a limited discretionary activity, subject to normal notification procedures and discretion is limited to:

- the effects of the activity on the flight safety and operations of aircraft into and out of Tauranga airport.

13.2.4(p)(ii) Notwithstanding rule 13.2.4(p)(i), the erection, reconstruction, placement, alteration or extension of a wharf crane located in the area of the existing wharf at Sulphur Point and the Sulphur Point Extension North is a permitted activity provided that:

- the crane or any alteration or extension to it does not exceed 90 metres (Moturiki datum) in height when extended; and
- the number of wharf cranes permitted within the area of the existing wharf at Sulphur Point and the Sulphur Point Extension North is limited to a total of five. Any additional wharf cranes are subject to rule 13.2.4(p)(i).

In this rule, 'extension' and 'extended' refer to the maximum vertical extension that can be achieved by any part of the crane.

Note: The existing wharf and the Sulphur Point Extension North are shown in the Outline Development Plan referred to as Drawing No. 270-27 Amendment B contained in the Eighth Schedule to this plan.

Other Structures – Port Zone

13.2.4(q) The erection, reconstruction, placement, alteration, extension, removal or demolition of any structure in the Port Zone, not expressly provided for by another rule, is a discretionary activity.

13.2.5 Methods of Implementation – Process

Environment Bay of Plenty will:

13.2.5(a) Encourage, as conditions on coastal permits for structures, the use of designs and materials that can be removed with minimal adverse effects.

13.2.5(b) When appropriate, send Land Information New Zealand a copy of any approved coastal permit, in accordance with section 114(2) of the Resource Management Act.

13.2.5(c) Forward copies of consent applications to the Director of Maritime Safety in accordance with section 395 of the Resource Management Act 1991.

13.2.6 **Methods of Implementation - Services**

13.2.6(a) Environment Bay of Plenty may, at its discretion, undertake the removal of structures which:

- are having adverse environmental effects which cannot be avoided, remedied or mitigated; or
- are in an unsafe state; and
- for which there is no owner or no administering authority or some other person or agency willing to assume responsibility for the structure and carry out all necessary remedial works.

13.2.6(b) Environment Bay of Plenty will continue a programme to review all unauthorised structures on the margins of the Tauranga and Ohiwa harbours. The process started with high priority areas in July 1998.

14 Disturbance, Deposition and Extraction

14.1 Explanation/Principal Reasons

This chapter addresses the requirements of sections 12(1)(c), 12(1)(d), and 12(1)(e) of the Act. These sections control disturbance of, and deposition on to, the foreshore or seabed. In brief, these sections of the Act prohibit these activities where there are likely to be adverse effects, unless the activities are expressly allowed by a rule in a plan or by a resource consent. Section 12(2)(b) of the Act which controls removal of sand, shingle, shell or other natural material (minerals) from land within the coastal marine area is also addressed.

The three main issues are dredging, marine disposal of dredged spoil, and extraction of sand, shell shingle and minerals.

Dredging and Spoil Disposal

Dredging is a form of excavation that is designed to clear a channel to allow vessel navigation in areas which would otherwise be too shallow. It involves the scooping or sucking up of sediments from the seabed and is often required around commercial ports and marinas in the upper reaches of harbours. Dredging may also be required in deeper water to provide for large ships.

For management purposes, dredging activity is generally categorised as either:

Capital dredging: meaning new dredging of the natural foreshore or seabed for the purpose of providing adequate depth for a specified purpose.

Maintenance dredging: meaning the ongoing dredging necessary to maintain the channel dimensions specified in a coastal permit for capital works dredging.

Associated with the activity of dredging is the dumping of spoil. Both dredging and spoil dumping at sea can have significant adverse environmental effects. These adverse effects may include some or all of the following:

- An increase in suspended sediment load (and a corresponding decrease in water quality).
- The possible silting of shellfish beds and benthic communities.
- Changes in water chemistry associated with the release of chemicals from sediments.
- Changes to sea floor bathymetry.
- Changes to sediment transport patterns.
- Loss of fish spawning and feeding grounds, with possible flow-on shortage of food for birds.
- Changes to patterns of recreation and commercial fishing activities as well as to recreational diving.

- Changes to water movement patterns in an area. This in turn can lead to such changes as movement or shoaling of natural drainage channels and to the creation of dead zones – areas of reduced tidal flushing where sediment or any pollutants in the water tend to settle.
- Alteration of the physical nature of the sediments in the affected area. This in turn can change the type and abundance of organisms present. The ability of the disrupted communities to recover is a major concern. Some organisms (those which live within naturally disturbed areas) can cope with such changes whereas others (those which live in relatively stable environments) cannot.

An alternative to disposal of dredging spoil at sea is disposal of it on land. However, this may also have adverse effects including all or some of the following:

- contamination of surface and ground waters over time through degeneration and release of leachate (as the result of physical and chemical changes to the dredged material);
- reduced quality of adjacent surface waters through sedimentation;
- destruction of the habitat values at the disposal site; and
- disturbance of adjacent land uses during disposal.

Because dredging and spoil disposal can have these adverse effects, the plan requires coastal permits to be obtained before dredging or spoil disposal can take place.

Port of Tauranga

It is recognised that dredging is required to keep the Port of Tauranga operational. This is the largest export port (by volume) in New Zealand and its continued operation can be viewed as being in the national interest. The Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004, specifies the location and extent of dredging to take place. Dredging is specified as a discretionary activity as there is a potential for significant adverse effects when establishing navigation channels or berths. The capital dredging identified in the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004, is confined to areas adjacent to existing port activities as these areas have already been modified. The extent of maintenance dredging required is also shown in the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004.

The volume of dredgings from the Port of Tauranga would make it impractical to consider land-based disposal, although some dredged sand is currently removed for sale. Furthermore, the existing dump sites are closely monitored and seem to be having some positive effects in terms of replenishing sand on local beaches. Additionally, the disposal sites have already been modified by previous dumping. Therefore it is appropriate to provide for the current dumping grounds in accordance with the details as specified in the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004. Specific dump sites have been provided to facilitate beach replenishment.

Spoil derived from capital dredging works at the Port of Tauranga may vary in physical composition, depending on the location of the dredging. In some cases where the spoil contains excessive fine silt, the dumping grounds specified in the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004, may not be appropriate and alternative dumping sites may need to be considered.

Whakatane Harbour

The harbour at Whakatane is a much smaller scale operation. However, dredging may periodically be required to remove sediment deposited by the Whakatane River, and may also be required to establish new berths (refer to the Fifteenth Schedule – Whakatane Harbour Development Zone Outline Plan). As the effects of these dredging activities could be significant, they are a discretionary activity.

Dumping of dredgings from the Whakatane Harbour is also a discretionary activity for the same reason. The volumes of maintenance dredgings from the port of Whakatane are small enough to make it practical to use land-based disposal. Alternatively, some of the sand may be suitable for beach replenishment. There are no established ocean dumping grounds for dredge spoil from Whakatane Harbour. For this reason ocean dumping grounds for Whakatane Harbour are not specified in this plan and coastal permit applicants will need to consider the alternatives of land disposal or beach replenishment.

Other Capital Works Dredging

The above applies to other capital dredging works such as marina development, maintenance of recreational navigation channels, and localised dredging associated with minor works such as small jetties and wharfs.

In addition, there may be certain circumstances in which parts of the coastal marine area would be required for the temporary storage of dredged material. Such temporary storage could be for stockpiling sand before commercial recovery or for the stockpiling of sand before beach replenishment operations. In the case of the Port of Tauranga, temporary dumping grounds are specified in the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004. These temporary dump grounds are already in use.

Mineral Extraction

Sand, shingle and mineral extraction can also be a form of dredging. However, its primary purpose differs from that of dredging to provide for navigation access, in that the bulk of these materials are extracted for commercial sake or other use. Shingle is currently taken from several river mouths in the eastern Bay of Plenty while sand is extracted from three sites in the coastal marine area of the region.

Sand, shell and shingle extraction is dealt with under both the Crown Minerals Act and the Resource Management Act. The Crown Minerals Act allocates prospecting, exploration and mining rights to Crown-owned minerals while the Resource Management Act deals with the effects of removal. Although sand, shell and shingle within the coastal marine area are by definition Crown-owned minerals, section 4.2.3 of the Minerals Programme for Minerals other than Coal, Oil and Petroleum (1996) provides that mining permits are not required from the Crown for mining of sand, shingle or other natural material from the coastal marine area.

However, in all cases where it is proposed to extract any sand, shell and shingle (or other natural material) from within the coastal marine area, a coastal permit will be required from Environment Bay of Plenty. This ensures that the adverse effects of mineral extraction are avoided, remedied or mitigated.

Adverse effects that could arise from the removal of sand, shingle, shell and other natural material within the coastal marine area include:

- Coastal erosion – removing sand, shell, shingle, or other natural material from beach systems may trigger or worsen beach erosion.

- Biological effects – this can result from the direct disturbance or removal of habitat and the smothering of benthic communities by sedimentation. However, impact tends to be site specific and relatively localised and it appears that disturbed areas generally recolonise once extraction ceases.
- Cultural effects – the removal of sand, shingle, shell or other natural material could disturb or destroy areas of cultural and historical significance. Some beaches may contain midden and burial sites. In addition, the coastal marine area has a particular significance to tangata whenua who have concerns that the spiritual values placed on parts of the coast would be affected by sand, shell or shingle extraction.

One of the major concerns associated with sand extraction is that it will cause coastal erosion (either on-site or off-site). This concern is based on the knowledge that beaches are an integral part of a wider coastal sediment system and must adjust to any changes in their equilibrium caused by losses or gains of sand. This system is called the active beach system. The removal of large quantities of sand, shell or shingle from these systems may well trigger beach erosion. In addition, removal of dunes can increase the vulnerability of low lying land to storm flooding. This issue has been made more serious in recent years by the prospect of rising sea levels. Any rise in sea level will result in erosion of beaches and the landward movement of mean high water springs.

For these reasons, the plan phases out sand, shell and shingle extraction in the active beach system. Correspondingly, provision should be made for alternative sources of these materials in locations where the potential adverse effects would be far less.

In addition to sand, shell and shingle, there are also other minerals within the Bay of Plenty coastal marine area which industry has shown an interest in extracting (e.g. gold and silver deposits around geothermal vents, and certain heavy metals). The extraction of these minerals is quite different from that of sand, in that usually the great majority of sediments are returned to the seabed once the minerals have been processed and extracted.

However, the extraction of minerals and the disposal of unwanted sediments could result in both disturbance and smothering of many hectares of seabed, with significant adverse effects on marine flora and fauna. The disposal of unwanted sediments may release contaminants from the sediments or the chemical processing of ore. For these reasons, mineral extraction is a potentially damaging activity. Accordingly it is a discretionary activity.

In the absence of certainty with regard to the likely effects of any extraction activities (including sand, shingle, shell and mineral) Environment Bay of Plenty considers that a conservative approach should be taken with regard to their authorisation. At a minimum the impact of any extraction activities would need to be carefully monitored, and depending upon the size of the operation, a detailed assessment of environmental effects may be required.

Disturbance and Deposition

There are a wide range of other activities that can cause disturbance and deposition on the foreshore or seabed. These include:

- vehicle use on the foreshore,
- stock grazing and trampling,
- horse riding,
- disposal of spoil from activities such as road construction,

- disturbance caused in the erection of structures,
- disturbance caused by military training,
- disturbance caused by driftwood collecting and beach grooming.

The use of vehicles on beaches may contribute to erosion by lowering the beach berm and making frontal dunes more susceptible to wave attack. It may also cause damage to intertidal habitats and pose a safety hazard to members of the public. Vehicle access on to the foreshore is necessary for some activities, but indiscriminate use of vehicles can cause significant cumulative effects. Accordingly the rules permit specific vehicle uses on the foreshore, but place restrictions on other use of vehicles on the foreshore. In addition, some district council bylaws contain more specific restrictions on vehicle use. Those bylaws must be complied with as well as the rules of this plan.

Stock grazing and trampling can damage and destroy estuarine vegetation or depress regeneration. Stock grazing can also result in direct faecal contamination of coastal water. Accordingly the rules prohibit grazing in the coastal marine area.

Drain construction and maintenance, excavation of river mouths, disposal of spoil from road construction or shell from aquaculture operations, and disturbance associated with the erection of structures on the foreshore or seabed, beach grooming and driftwood removal all have the potential to cause significant adverse effects. Accordingly the rules of the plan control these activities.

The New Zealand Defence Force has used the coastal marine area surrounding Paepae o Aotea (Volkner Rocks) as a practice range for aerial bombing and naval gunfire. These periodic military training exercises have caused disturbance to Paepae o Aotea (Volkner Rocks) which are significant for their cultural and other values. Consequently this activity is non-complying. The New Zealand Defence Forces also occasionally undertake other temporary training activities on beaches. The disturbance from these activities is minor and local in extent, and is accordingly a permitted activity subject to conditions.

The Resource Management (Marine Pollution) Regulations 1998 control the dumping of waste or other matter in the coastal marine area from any ship, aircraft or offshore installation. These regulations should be consulted.

14.2 Issue, Objective, Policies and Methods

14.2.1 Key Issues

The coastal marine area can be adversely affected by disturbance and/or deposition resulting from a variety of activities.

Sand, shell, shingle and mineral extraction in the coastal marine area can adversely affect the environment as a result of direct disturbance, deposition of material, introduction of contaminants and can cause coastal erosion.

Dredging and spoil disposal, both that which is necessary for maintenance of existing channels, and that which is associated with new development, can result in significant adverse environmental effects.

14.2.2 Objectives

- 14.2.2(a) Provisions for disturbance and deposition within the coastal marine area only as appropriate and while avoiding, remedying or mitigating any associated adverse environmental effects.

- 14.2.2(b) Provision for sand, shell, shingle and/or mineral extraction within the coastal marine area only in appropriate locations while avoiding, remedying or mitigating any associated adverse environmental effects.

14.2.3 Policies

- 14.2.3(a) To avoid the adverse effects of disturbance and deposition within the coastal marine area caused by disposal of spoil from land-based activities.
- 14.2.3(b) To avoid, remedy or mitigate adverse effects from dumping into the coastal marine area of aquaculture processing wastes.
- 14.2.3(c) To restrict the use of vehicles on foreshore and seabed to those which have a legitimate need to utilise such areas.
- 14.2.3(d) To provide for disturbance and deposition associated with periodic activities undertaken by the New Zealand Defence Force.
- 14.2.3(e) To provide for dredging, disturbance and deposition, where necessary to protect the integrity of major flood protection and/or drainage schemes.
- 14.2.3(f) To avoid, remedy or mitigate any adverse environmental effects associated with disturbance, deposition or mineral extraction.
- 14.2.3(g) To discourage channelisation or piping of streams flowing into estuaries or harbours.

Mineral Extraction

- 14.2.3(h) To recognise the extraction of sand, shell, shingle and minerals from the Coastal Habitat Preservation Zone as inappropriate.
- 14.2.3(i) To take a precautionary approach to sand, shell and shingle removal, or dredging; within the coastal environment in recognition of:
- the importance of maintaining the ability of coastal land forms to resist erosion and flooding; and
 - the limited nature of knowledge on coastal processes in general and local sediment dynamics in particular; and
 - rising sea level and the impact this will have on beach erosion.
- 14.2.3(j) To provide for a transition from the extraction of sand from the active beach system to extraction from less sensitive areas, and take into account the areas sensitive to coastal hazards identified in the maps of this plan.

Dredging and Spoil Disposal

- 14.2.3(k) To take into account the potential benefits of using sand from dredging for the purpose of beach replenishment. Map 6 of the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004, identifies appropriate beach replenishment dumping grounds for sand dredgings from the Port of Tauranga, but other dumping grounds may also be appropriate for beach replenishment.
- 14.2.3(l) To recognise that capital works dredging identified in the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004, is appropriate within the Port Zone.
- 14.2.3(m) To recognise that capital works dredging identified in the Harbour Development Zone is appropriate where it is to provide for the purpose of that zone, as described in chapter 3 – Plan Structure.

- 14.2.3(n) To recognise the coastal marine area as requiring a level of protection from adverse effects of dredging and spoil disposal that is appropriate to the site specific environmental values present.
- 14.2.3(o) To recognise maintenance dredging as being necessary for the continued operation of certain activities within the coastal marine area.
- 14.2.3(p) The time and duration of dredging or spoil disposal operations should not interfere with:
- the migratory patterns of marine life (such as whitebait runs); and
 - the spawning of marine life.
- 14.2.3(q) Dredging and spoil disposal activities should use methods of dredging, spoil transport and spoil disposal designed to minimise adverse effects on:
- water quality;
 - the benthic community adjacent to the area to be dredged or dumped on;
 - recreational and commercial activities;
 - cultural and social values.
- 14.2.3(r) Selection of new dumping sites (additional to those in the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004), will be subject to the following criteria:
- avoidance of interference with areas of existing significant fisheries, or shell fisheries or other areas containing nationally rare or outstanding examples of indigenous ecological community types;
 - avoidance of areas of heavy commercial or recreational navigation;
 - the capacity to return seawater to ambient conditions before reaching any beach (except where beach replenishment is one of the purposes of dredging), or significant fishery, shell fishery or identified area or value of significance;
 - minimum size to limit any adverse effects and to allow for effective monitoring to determine any adverse effects;
 - maintenance of beaches and related sediment transport processes.

14.2.4 **Rules**

Note: The rules are set out in this chapter to assist readers who wish to view the rules in the context of relevant objectives and policies. These are the rules that are to be applied for regulatory purposes. A summary table of all the rules is provided in Part VI for convenience, but that summary table is not intended to be used for regulatory purposes. A diagram of the Port area is also provided to give guidance on the application of port zone rules. Again this is not to be used for regulatory purposes.

The rules are to be read subject to the following definitions:

The rules apply to activities in the coastal marine area only. They do not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Where an activity is classified as a prohibited activity in the rules of this plan, it shall be read as an activity for which no resource consent shall be granted (refer to section 2 of the Resource Management Act 1991).

Coastal Marine Area (All Zones)

Note: Activities may be subject to the provisions of sections 15(A), (B) and (C) of the Act and to any regulations made under those sections.

- 14.2.4(a) The construction of open drains, removal of sand, shell, shingle and minerals, dredging and spoil disposal, within the Coastal Habitat Preservation Zone are prohibited activities.
- 14.2.4(b) Any disturbance of, deposition on, dredging of, or removal of sand, shingle and shell from the foreshore or seabed, not expressly provided for or prohibited by the other rules of this plan, is a discretionary activity.
- 14.2.4(c) Disturbance of the foreshore or seabed for the maintenance of drains is a permitted activity subject to compliance with the following standards and terms:
- excavation will not result in an increase in the original dimensions of the drain;
 - the spoil will be disposed of on to land outside the coastal marine area; and
 - the drain is not in the Coastal Habitat Preservation Zone or the sites of district or local significance in the coastal marine area identified in the maps.
- 14.2.4(d) Disposal on to the coastal marine area of any spoil from land-based activities other than diversion of coastal water, reclamation and beach replenishment, is a prohibited activity.
- 14.2.4(e) Where a rule in this plan states that the erection, reconstruction, alteration, extension, demolition or removal of structures:
- is a permitted activity, then deposition on and disturbance of the foreshore or seabed for that purpose is also a permitted activity,
 - is a controlled activity, then deposition on and disturbance of the foreshore or seabed for that purpose is also a controlled activity,
 - is a discretionary activity, then deposition on and disturbance of the foreshore or seabed for that purpose is also a discretionary activity,
 - is a prohibited activity, then deposition on and disturbance of the foreshore or seabed for that purpose is also a prohibited activity.
- 14.2.4(f) The disturbance of foreshore or seabed by the use of vehicles is a permitted activity, except in the Coastal Habitat Preservation Zone, and provided that the vehicle use is for any of the following activities:
- surf life saving operations;
 - emergency situations, including (but not restricted to) fire fighting, oil spills, rescue operations, salvage of vessels and sea mammal strandings;
 - burial of dead animals washed up on the foreshore;

- the removal of litter, nuisance matter, or driftwood and debris which may affect navigation and safety of vessels;
 - the launching or retrieval of vessels;
 - the transportation of recreational equipment to the waters edge;
 - Coastcare projects;
 - beach grooming undertaken by either a district council or its agents;
 - New Zealand Defence Force temporary military training activities, provided that Environment Bay of Plenty, the Department of Conservation and adjacent territorial authorities have been advised before the training takes place;
 - local authority, Government, and educational institution data collection, monitoring, maintenance and law enforcement activities, provided the vehicles do not exceed 1.8 tonnes kerb weight.
- 14.2.4(g) Burial of dead animals washed up on the foreshore is a permitted activity.
- 14.2.4(h) Disturbance of, or deposition on, the foreshore or seabed resulting from artillery gunfire, naval gunfire, or aerial bombardment, for military training, is a discretionary activity, except within a 1 nautical mile radius of Paepae o Aotea (Volkner Rocks) where it is a non-complying activity.
- 14.2.4(i) Except in the Coastal Habitat Preservation Zone, disturbance of, and deposition on, the foreshore or seabed for temporary military training activities of the New Zealand Defence Forces other than those controlled by 14.2.4(h) is a permitted activity, provided that Environment Bay of Plenty, the Department of Conservation, adjacent territorial authorities and the relevant iwi authority are advised before the training takes place.
- 14.2.4(j) Removal, damage, modification or destruction of indigenous vegetation that is growing in the foreshore or seabed, is a discretionary activity.
- 14.2.4(k) The grazing of stock in the coastal marine area is a prohibited activity.
- 14.2.4(l) Disturbance and deposition for the taking of driftwood from the coastal marine area are permitted activities provided it does not involve the use of vehicles on the foreshore.
- 14.2.4(m) Disturbance of, deposition or dredging of the foreshore or seabed to maintain river flood protection and drainage schemes presently operated by Environment Bay of Plenty or its agents and the Waihi Drainage District Society Incorporated, is a controlled activity. Environment Bay of Plenty reserves control over these matters:
- the duration of the consent;
 - information and monitoring requirements;
 - administrative charges;
 - the quantity, nature and composition of the material to be disturbed, dredged or deposited;
 - any adverse effects on indigenous flora, fauna, natural character or cultural values;

- the location and method of disturbance, deposition or dredging;
- the frequency or timing of disturbance, deposition or dredging.

This rule does not apply where the purpose of the disturbance, deposition or dredging is to create new flood protection schemes, or to extend existing works (including but not limited to dredging and excavation).

14.2.4(n) Removal for profit (mining) of sand, shell and shingle from the active beach system of the open coast is a discretionary activity until the third anniversary of this plan becoming operative. For the purpose of this rule the active beach system is that area on the open coast between the 8.5 metre bathymetric contour and mean high water springs.

14.2.4(o) Removal for profit (mining) of sand, shell and shingle from outside the active beach system of the open coast is a discretionary activity. For the purpose of this rule the active beach system is that area on the open coast between the 8.5 metre bathymetric contour and mean high water springs.

14.2.4(p) From the third anniversary of this plan becoming operative, removal for profit (mining) of sand, shell and shingle from the active beach system on the open coast is a prohibited activity for which no resource consent shall be granted. For the purpose of this rule the active beach system is that area on the open coast between the 8.5 metre bathymetric contour and mean high water springs.

14.2.4(q) Removal for profit (mining) of minerals other than sand, shell and shingle from within the coastal marine area is a discretionary activity.

14.2.4(r) Disposal to the coastal marine area of spoil from sand, shell, shingle or mineral removal for profit (mining) is a discretionary activity.

14.2.4(s) The permanent disposal of any dredging spoil within the Harbour Development Zone is a prohibited activity, unless the dredging spoil is being used for a consented reclamation or impoundment.

14.2.4(t) Deposition of dredge spoil on the foreshore or seabed which:

- is from the Port of Tauranga Limited's dredging operations, and
- is deposited within the boundaries of the dumping sites identified in the Eighth Schedule to this plan – Outline Development Plan Port of Tauranga – 1994-2004.

is a discretionary activity.

Port Zone

14.2.4(u) Disturbance of (including removal of sand, shingle, shell, or other natural material from) or deposition on the foreshore or seabed for the purpose of erection, reconstruction, placement, alteration or extension of any structure expressly controlled by rule 13.2.4(o), is a non-notified limited discretionary activity. Environment Bay of Plenty restricts the exercise of its discretion to the following matters:

- the area, quantity, location and timing of disturbance or deposition,

- the materials deposited,
- effects on the hydrodynamic and geomorphic regime of the harbour
- coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan,
- effects on other harbour users, navigation, and public safety during construction,
- site specific historical or cultural values,
- the review of conditions and the timing and purpose of that review,
- the amount and type of any financial contribution,
- compliance monitoring,

Applications will be considered without the need to obtain the written approval of affected persons.

14.2.4(v)

Any disturbance (including removal of sand, shingle, shell, or other natural material from) of the foreshore or seabed for the following activities as expressly described in the Eighth Schedule to this plan:

- construction of the Sulphur Point Wharf Extension North Sitting Basin,
- construction of the Sulphur Point Wharf Extension South Sitting Basin,
- construction of the Sitting Basin between the existing Mt Maunganui Wharf and the southern face of the petrochemical wharf,
- the Mount Maunganui Wharfs Future Berth Deepening as shown on plan 270-25A,
- and maintenance dredging;

is a non-notified limited discretionary activity. Environment Bay of Plenty restricts the exercise of its discretion to the following matters:

- the area, quantity, location and timing of disturbance,
- effects on the hydrodynamic and geomorphic regime of the harbour and open coastline,
- effects on marine life and ecosystems,
- coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan,
- effects on other harbour users, navigation and public safety during construction,
- site specific historical or cultural values,
- the review of conditions and the timing and purpose of that review,
- the amount and type of any financial contribution,
- compliance monitoring.

Applications will be considered without the need to obtain the written approval of affected persons.

14.2.4(w)

Deposition onto the foreshore or seabed for the following reclamation as expressly described in the Eighth Schedule to this plan:

- construction of the Sulphur Point Wharf Extension North,
- construction of the Sulphur Point Wharf Extension South,
- construction of the Mt Maunganui Wharf Extension South between the existing Mt Maunganui Wharf and the southern face of the petrochemical wharf,

is a non-notified limited discretionary activity. Environment Bay of Plenty restricts the exercise of its discretion to the following matters:

- the material, quantity, area, location and timing of deposition,
- effects on the hydrodynamic and geomorphic regime of the harbour,
- coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan,
- effects on other harbour users, navigation and public safety during construction,
- site specific historical or cultural values,
- the review of conditions and the timing and purpose of that review,
- the amount and type of any financial contribution,
- compliance monitoring.

Applications will be considered without the need to obtain the written approval of affected persons.

14.2.4(x)

The permanent disposal of any dredging spoil within the Port Zone is a prohibited activity, unless the dredging spoil is being used for an authorised reclamation or impoundment.

14.2.4(y)

Disturbance of (including removal of sand, shingle, shell, or other natural material from) the foreshore or seabed, except as provided for in rules 14.2.4(u) and 14.2.4(v), which:

- is for the purpose of the capital dredging works identified in the Eighth Schedule to this plan – Outline Development Plan Port of Tauranga 1994-2004, and
- is less than 300,000 cubic metres in volume, and
- is less than 10 hectares in area, and
- extends less than 10,000 metres,

is a discretionary activity.

14.2.5 **Methods of Implementation - Process**

Without limiting the power of Environment Bay of Plenty to set any other conditions for the purposes of avoiding, remedying or mitigating adverse effects, permissions granted for sand, shell shingle and/or mineral extraction may include all or some of the following conditions:

- the establishment and maintenance of suitable monitoring programmes by the operator in accordance with the directions of Environment Bay of Plenty; and
- a requirement for Environment Bay of Plenty to review the extraction operation annually, with the power to reduce the amounts to be extracted over the subsequent 12 month period if the adverse effects of the activity justify a reduction; and
- a requirement for bonds, environmental compensation, or both.

14.2.6 **Methods of Implementation - Advocacy**

14.2.6(a) In consultation with landowners and in collaboration with the Department of Conservation and district councils, Environment Bay of Plenty will promote and encourage the cessation of stock grazing on private land within the coastal marine area by way of education, promotion and where practicable incentives, compensation and/or operational works. This may include the use of environmental plans and farm plans. The information in the maps and the Third Schedule – Areas of Significant Conservation Value, the Sixth Schedule – Significant Marshbird Habitat Areas and the Seventh Schedule – Significant Indigenous Vegetation Areas, will be used as a guide to setting priorities.

14.2.6(b) Environment Bay of Plenty will promote the prohibition of sand, shell shingle and mineral extraction from beach areas and foredunes within the Bay of Plenty.

14.2.7 **Methods of Implementation - Information**

Environment Bay of Plenty will continue routine monitoring of beach erosion in order to identify long term trends in local beach dynamics.

15 Reclamation

15.1 Explanation/Principal Reasons

Reclamations can arise by infilling or impoundment that has the effect of significantly shifting the line of mean high water springs seaward of its natural position. In other words, reclamations exclude the ebb and flow of tides. Reclamations are an activity with the purpose of turning land in the coastal marine area into land outside the coastal marine area.

Large scale infilling of land is an obvious example of reclamation. The use of embankments and tide control structures can also create reclamation without any actual infilling. These two methods of reclamation have commonly been used in the Bay of Plenty to make land for urban, industrial and agricultural purposes.

Other examples of reclamation may be less obvious. For example, infilling to make a causeway on which roads are built is also reclamation.

It is not possible to give a complete inclusive definition of reclamation as this is dependent on the particular facts and circumstances of an activity.

In certain circumstances reclamation may enhance public access to and enjoyment of the coast. Further, depending upon the material used at the reclamation face it may also create a new type of environment to be colonised by marine life previously absent from the area.

However, reclamation may also have considerable adverse attributes, and normally has an irreversible and cumulative effect on the coastal environment. It results in a reduction of the water area of a harbour and may therefore adversely influence flow regimes, tidal hydraulics and flushing capabilities (so increasing siltation).

It may also involve the destruction or modification of coastal wetlands and mangroves. These sorts of habitats are known to be crucial in the life stages of many marine species. In addition, reclamation may adversely affect the natural character of the coastal environment, and will always result in the loss of a part of the coastal marine area from public usage.

The cumulative effects of many small reclamations may be just as adverse as those resulting from singular large scale ones. In some instances the net result may actually be far worse, as it is the piecemeal and incremental events that account for much of the historic reclamations within the Bay of Plenty coastal marine area (in particular the harbours, and especially within Tauranga harbour).

Given all this, it is appropriate that applications for reclamations will generally require firm evidence of need, careful consideration of all other alternatives and full assessment of the impact on natural values and physical processes (including cumulative effects).

Applicants for coastal permits to reclaim foreshore or seabed should note that once they have obtained the permit, they are required to deposit a plan of survey with the Registrar of Deeds. The Minister of Conservation, as representative of the Crown, is responsible for determining the appropriate price (if any) for any right, title or interest in any reclamation which is land of the Crown.

15.2 Issue, Objective, Policies and Methods

15.2.1 Key Issue

Reclamation can have adverse environmental effects.

15.2.2 Objective

15.2.2(a) Provision for reclamations within the coastal marine area that are either necessary or otherwise appropriate while avoiding, remedying or mitigating any associated adverse environmental effects.

15.2.3 Policies

15.2.3(a) Reclamations must not have adverse effects on the ecological values of the Coastal Habitat Preservation Zone.

15.2.3(b) To take a precautionary approach to reclamations within the Coastal Management Zone. The precautionary approach should consider effects on:

- siltation rates;
- flushing of harbours and estuaries;
- the life supporting capacity of harbours and estuaries;
- hydrodynamic, geomorphic and ecological processes.

15.2.3(c) To recognise that reclamation identified in the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004, is appropriate in terms of section 6(a) of the Resource Management Act 1991, provided that any adverse effects are avoided, remedied or mitigated.

15.2.3(d) To recognise that reclamation in the Harbour Development Zone may be appropriate provided that it is consistent with the purposes of the Harbour Development Zone described in section 3.3.2(c), no other practicable options exist, and adverse effects are avoided, remedied or mitigated.

15.2.3(e) To discourage the proliferation of new reclamations and encourage the efficient use of existing land and reclamation as alternatives to new reclamations.

15.2.3(f) To recognise that reclamation for the purposes of waste disposal or to create land for activities not dependent on the coastal marine area, is inappropriate.

15.2.3(g) Reclamations must:

- be constructed of inert materials which will not result in contaminants leaching into the coastal marine area; and
- be finished with materials which are compatible with the amenity values, landscape and natural character of the coastal environment in the location; and
- be designed by an engineer to a high standard of structural integrity; and
- not impede the flow of floodwater.

15.2.3(i) To consider the adverse effects and practicality of removing reclamation in comparison to the beneficial effects of removing reclamation.

15.2.4 Rules

Note: The rules are set out in this chapter to assist readers who wish to view the rules in the context of relevant objectives and policies. These are the rules that are to be applied for regulatory purposes. A summary table of all the rules is provided in Part VI for convenience, but that summary table is not intended to be used for regulatory purposes. A diagram of the Port area is also provided to give guidance on the application of port zone rules. Again this is not to be used for regulatory purposes.”

The rules are to be read subject to the following definitions:

The rules apply to activities in the coastal marine area only. They do not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Where an activity is classified as a prohibited activity in the rules of this plan, it shall be read as an activity for which no resource consent shall be granted (refer to section 2 of the Resource Management Act 1991).

All Zones

15.2.4(a) Reclamation for the following purposes is a prohibited activity:

- disposal of dredged material as the primary purpose of the reclamation; or
- extension to or creation of farmland, playing fields, urban, and industrial areas excepting ports, or other marine servicing facilities and storage; or
- carparks as the primary purpose of the reclamation; or
- rubbish disposal, including industrial, horticultural, farm and household.

15.2.4(b) Any reclamation not expressly provided for or prohibited by the other rules of this plan, is a discretionary activity.

15.2.4(c) Removal of reclamation is a discretionary activity.

Coastal Habitat Preservation Zone

15.2.4(d) Reclamation is a prohibited activity in the Coastal Habitat Preservation Zone, except for reclamation which occurred before 27 January 1995.

Port Zone

15.2.4(e) Reclamation for the activities listed below, as expressly described in the Eighth Schedule to this plan:

- construction of the Sulphur Point Wharf Extension North,
- construction of the Sulphur Point Wharf Extension South,

- construction of the Mt Maunganui Wharf Extension South between the existing Mt Maunganui Wharf and the southern face of the petrochemical wharf:

is a non-notified limited discretionary activity. Environment Bay of Plenty restricts the exercise of its discretion to the following matters:

- the material, area, quantity, location and timing of reclamation,
- effects on the hydrodynamic and geomorphic regime of the harbour,
- coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan,
- effects on other harbour users, navigation and public safety during construction,
- site specific historical or cultural values,
- the review of conditions and the timing and purpose of that review,
- the amount and type of any financial contribution,
- compliance monitoring.

Applications will be considered without the need to obtain the written approval of affected persons.

15.2.5 **Methods of Implementation**

Environment Bay of Plenty will:

15.2.5(a) Monitor general sediment accumulation in the Tauranga and Ohiwa Harbours.

15.2.5(b) Maintain a database of reclamations in harbours and estuaries which records:

- site details;
- legal status;
- potential for restoration.

and use this information to assess existing reclamations and assist in harbour restoration.

15.2.5(c) Where appropriate, send to Land Information New Zealand, a copy of any approved coastal permit, in accordance with section 114(2) of the Resource Management Act 1991.

15.2.5(d) Forward copies of coastal permit applications to the Director Maritime Safety, in accordance with section 395 of the Resource Management Act 1991.

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16 Exotic Plants and Animals

16.1 Explanation/Principal Reasons

Exotic plants or animals are those that do not naturally occur in New Zealand. Exotic species already in New Zealand are often referred to as introduced species. Indigenous plant or animal species are those that occur naturally in New Zealand, i.e. they evolved or arrived in New Zealand without human assistance or intervention. This chapter is concerned only with exotic species, not indigenous species.

The introduction of exotic species into New Zealand can have significant effects on ecosystems and associated economies. It has become a major environmental issue. Legislative control applies at different levels.

The initial introduction of new exotic species into New Zealand is controlled by Central Government under the Hazardous Substances and New Organisms Act 1996 (HSN096). New exotic species cannot be introduced into New Zealand without first gaining authorisation under this Act. However, if authorisation is obtained there are no further controls placed on the distribution of a species once it has been introduced into New Zealand. Likewise HSN096 does not apply to exotic species that have already been introduced into New Zealand.

The Biosecurity Act 1993 (as amended in 1997) provides for Central Government border control of the introduction of new organisms into New Zealand. This function is relevant to the introduction of new species in the ballast water of vessels and is currently implemented by the Ministry of Fisheries (refer to chapter 10). The Biosecurity Act also addresses the physical control of previously introduced species which have been declared to be pests. This function is implemented by Environment Bay of Plenty through regional pest management strategies.

There are two pest strategies. One deals with plant pests and the other with animal pests. These are the principal method for addressing existing pest problems. The pest strategies include controls on the sale, propagation, keeping or distribution of pests, in addition to setting out responsibilities for control of existing infestations.

Section 12 of the Resource Management Act also regulates the planting or introduction of exotic plants into the foreshore or seabed. To date the only known exotic plant pest of significance in the coastal marine area is *Spartina* (*Spartina* spp), but other exotic or introduced plant species have the potential for serious adverse effects on marine and estuarine ecosystems.

Spartina is an aggressive estuarine grass, which spreads as a dense mat and takes over large areas of foreshore. It works as a very effective sediment trap, and gradually builds up the foreshore until it is no longer subject to the tide. In this way growth of *Spartina* reclaims land from the coastal marine area. This combination of dense growth and reclaiming action rapidly destroys the pre-existing estuarine ecosystem. In the past *Spartina* was used in some instances as a buffer against wave action on erosion prone areas, but it has spread rapidly.

Prohibition of new plantings of *Spartina* is appropriate given its serious adverse effect. This approach is consistent with that taken in the Plant Pest Management Strategy which focuses on containment and eventual eradication of *Spartina* from the Bay of Plenty.

There are a number of exotic species which are not officially recognised as pests but which can nevertheless have adverse effects on the coastal environment if planted in inappropriate places. For example, pines used for forestry can affect

coastal landscape values and invade sensitive ecological habitat. The planting of exotic plants on land in the coastal environment is a matter for district councils to exercise control over, where necessary.

A consent process is required for the introduction of other plant species in the coastal marine area to allow for the assessment of effects.

The Resource Management Act and the plan do not specifically regulate the introduction of animal species into the coastal marine area. However, the plan does regulate the erection of structures and other activities (refer to chapters 13 and 14) that could be associated with the introduction of new animal species for marine farming.

There is a potential risk that the introduction of new species for marine farming will cause adverse effects on other fisheries and the marine environment, if the new species reproduces out of control. However, section 30 of the Act places limits on the extent to which Environment Bay of Plenty can regulate fisheries. For example, Environment Bay of Plenty cannot exercise control to prevent a species being introduced for marine farming on the grounds that it may have adverse effects on other fisheries.

16.2 Issue, Objective, Policies and Methods

16.2.1 Key Issue

The inappropriate introduction of exotic plants or animals to the coastal marine area can adversely affect the environment, including the loss of habitat and foreshore.

16.2.2 Objective

To avoid, remedy or mitigate the adverse effects of exotic plants or animals introduced into the coastal environment.

16.2.3 Policies

16.2.3(a) To recognise that the introduction of exotic plants into the Coastal Habitat Preservation Zone is inappropriate.

16.2.3(b) To provide for the introduction of exotic plants (other than *Spartina*) into the Coastal Management Zone only in appropriate places and circumstances.

16.2.3(c) To promote the eradication of *Spartina*.

16.2.3(d) If eradication of *Spartina* is likely to result in erosion, consideration should be given to:

- replacement with native species appropriate to the location as a first preference, or
- replacement with exotic species, subject to rule 16.2.4(d).

Replacement should be undertaken by the landowner or agency which eradicated the *Spartina*.

16.2.3(e) To avoid, remedy or mitigate the adverse environmental effects associated with the introduction of exotic plants or animals to the coastal marine area.

- 16.2.3(f) The introduction of exotic plants to the coastal environment should be avoided where the introduction of those plants could have significant adverse effects on:
- landscape values;
 - natural character;
 - the functioning of natural ecosystems;
 - the functioning of geophysical processes which form and maintain estuaries and the coastal foredune.

- 16.2.3(g) A precautionary approach will be taken to the introduction of species not already present in the coastal marine area of the region.

16.2.4 Rules

Note: The rules are set out in this chapter to assist readers who wish to view the rules in the context of relevant objectives and policies. These are the rules that are to be applied for regulatory purposes. A summary table of all the rules is provided in Part VI for convenience, but that summary table is not intended to be used for regulatory purposes.

The rules are to be read subject to the following definitions:

The rules apply to activities in the coastal marine area only. They do not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Where an activity is classified as a prohibited activity in the rules of this plan, it shall be read as an activity for which no resource consent shall be granted (refer to section 2 of the Resource Management Act 1991).

Coastal Habitat Preservation Zone

- 16.2.4(a) Notwithstanding rule 16.2.4(d), the introduction of exotic plant species into the Coastal Habitat Preservation Zone is a prohibited activity.

Coastal Marine Area (All Zones)

- 16.2.4(b) The introduction or spreading of *Spartina* into the coastal marine area is a prohibited activity.
- 16.2.4(c) The eradication or control of *Spartina* by mechanical harvesting is a prohibited activity.
- 16.2.4(d) The introduction of exotic plant species other than *Spartina* into the coastal marine area is a discretionary activity provided that the species is already present in the area of the intended introduction.

16.2.5 Methods of Implementation - Process

In accordance with method 16.2.4(d) without limiting its powers to recommend any other conditions for the purposes of avoiding, remedying or mitigating adverse environmental effects, recommendations to the Minister to permit the experimental introduction of exotic plants for trial purposes may include all or some of the following conditions:

- appropriate measures to ensure as far as practicable that the species will be contained within the trial area; and

- the establishment and maintenance of suitable monitoring programmes by the operator in accordance with the directions of Environment Bay of Plenty; and
- requirements for bonds of a sufficient amount to ensure eradication if the species should escape.

16.2.6 **Methods of Implementation - Services**

The eradication of *Spartina* will be promoted in accordance with the pest management strategies prepared under the Biosecurity Act 1993.

16.2.7 **Methods of Implementation - Information**

Environment Bay of Plenty will provide information as to the most efficient and effective methods to eradicate *Spartina* using non-mechanical means.

17 Hazardous Substances

17.1 Explanation/Principal Reasons

Hazardous substances are managed primarily under the Hazardous Substances and New Organisms Act 1996. Under this Act hazardous substances are defined as “*unless expressly provided otherwise by any regulations, any substance –*

(a) *With one or more of the following properties:*

(i) *Explosiveness:*

(ii) *Flammability:*

(iii) *A capacity to oxidise:*

(iv) *Corrosiveness:*

(v) *Toxicity (including chronic toxicity):*

(vi) *Ecotoxicity, with or without bioaccumulation; or*

(b) *Which on contact with air or water (other than air or water where the temperature or pressure has been artificially increased or decreased) generates a substance with any one of the properties specified in paragraph (a) of this definition:*

The threshold levels for hazardous substances will be set by regulations.

The requirements of the Hazardous Substances and New Organisms Act 1996 will apply irrespective of the location of the hazardous substances. Conditions that pertain to identified sites will continue to be set through processes under the Resource Management Act 1991. However any conditions set by Environment Bay of Plenty will need to meet the standards established under the Hazardous Substances and New Organisms Act 1996.

Emergency responses to oil spills are dealt with under the Maritime Transport Act 1994. Under this Act Environment Bay of Plenty has a responsibility to develop oil spill contingency plans. Environment Bay of Plenty has produced a Tier II Oil Spill Contingency Plan.

Hazardous substances are transported through the coastal marine area within the Bay of Plenty primarily via the Port of Tauranga, as part of local or international trade. They may also be stored on land. The Resource Management Act 1991 requires that the risk associated with the storage, use or transportation of hazardous substances is minimised.

17.2 Issue, Objective, Policies and Methods

17.2.1 Key Issue

There is risk of adverse environmental effects associated with the storage, use and transportation of hazardous substances within the coastal marine area.

17.2.2 Objective

The minimisation of the risk of adverse environmental effects associated with the storage, use and transportation of hazardous substances within the coastal marine area.

17.2.3 Policies

- 17.2.3(a) To prevent the disposal of hazardous substances to the coastal marine area.
- 17.2.3(b) To require where appropriate specific contingency and emergency response planning from the industry groups storing, using and transporting hazardous substances within the coastal marine area.
- 17.2.3(c) To ensure that the off-target effects of herbicide or pesticide use in the coastal marine area are avoided, remedied or mitigated.
- 17.2.3(d) To take a precautionary approach to the storage and transportation of hazardous substances in the coastal marine area, where there is the potential for serious or irreversible effects.
- 17.2.3(e) To promote the development of a management system which will ensure that the storage, use and transportation of hazardous substances is carried out in a manner which minimises any potential risk to the environment.
- 17.2.3(f) To promote the safe and efficient handling, use, storage and transportation of hazardous substances within the coastal marine area.
- 17.2.3(g) To avoid, remedy or mitigate any adverse environmental effects of the storage, use or transportation of hazardous substances within the coastal environment.

17.2.4 Rules

Note: The rule is set out in this chapter to assist readers who wish to view the rule in the context of relevant objectives and policies. The rule as written here is to be applied for regulatory purposes. A summary table of all the rules is provided in Part VI for convenience, but that summary table is not intended to be used for regulatory purposes.

The rule is to be read subject to the following definitions:

The rule applies to activities in the coastal marine area only. It does not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Where an activity is classified as a prohibited activity in the rule, it shall be read as an activity for which no resource consent shall be granted (refer to section 2 of the Resource Management Act 1991).

Note: Any dumping, discharging, or incineration from ships, aircraft or offshore installations may be subject to the provisions of sections 15(A), (B) and (C) of the Act and to any regulations made under those sections.

Coastal Marine Area (All Zones)

The dumping, or incineration of hazardous substances in the coastal marine area is a prohibited activity.

17.2.5 **Methods of Implementation – Advocacy**

Environment Bay of Plenty will:

17.2.5(a) Advocate that central government urgently address the issues of:

- the development of an international register of highly hazardous substances; and
- the development of a national tracking system for highly hazardous substances.

17.2.5(b) Environment Bay of Plenty will continue to participate in the Hazardous Substances Technical Liaison Committee for the prevention and clean-up of spills of hazardous substances.

17.2.6 **Methods of Implementation - Education**

Environment Bay of Plenty will identify hazardous substances users within the coastal marine area and target these specific groups with:

- education about the safe storage and use of hazardous substances;
- education regarding minimisation of the requirement for use of hazardous substances;
- education regarding contingency planning to avoid adverse effects of inappropriate use of substances.

18 Historic and Cultural Heritage

18.1 Explanation/Principal Reasons

Heritage involves those aspects of the natural and cultural environment which have been inherited from the past, which define the present and which will be handed on to future generations. In the coastal marine area heritage resources include features such as natural objects, structures, archaeological sites, (including shipwrecks), and historic and traditional areas.

With regard to Maori heritage, tangata whenua have strong links with specific areas of the coast. These links are complex and often overlap. Maori heritage matters in the coastal environment include:

- traditional names and historical associations with sea areas, channels and other natural features;
- spiritual dimensions related to specific water areas;
- areas associated with resource use (e.g. fishing grounds, shellfish gathering areas, rock resources, working areas, seabird gathering areas, seaweed gathering areas);
- routes, boundaries and boundary markers; and
- traditional places of recreation.

Maori heritage may have particular sensitivity, and it is often inappropriate to identify sites or areas of Maori cultural significance within public documents. This necessitates a different process for recognising Maori cultural heritage, with this needing to be determined in consultation with tangata whenua. See the policies and methods of chapter 8 – Tangata Whenua Interests.

With regard to European heritage, more than 200 years of settlement concentrated along the coast have resulted in a rich maritime heritage, reflected predominantly in structures and features that exist today.

European heritage matters in the coastal environment include:

- landing places associated with early settlement;
- constructions (such as jetties and wharfs);
- shipwrecks;
- navigational aids;
- shipbuilding areas;
- areas associated with naval and military history;
- reclamations; and
- recreational areas.

Heritage includes both historic places and archaeological sites (as defined in the Historic Places Act 1993). It is important to note that historic places within the

open coastal marine area cannot be protected through the regulatory mechanism of section 189 of the Resource Management Act (i.e. the heritage order process) because the Act defines heritage orders as provisions within district plans. Accordingly, the regulatory protection of these resources is reliant upon appropriate rules within the coastal plan. These rules in turn must regulate uses that may affect heritage resources recognised as being significant.

With regard to European heritage within the coastal marine area, the historic jetty at the base of Mount Maunganui and the shipwreck of the vessel Taupo for example, are particularly important. Permission of the Historic Places Trust is first required for any activity which would destroy, damage or modify archaeological sites.

18.2 Issue, Objective, Policies and Methods

18.2.1 Key Issue

Heritage resources within the coastal marine area are not always recognised or identified and can be adversely affected by inappropriate activities.

18.2.2 Objective

The protection of the heritage values and heritage resources within the coastal marine area.

18.2.3 Policies

18.2.3(a) To protect the heritage resources within the Bay of Plenty coastal marine area which are either scheduled by the Historic Places Trust, recorded in the New Zealand Archaeological Association Site Recording Scheme, or listed in the Regional Heritage Inventory (proposed in 18.2.5(a)).

18.2.3(b) To promote further research into identifying any additional sites or features of heritage value within the coastal marine area.

18.2.3(c) To require the conservation and protection of heritage resources within the coastal marine area not registered by the Historic Places Trust or in the New Zealand Archaeological Association Site Recording Scheme, but nevertheless of significance.

18.2.3(d) To recognise the sensitivity associated with certain forms of Maori cultural heritage within the coastal marine area.

18.2.3(e) To avoid adverse effects on heritage resources as far as practicable, and where avoidance is not practicable, effects shall be remedied or mitigated.

18.2.3(f) In consultation with the Historic Places Trust, tangata whenua and other interested parties, Environment Bay of Plenty will establish and implement a set of evaluation criteria for assessing heritage resources within the coastal marine area. In doing so, regard will be had to the Historic Places Register criteria.

18.2.3(g) Environment Bay of Plenty will have regard to the conservation principles contained within the New Zealand ICOMOS Charter, when making decisions concerning heritage resources within the coastal marine area.

Note: These policies are being given effect to through the heritage criteria of the Bay of Plenty Regional Policy Statement and will also be considered when assessing any resource consent application located in or likely to affect any site of historical or cultural importance.

18.2.4 Rules

Note: The rule is set out in this chapter to assist readers who wish to view the rule in the context of relevant objectives and policies. The rule as written here is to be applied for regulatory purposes. A summary table of all the rules is provided in Part VI for convenience, but that summary table is not intended to be used for regulatory purposes.

The rule is to be read subject to the following definition:

The rule applies to activities in the coastal marine area only. It does not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Coastal Marine Area (All Zones)

All activities which would affect the remains of any vessel wrecked before 1900 are discretionary activities.

18.2.5 Methods of Implementation - Information

- 18.2.5(a) In consultation with tangata whenua and other heritage agencies, Environment Bay of Plenty will promote, support and be involved in compiling a regional heritage inventory of the coastal marine area in order to identify heritage sites, features or resources.
- 18.2.5(b) In consultation with tangata whenua and other heritage agencies, Environment Bay of Plenty will investigate the most appropriate means of protecting sites of cultural heritage value without the need for their explicit identification.
- 18.2.5(c) Environment Bay of Plenty will send New Zealand Historic Places Trust a copy of every coastal permit application which relates to land subject to a heritage order or requirement, or is identified in a plan as having heritage value, or is registered under the Historic Places Act 1993.

19 Recreation

19.1 Explanation/Principal Reasons

The coastal marine area of the Bay of Plenty is a major recreational asset attracting both locals and overseas visitors. The primary recreational activities that occur within the coastal environment include swimming, boating, surfing, windsurfing, fishing, walking, picnicking and simply relaxing.

Surveys have shown that recreational pursuits at the coast are some of the most popular outdoor leisure activities. A recent Department of Conservation survey of recreation destinations reinforced these findings, showing that the Bay of Plenty coastline is the most frequently visited area for recreation by residents of Auckland, Waikato and the Bay of Plenty itself.

Recreational use of the coast is likely to increase and become more diverse. There is, therefore, a growing need to manage recreational activities in such a way as to reduce conflict and competition. In addition to managing the activities, it is also just as important to manage the setting. This is achieved by preserving the environment which people value for their recreational pursuits.

Environment Bay of Plenty has the power to control the adverse effects of water related recreation under section 12(3) of the Act. However, Environment Bay of Plenty believes that, when control is necessary, it is more appropriate to exercise it under the Harbours Act. This approach allows navigation safety and general water safety matters to be dealt with under one Act. Recreation is tied in with navigation and safety matters and these may be regulated only under the Harbours Act. In the past, harbour boards were responsible for these functions, but since 1989 regional councils have (for the most part) replaced such harbour boards.

For these reasons, rules and methods for managing water surface recreation are not included in this plan. Rather they are contained within the Local Government Act 2002 provisions and the Harbour bylaws promulgated by Environment Bay of Plenty (under section 232 of that Act). At present this jurisdiction extends to cover the whole of the coastal marine area in the Bay of Plenty.

The areas marked as indicative ski areas in the maps are for the purpose of managing noise only. They do not show the actual boundaries of the ski lanes within those areas. The actual boundaries of the ski lanes are set in accordance with the Harbours Act and may vary depending on weather and tidal conditions.

Recreational activities other than those associated with the water (i.e. those which involve disturbance of the foreshore or seabed) are technically restricted under the provisions of the Act. This is in accordance with the restrictions of section 12 of the Act, which lists a number of activities which are prohibited unless allowed by a rule in this plan or a resource consent. Some of these activities could be read to include recreational pursuits.

Environment Bay of Plenty considers that resource management effects associated with such recreational activities (i.e. those which take place on foreshore) are both temporary and minor in nature. Such activities are given permitted activity status within this plan. However, this provision excludes recreational activities involving the use of motor vehicles. The use of these is regulated by the provisions of chapter 14 (Disturbance, Deposition and Extraction).

19.2 Issue, Objective, Policies and Methods

19.2.1 Key Issue

Recreational use of the coastal environment is increasing and has the potential to cause conflict, competition and adverse environmental effects.

19.2.2 Objective

Appropriate recreation within the Bay of Plenty coastal environment.

19.2.3 Policies

19.2.3(a) To recognise the recreational values of the Bay of Plenty coastal marine area as being of national significance. Effects on those values shall be avoided as far as practicable, and where avoidance is not practicable, remedied or mitigated.

19.2.3(b) To minimise the effects of active water sports on other more passive recreational activities, on adjacent activities or uses on land and on indigenous wildlife.

19.2.3(c) To discourage the proliferation of commercial, recreational or tourist activities where they would unduly interfere with public access to and recreational use of the coastal marine area. Care must be taken to ensure that existing recreational opportunities and public access are not progressively lost through the cumulative impact of new development.

19.2.3(d) To promote provision of the appropriate land-based infrastructure to support recreational activities within the coastal environment while ensuring minimal adverse effects associated with such facilities.

19.2.3(e) To avoid, remedy or mitigate any significant adverse environmental effects of recreation.

19.2.3(f) District councils should ensure that vehicle use does not adversely affect sand dunes, users of beaches or wildlife.

19.2.3(g) Areas of high actual or potential use for recreation should be protected from incompatible activities.

19.2.4 Methods of Implementation - Process

Environment Bay of Plenty will manage water surface recreation within those harbours for which it exercises the powers, functions and duties of a harbour board primarily by way of Local Government Act section 232 bylaws promulgated by Environment Bay of Plenty, by way of launch wardens appointed by Environment Bay of Plenty, and by way of any other provisions of the Local Government Act as considered appropriate by Environment Bay of Plenty.

19.2.5 Methods of Implementation - Information

Environment Bay of Plenty will continue to produce and distribute on a regular basis navigation and safety information and signage, as well as information on the location of recreational facilities, for Tauranga Harbour and Ohiwa Harbour.

19.2.6 Methods of Implementation - Advocacy

Environment Bay of Plenty will promote the appropriate provision of the facilities and infrastructure needed to support recreational activities within the coastal environment, including car-parking, rubbish bins, toilet and changing facilities, boat ramps and minor jetties together with access to and along the coastal marine area.

20 Noise

20.1 Explanation/Principal Reasons

Section 30(1)(d)(vi) of the Act directs that regional councils are responsible for the control of the emission of noise and the mitigation of the effects of noise within the coastal marine area.

Further to this, section 16 of the Act (without limiting the role of regional councils as described above) requires that persons undertaking activities within the coastal marine area are to adopt the best practicable option to ensure emission of noise does not exceed a reasonable level.

Noise levels near the sea are normally relatively high due to wave action. A background level of 40 dBA would be common with waves as small as 50 mm, increasing to 50 dBA with 100 mm waves. However in sheltered coastal waterways the background sound level may drop as low as 25-26 dBA at night time in calm conditions.

Experience indicates that noise levels near residential areas should not exceed 45 dBA during the sleeping hours and 55 dBA during waking hours. This is a relevant standard to apply to sensitive parts of the coastal environment. The quality of noise is an important issue. People expect to hear waves in the coastal environment and may even regard that noise as a soothing part of the natural character of the coastal environment. By contrast mechanical noise can be intrusive and inconsistent with the natural character and amenity values of the coastal environment.

Ohiwa and Tauranga harbours are particularly sensitive coastal environments in terms of their: ecological values, natural character, proximity of human settlement and recreational use, and relatively low natural noise levels. For this reason it is appropriate to set minimum noise standards for these harbours. In other areas the powers provided under section 16 of the Act are adequate. Section 16 of the Act requires the adoption of the best practicable option to ensure that emission of noise does not exceed a reasonable level.

Some recreational activities such as the use of personal watercraft, water ski boats and hovercraft are inherently noisy. When these activities are carried out on a regular basis that noise can have significant adverse effects. The significance of the effects is very location dependent. Therefore the most practical way to control the effect, in the areas less than 200 m from the shore, is to restrict the high speed inshore use of ski boats and personal watercraft to areas remote from other people. The areas marked as indicative ski areas on the maps are for the purpose of managing noise only. Noise emissions from ski boats may exceed the noise standards set for the harbours in these areas, but the best practicable option must still be applied to ensure that noise does not exceed a reasonable level. The indicative ski areas do not show the actual boundaries of the ski lanes within those areas. The actual boundaries of the ski lanes are set in accordance with the Harbours Act and may vary depending on weather and tidal conditions.

In addition to noise emissions from vessels there is also that which emanates from wharfs and from other structures or activities situated within the coastal marine area. In particular the commercial port areas of the region have operational requirements which may generate considerable noise levels. Environment Bay of Plenty considers the most appropriate means of managing the effects of noise in the coastal marine area is to set noise level standards. These standards are maximums which must not be exceeded.

At the end of 1994 Environment Bay of Plenty transferred the power to control the emission of noise and the mitigation of the effects of noise to the district councils of Tauranga and Western Bay of Plenty. However, the coastal plan needs to stipulate noise level standards which these district councils will monitor and enforce. Environment Bay of Plenty is responsible for enforcement of noise control in that part of the coastal marine area not subject to the transfer of power to these district councils.

Another noise-related issue is that of the discharge of firearms within the coastal marine area by recreational hunters and the New Zealand Defence Forces. Recreational hunters are licensed by the Eastern Region Fish and Game Council, and in general the noise associated with the discharge of their firearms seems to cause few problems.

20.2 Issue, Objective, Policies and Methods

20.2.1 Key Issue

Noise within the coastal marine area can cause adverse environmental effects.

20.2.2 Objective

Adverse effects of noise generated in the coastal marine area are avoided, remedied or mitigated.

20.2.3 Policies

20.2.3(a) Recreational vessels such as personal watercraft, water ski boats, and hovercraft, which exceed the noise standards, should only operate within the indicative water ski or personal watercraft areas shown in the maps, or beyond 200 metres off the coast. The defined areas are identified in the maps to this plan.

20.2.3(b) The natural character and amenity values of the Tauranga Harbour and Ohiwa Harbour coastal environment should be protected from the adverse effects of noise. The Port Zone noise control boundary is to be used to manage noise from the Port of Tauranga. In other parts of the coastal environment section 16 of the Act is to be applied where necessary.

20.2.4 Rules

Note: The rules are set out in this chapter to assist readers who wish to view the rules in the context of relevant objectives and policies. These are the rules that are to be applied for regulatory purposes. A summary table of all the rules is provided in Part VI for convenience, but that summary table is not intended to be used for regulatory purposes.

The rules are to be read subject to the following definitions:

The rules apply to activities in the coastal marine area only. They do not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Coastal Marine Area (All Zones)

20.2.4(a) The emission of noise within the coastal marine area of the Tauranga and Ohiwa harbours is a permitted activity, provided that the noise does not exceed the following conditions:

Night Time – 45 dBA L10; and an LMAX of the lower of 75dBA or the background sound level plus 30.

Day Time – 55 dBA L10. The day time period is between 7.00 a.m. – 10.00 p.m.

The following noise emissions are exempt from these conditions (note: section 16 of the Act still applies):

- noise generated by navigational aids, safety signals, warning devices, or emergency pressure relief valves;
- noise generated by emergency work undertaken to protect life or limb, or to prevent loss or serious damage to property, or minimise or prevent environmental damage;
- noise generated by the discharge of firearms by licensed hunters;
- noise generated by the use of weapons and the subsequent detonation of munitions by the New Zealand Defence Forces;
- noise generated by the use of vessels within the indicative ski areas identified in the maps to this plan (Note: the actual boundaries of ski lanes may vary depending on the weather and tidal conditions);
- noise generated by any activity within the Port Zone identified in the maps to this plan.

The emission of noise within the coastal marine area of the Ohiwa Harbour and Tauranga Harbour which does not comply with the conditions and is not exempted, is a discretionary activity.

For the purpose of this rule, the entrances of the Tauranga Harbour are defined by lines drawn across the Katikati and Tauranga entrances at U13 744104, U13 744100, U14 892914, U14 897914, respectively.

For the purpose of this rule, the entrance of the Ohiwa Harbour is defined by a line drawn across the Ohiwa Entrance at W15 744485, W15 748485.

The noise levels will be measured and assessed in accordance with the requirements of NZS 6801:1991 Measurement of Sound and NZS 6802:1991 Assessment of Environmental Sound. Noise will be measured at:

- (i) Whichever is the lesser of, a residential property boundary or 20 metres from a residential building.
- (ii) The boundaries of the Coastal Habitat Preservation Zone and the sites of significance identified in the maps, the Sixth Schedule – Significant Marshbird Habitat Areas and the Seventh Schedule – Significant Indigenous Vegetation Areas.

20.2.4(b)

- (i) Emission of noise from within the Port Zone is a permitted activity provided that:
 - The long-term average sound level (L_{dn}) shall not exceed 55 dBA at any point outside the 55 dBA noise control boundary (Sheet 11a of the maps to this plan), nor 65 dBA at any point outside the 65 dBA noise control boundary;
 - The short-term average sound level (L₁₀) shall not exceed 60 dBA between 0700 and 2200, nor 50 dBA between 2200 and 0700 at any point outside the 55 dBA noise control boundary;
 - The night time maximum sound level (L_{max}) shall not exceed 75 dBA between the hours of 2200 and 0700 at any point outside the 55 dBA noise control boundary; and

- The short term average sound level (L10) shall not exceed 65 dBA between 0700 and 2200, nor 60 dBA between 2200 and 0700, at any point on land zoned for residential purposes outside the 65 dBA noise control boundary, but within the 55 dBA boundary.

The following noise emissions are exempt from these conditions (Note: section 16 of the Act still applies):

- noise generated by navigational aids, safety signals, warning devices, or emergency pressure relief valves;
- noise generated by emergency work undertaken to protect life or limb, or to prevent loss or serious damage to property, or minimise or prevent environmental damage.

Emission of noise in excess of these conditions and which is not exempted is a discretionary activity.

The 55 dBA and 65 dBA noise control boundaries and Port Zone are shown on the maps to this plan.

Note: For rules relating to land use restrictions between the 55 dBA and 65 dBA noise control boundaries refer to the Tauranga District Plan.

- (ii) Sound levels shall be measured in accordance with NZS6801:1991 Measurement of Sound.

Terms used shall be defined as in NZS6801:1991 Measurement of Sound. The following definitions shall apply for terms not covered in NZS6801:1991.

LONG-TERM AVERAGE SOUND LEVEL – shall be the Ldn measured over a consecutive five-day period.

SHORT-TERM AVERAGE SOUND LEVEL – shall be the inverse logarithmic average of any four L10 (15 minutes) values obtained within a 2 hour period during a single day (0700 to 2200) or night (2200 to 0700).

PART IV

ADVOCACY

This part of the plan refers to issues in which Environment Bay of Plenty has no statutory functions or obligations but in which it may wish to articulate an opinion expressed by sectors of the regional community. However, in this regard Environment Bay of Plenty needs to exercise care in ensuring that whatever particular stance it takes reflects a balanced and equitable view between different community sectors.

The two issues to date which have been identified as suitable for a Council advocacy role are:

- (a) fishing; and
- (b) marine protected areas and marine reserves.

21 Fishing

21.1 Explanation/Principal Reasons

Both the inshore and offshore waters of the Bay of Plenty coastal marine area support a range of important commercial, recreational and traditional (i.e. Maori) fisheries. However the functions of regional councils do not apply to the control of fisheries. Instead, the conservation, enhancement, protection, allocation and management of all fishery resources remain the responsibility of the Ministry of Fisheries under the Fisheries Act 1996. Fisheries resources are defined in that Act to mean *any one or more stocks or species of fish, aquatic life, or seaweed*.

Notwithstanding this, Environment Bay of Plenty has a responsibility to protect fisheries from non-fishing activities, and also to control the effects of fishing on non-fishing activities. Further, the primary function of regional councils is to promote the sustainable management of the natural and physical resources of their regions while being mindful of the social, economic and cultural wellbeing of the community. Environment Bay of Plenty interprets this as compelling it to adopt an advocacy role in promoting the sustainable management of regional fisheries.

This advocacy role would include promoting better coordination between fisheries management and the Resource Management Act, promoting the principles of sustainability and resource stewardship with regard to fisheries management, and promoting balance in the economic, recreational and cultural needs of the community in relation to fisheries.

With regard to this advocacy role, Environment Bay of Plenty will also need to recognise its indirect influence on the sustainable management of fisheries. This influence is primarily by way of coastal permits (and other consents) which will affect water quality, fisheries habitat and public access to fisheries.

Maintenance of traditional access to fisheries is an issue of particular importance to tangata whenua. There is particular concern that traditional fisheries are being depleted. Under fisheries legislation, taiapure and mataitai are two mechanisms by which tangata whenua can seek greater control of the management of local customary fisheries. Environment Bay of Plenty has no statutory role in either the establishment or management of taiapure or mataitai, but may choose to support an application after consultation with interested parties.

21.2 Issue, Objective, Policies, Methods

21.2.1 Key Issue

Non-sustainable fishing activity, poor coordination between fisheries management and the Resource Management Act, and inappropriate activities in the coastal marine area (and on land above mean high water springs) can adversely affect fisheries.

21.2.2 Objective

The sustainable management of the Bay of Plenty coastal fisheries.

21.2.3 Policies

21.2.3(a) To promote the sustainable management of the Bay of Plenty coastal fisheries.

21.2.3(b) To recognise that the sustainable management role of Environment Bay of Plenty includes ensuring that the adverse effects of activities other than fishery harvesting or fishery enhancement are avoided, remedied or mitigated.

21.2.3(c) To avoid, remedy or mitigate any adverse effects of fishing on other activities.

21.2.4 **Methods of Implementation - Process**

21.2.4(a) Environment Bay of Plenty will establish and maintain appropriate communication with the Ministry of Fisheries with respect to the management of resources within the coastal marine area.

21.2.4(b) In consultation with groups and agencies that have interests in the fisheries resources of the Bay of Plenty, Environment Bay of Plenty will develop an advocacy policy which promotes the sustainable management of fisheries in the region.

21.2.4(c) In determining applications for coastal permits and other resource consents, Environment Bay of Plenty will ensure that any adverse effects of the activity on fisheries or important fishery or shellfish habitat are avoided or mitigated to the fullest extent practicable.

21.2.4(d) In determining applications for the exclusive occupation of space in the coastal marine area, Environment Bay of Plenty will be mindful of any implications the activity would have on fishing opportunities.

21.2.4(e) Environment Bay of Plenty will recognise that direct provision of access to the coastal marine area may result in localised increases in pressure on fish and shellfish resources and, where appropriate, will inform the Ministry of Fisheries so that appropriate management steps can be taken.

21.2.4(f) In consultation with the Ministry of Fisheries and the Department of Conservation, Environment Bay of Plenty will protect from inappropriate use or development areas that are important either as juvenile fish habitats or important at other vulnerable stages of the life cycle of fish or shellfish.

21.2.4(g) After consultation with interested parties, Environment Bay of Plenty may choose to support applications for taiapure or mataitai.

22 Marine Protected Areas

22.1 Explanation/Principal Reasons

Marine protected areas is a generic term for marine areas that are protected under various pieces of legislation, in particular the Marine Reserves Act and the Fisheries Act. They include both fully and partially protected areas. In partially protected areas limited forms of recreational or commercial fishing may take place. In fully protected areas all marine life is totally protected.

Marine protected areas is an issue in which Environment Bay of Plenty has no statutory functions or obligations. Its primary role in this regard would therefore be one of advocacy, when the community has expressed a desire to establish marine protected areas within the Bay of Plenty.

With regard to partially protected areas, Environment Bay of Plenty recognises that some areas of the coastal marine area are not suited to certain methods of fishing and should therefore be protected from them, while at the same time allowing for less harmful (alternative) methods of harvest.

With regard to fully protected areas, Environment Bay of Plenty will advocate for the establishment of a network of these which are representative of the full range of marine ecosystems present within the Bay of Plenty. This is in accordance with the requirement of the Act which directs regional councils to recognise and provide for the preservation of the natural character of the coastal environment.

It is appropriate therefore that Environment Bay of Plenty encourage the development of a process by which the full range of marine habitats and ecosystems within the Bay of Plenty coastal marine area can be firstly identified. Following from this exercise best examples of each type of habitat can be selected for full protected marine reserve status. In addition to such representative sites other priority areas for protection may also be identified during this process (i.e.: those with unique features or of special interest).

22.2 Issue, Objective, Policy and Methods

22.2.1 Key Issue

The full range of marine habitats and ecosystems within the Bay of Plenty coastal marine area have not been adequately identified or protected.

22.2.2 Objective

A network of unique and representative marine protected areas.

22.2.3 Policy

To advocate for the establishment of a network of unique and representative marine protected areas.

22.2.4 Methods of Implementation - Process

22.2.4(a) Environment Bay of Plenty will liaise with groups and agencies which have an interest in the establishment of marine protected areas within the Bay of Plenty.

- 22.2.4(b) In consultation with these groups, tangata whenua, fisheries users and the community as a whole, Environment Bay of Plenty will participate in the identification of areas which should have a partially protected status, and advocate for the establishment of these as partially protected areas.
- 22.2.4(c) In consultation with these groups, tangata whenua, fisheries users and the community as a whole, Environment Bay of Plenty will participate in the development of a process for establishing a network of fully protected marine reserves which:
- are representative of the complete range of marine ecosystems that are present within the Bay of Plenty; or
 - are worthy of protection due to their unique or special interest features.
- 22.2.4(d) In the development of the process described in method 22.2.4(c), Environment Bay of Plenty will recognise the desirability of:
- the resultant size of the marine reserves being large enough to ensure their long-term viability; and
 - the resultant marine reserves having, as far as practicable, clearly identifiable boundaries.
- 22.2.4(e) Environment Bay of Plenty may consider lodging an application for a marine reserve in appropriate locations and in accordance with methods 22.2.4(c).
- 22.2.4(f) Environment Bay of Plenty will support and encourage public participation in the management of marine protected areas.
- 22.2.4(g) Environment Bay of Plenty will encourage self enforcement by users of marine protected areas.

PART V

ENVIRONMENTAL

RESULTS

Every objective, policy and method of implementation contained within this plan is designed to achieve a positive environmental result. This part of the plan describes these results. They are required to be stated in regional coastal plans.

23 Anticipated Environmental Results

23.1 Background

The Act requires that regional plans include documentation of the environmental results that are anticipated from the successful implementation of the policies and methods that are contained therein. These environmental outcomes must be in accordance with the purpose and principles of the Act. Hence they must promote the sustainable management of natural and physical resources.

While preparing this plan (and in particular identifying the anticipated environmental results) it became apparent that many of the expected outcomes were common to several or more of the issues. Rather than repeating them at length they have been grouped together within this single chapter.

23.2 Anticipated Environmental Results

It is anticipated that the implementation of the policies and methods contained within this plan will achieve the following environmental outcomes:

- Sustainable management of the natural and physical resources of the coastal marine area.
- Safeguarding the life-supporting capacity of coastal water and coastal ecosystems.
- Preservation of the natural character of the coastal environment and protection from inappropriate subdivision, use and development.
- Protection of outstanding natural features and landscapes of the coastal environment.
- Protection of significant areas of indigenous vegetation and significant habitats of indigenous fauna within the coastal environment.
- Maintenance of biological diversity within the coastal environment.
- Maintenance of physical and ecological coastal processes.
- Maintenance and enhancement of the intrinsic values of coastal ecosystems.
- Maintenance and enhancement of the quality of coastal water and open coastal water.
- Avoidance and mitigation of the risk to property and other values from the effects of natural coastal hazards, in particular storm erosion and storm flooding.
- Recognition of kaitiakitanga.
- Provision for the relationship of Maori and their culture and traditions with coastal taonga.
- Protection of the mauri of the natural and physical resources of the coastal marine area.

- The special Treaty relationship between the Crown and tangata whenua is recognised and facilitated.
- The relationship of tangata whenua and their culture and traditions with their ancestral taonga, including use of and access to these taonga, are recognised and provided for.
- Adverse effects of use and development on the relationship of tangata whenua and their culture and traditions with their ancestral taonga are avoided, remedied or mitigated.
- Appropriate and meaningful consultation is undertaken with tangata whenua on all matters of resource management significance to them.
- Involvement of tangata whenua in managing their ancestral taonga, including decision making, in accordance with tikanga Maori.
- Maintenance and enhancement of the amenity values of the coastal environment, including recreational, educational, cultural social and inspirational experiences.
- Protection of the heritage values of sites, structures, places or areas within the coastal marine area.
- Maintenance and enhancement of public access to and along the coastal marine area, unless otherwise appropriate.
- Consideration of the finite characteristics of the natural and physical resources of the coastal environment.
- Prevention of non-essential or unnecessary activities locating within the coastal marine area, unless otherwise appropriate.
- The efficient and appropriate use and development of the natural and physical resources of the coastal marine area where such use and development is also consistent with sustainable management.
- Avoidance, remedy or mitigation of the adverse effects of maintenance works within the coastal marine area that are associated with the operation of certain operations essential to the regional economy.
- Increased certainty of outcome for potential and actual users of coastal resources.
- Compensatory works or services provided by the operators of consented activities which have adverse environmental effects.
- Coordination between the various agencies which exercise management responsibilities within the coastal environment.
- Integration of the management of the coastal environment with the management of the terrestrial environment.
- A better informed and more environmentally aware regional community.
- Water quality in harbours and estuaries is maintained and enhanced.
- Reduction in human induced sedimentation within harbours and estuaries.
- The extent and quality of estuarine vegetation in sites of significance is retained.

- Shellfish beds of importance to tangata whenua and the community generally are not degraded by development and use.
- The ability of the active beach system to resist natural coastal erosion is maintained.
- Values contained within the areas of significant conservation value are protected.

PART VI

SUMMARY OF RULES

This part of the plan contains the rules, which apply to the coastal marine area of the Bay of Plenty.

The rules are also written out in full in the chapters after the relevant objectives, policies and methods of each issue. This is to assist readers who wish to view the rules in the context of particular issues, objectives and policies. For regulatory purposes, it is the rules as set out in each chapter that are to be applied.

The rules are to be read subject to the following definitions:

The rules apply to activities in the coastal marine area only. They do not apply to activities on land outside the coastal marine area. The coastal marine area is described in chapter 2 – Plan Coverage.

Where an activity is classified as a prohibited activity in the rules of this plan, it shall be read as an activity for which no resource consent shall be granted (refer to section 2 of the Resource Management Act 1991).

Where a rule refers to the discharge of contaminants, it does not include a discharge of contaminants to air (refer to the Bay of Plenty Regional Air Plan).

Rules 9, 21, 42, 43, 72, 73, 74, 80, 81, 86 have been removed from the Regional Coastal Environment Plan in giving effect to Policy 29 of the New Zealand Coastal Policy Statement 2010, in accordance with Sections 55 and 57 of the Resource Management Act 1991.

Discharge of Contaminants

Rule Number	Zone	Classification	Description of Activity
Rule 1 (9.2.4(a))	All zones	Permitted Activity	The discharge of stormwater to the coastal marine area, provided that: <ul style="list-style-type: none"> the suspended solids concentration of the water discharged does not exceed 150 gm⁻³; and the water discharged is substantially free of grease, oil, scums and foam; and the maximum discharge does not exceed 80 litres per second for a 20% AEP storm event (5 year return period storm).
Rule 2 (9.2.4(b))	All zones	Discretionary Activity	Any discharge except as expressly provided for or prohibited by other rules to this plan.
Rule 3 (9.2.4(c))	All zones	Prohibited Activity	The discharge of human sewage, other than from vessels, into the coastal marine area of harbours and estuaries, which has not passed through soil or wetland (in addition to other treatment) (Note: Rule 9.2.4(e) applies to discharge of untreated sewage from vessels).
Rule 4 (9.2.4(d))	All zones	Permitted Activity	Discharge of seawater from live-fish holding tanks provided that: <ul style="list-style-type: none"> the concentration of suspended solids in the discharge does not exceed 10 gm⁻³; and the concentration of ammonia in the discharge does not exceed 5 gm⁻³.
Rule 5 (9.2.4(e))	All zones	Prohibited Activity	The discharge of untreated sewage from vessels in the Tauranga and Ohiwa harbours within 500 metres seaward of the harbour entrances and within 500 metres of a marine farm or a gazetted Mataitai reserve. For the purpose of this rule, the entrances are defined respectively as: Lines drawn across the Katikati and Tauranga entrances at U13 748 109, U13 763 091, U14 883 926 and U14 902 926 respectively. A line drawn across the Ohiwa Entrance at W15 738 492, W15 760 487. Note: This rule extends the application of the Resource Management (Marine Pollution) Amendment Regulations 2002.
Rule 6 (9.2.4(f))	All zones	Discretionary Activity	The discharge of any contaminant from cleaning of the exterior of the hulls of ships or offshore installations below the load line, or parts of a ship used for carrying cargo.
Rule 7 (9.2.4(g))	Port Zone	Non Notified Limited Discretionary Activity	Discharge resulting from the erection, reconstruction, placement, alteration of any structure expressly controlled by rule 13.2.4(o). Environment Bay of Plenty restricts the exercise of its discretion to the following matters: <ul style="list-style-type: none"> the quantity, location and timing of discharge, coastal water quality including the provisions of Chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan, the review of conditions and the timing and purpose of that review, the amount and type of any financial contribution, compliance monitoring, <p>Applications will be considered without the need to obtain the written approval of affected persons.</p>

Rule Number	Zone	Classification	Description of Activity
Rule 8 (9.2.4(h))	Port Zone	Non Notified Limited Discretionary Activity	<p>Discharge resulting from the following reclamation or following disturbance of the foreshore or seabed, both as expressly described in the Eighth Schedule to this plan - Outline Development Plan Port of Tauranga 1994-2004:</p> <ul style="list-style-type: none"> • construction of the Sulphur Point Wharf Extension North, and adjacent sitting basin, • construction of the Sulphur Point Wharf Extension South, and adjacent sitting basin, • construction of the Mt Maunganui Wharf Extension South and the adjacent Sitting Basin between the existing Mt Maunganui Wharf and the southern face of the petrochemical wharf, • the Mount Maunganui Wharfs Future Berth Deepening as shown on plan 270-25A, • maintenance dredging. <p>Environment Bay of Plenty restricts the exercise of its discretion to the following matters:</p> <ul style="list-style-type: none"> • the quantity, location and timing of discharge, • coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan, • the review of conditions and the timing and purpose of that review, • the amount and type of any financial contribution, • compliance monitoring. <p>Applications will be considered without the need to obtain the written approval of affected persons.</p>

Taking, Using, Damming, or Diversion of Coastal Water

Rule Number	Zone	Classification	Description of Activity
Rule 10 (10.2.4(a))	All zones	Permitted Activity	The use of any coastal water or open coastal water.
Rule 11 (10.2.4(b))	All zones	Permitted Activity	The taking of open coastal water.
Rule 12 (10.2.4(c))	All zones	Permitted Activity	The taking of coastal water from within harbours or estuaries, provided that no more than 15 cubic metres is taken each day.
Rule 13 (10.2.4(d))	All zones	Discretionary Activity	The taking of coastal water from within harbours or estuaries at rates or quantities greater than 15 cubic metres a day.
Rule 14 (10.2.4(e))	All zones	Discretionary Activity	The damming of coastal water or open coastal water.
Rule 15 (10.2.4(f))	All zones except the Coastal Habitat Preservation Zone	Controlled Activity	<p>Diversion of coastal water to maintain existing diversions which are in the flood protection or drainage schemes presently maintained by Environment Bay of Plenty or its agents and the Waihi Drainage District Society Incorporated, subject to the following standards:</p> <ul style="list-style-type: none"> • the diversion is not in the Coastal Habitat Preservation Zone; • refuelling, lubrication or fuel storage must not take place on the foreshore or within 30.0 metres of any coastal water; • all material excavated must be placed either into the former river channel or spread over the foreshore (sand only). <p>The matters over which Environment Bay of Plenty reserves control over are these:</p> <ul style="list-style-type: none"> • the duration of the consent; • the effects on indigenous flora and fauna, natural character and cultural values; • remediation of damage to estuaries and wetlands; • the design, dimensions and location of the diversion; • the timing of the diversion works; • information and monitoring requirements; • the administrative charges payable.
Rule 16 (10.2.4(g))	All zones	Discretionary Activity	Any diversion of coastal water not expressly provided for by Rule 10.2.4(f).

Occupation of Space

Rule Number	Zone	Classification	Description of Activity
Rule 17 (12.2.4(a))	All zones	Discretionary Activity	The occupation of land and any related part of the coastal marine area, which is land of the Crown, or is vested in Environment Bay of Plenty.
Rule 18 (12.2.4(b))	Coastal Management Zone and Harbour Development Zone	Permitted Activity	Notwithstanding Rule 12.2.4(a), the occupation of land and any related part of the coastal marine area, which is land of the Crown, or is vested in Environment Bay of Plenty, for recreational events, provided that these conditions are met: <ul style="list-style-type: none"> • the event does not involve occupation for more than seven days in any 12 month period; • there is no occupation of the Port Zone, or the Coastal Habitat Preservation Zone; • there must be consultation with the territorial authority, which administers the adjacent land area; • provisions are made to protect public safety; • toilet facilities which do not dispose of human waste into the coastal marine area are provided; • any rubbish or other waste material resulting from the activity must be removed from the coastal marine area; • the public must be notified about the proposed activity and any associated restrictions on the use of the area, at least seven days prior to the activity commencing; • the activity must not obstruct other persons operating in accordance with an occupation permit.
Rule 19 (12.2.4(b))	All Zones	Discretionary Activity	Any recreational event that does not comply with the conditions for a permitted activity.
Rule 20 (12.2.4(c))	All zones	Permitted Activity	Occupation by mooring within the mooring areas shown in the maps to this plan.

Structures

Rule Number	Zone	Classification	Description of Activity
Rule 22 (13.2.4(a))	All zones except the Coastal Habitat Preservation Zone	Permitted Activity	The erection or placement, alteration, extension or removal of navigation aids by: <ul style="list-style-type: none"> • Environment Bay of Plenty or its agents; or • the Maritime Safety Authority or its agents.
Rule 23 (13.2.4(b))	Coastal Management Zone	Discretionary Activity	Erection or placement of the following structures: <ul style="list-style-type: none"> • wharfs; • boat ramps; • structures for the specific purpose of providing public access to and along the coastal marine area; • submarine cables or pipelines; • structures for the specific purpose of providing vessel moorings or berths; and • bridges; within permanently navigable harbour water. For the purpose of this rule “permanently navigable harbour waters” means harbour or estuary that is covered by water at the lowest astronomical tide, but excluding: the open coast, the Port Zone, the Harbour Development Zone and the Coastal Habitat Preservation Zone.
Rule 24 (13.2.4(b))	Coastal Management Zone	Prohibited Activity	The erection or placement of any structure not expressly provided for by Rule 13.2.4(b) within permanently navigable harbour waters. For the purpose of this rule “permanently navigable harbour waters” means harbour or estuary that is covered by water at the lowest astronomical tide, but excluding: the open coast, the Port Zone, the Harbour Development Zone and the Coastal Habitat Preservation Zone.
Rule 25 (13.2.4(c))	All zones except the Coastal Habitat Preservation Zone	Permitted Activity	Erection, construction or placement of swing mooring structures (excluding wharfs), within the mooring areas shown in the maps to this plan. Note: this rule does not remove the obligation of section 23 of the Act, to comply with all other applicable Acts, regulations, bylaws and rules of law.
Rule 26 (13.2.4(d))	Coastal Management Zone and Harbour Development Zone	Discretionary Activity	Erection, construction or placement of swing mooring structures (excluding wharfs), outside the mooring areas shown in the maps to this plan.

Rule Number	Zone	Classification	Description of Activity
Rule 27 (13.2.4(e))	All zones except the Coastal Habitat Preservation Zone	Permitted Activity	The removal of any mooring structure by its owner.
Rule 28 (13.2.4(f))	All zones except the Coastal Habitat Preservation Zone	Permitted Activity	<p>The maintenance or alteration of any structure in the coastal marine area, notwithstanding rule 13.2.4(o), provided that all of the following standards are complied with:</p> <ul style="list-style-type: none"> • There is no increase in the external length, width, or height of any structure, except for increases for the purposes of: <ul style="list-style-type: none"> - replacement, removal or alteration of existing aerial telecommunications or electricity cables, where these activities will not result in an increase in the design voltage and the new or altered cables will not be lower in height above the foreshore or seabed; - replacement, removal, alteration or addition of telecommunications or electrical insulators, circuits, earth wires, earth peaks and lightning rods; - replacement, addition, removal or alteration of bridge footpaths, bridge side rails, bridge road seal, bridge road signs, bridge road lighting, and cables or pipes attached to bridges, where these activities will not cause an increase in the flood levels for a 1% annual exceedance probability flood event; and <p>provided that any increase in height does not exceed the specified airport slopes and surfaces of Tauranga airport as shown on Planning Map 11d.</p> • Any alterations are structurally sound. • There is no adverse effect on public access to, along and through the coastal marine area, other than temporary restrictions not lasting more than one week. • Alterations will not be for the purposes of new, or additional capacity for transport through the coastal marine area of sewage, petroleum products or hazardous substances. <p>This rule does not permit the erection or reconstruction of structures, which are controlled by rule 13.2.4(h).</p>
Rule 29 (13.2.4(f))	All zones except the Coastal Habitat Preservation Zone	Discretionary Activity	Any maintenance or minor alteration that does not comply with the standards in Rule 13.2.4(f).

Rule Number	Zone	Classification	Description of Activity
Rule 30 (13.2.4(g)) (13.2.4(j))	Coastal Management Zone and Coastal Habitat Preservation Zone	Permitted Activity	Notwithstanding rules 13.2.4(i) and (k), the erection, reconstruction, placement, alteration, extension, removal or demolition of temporary maimai, provided that: <ul style="list-style-type: none"> the structures are erected no earlier than one month before the beginning of each annual shooting season; and the structures are dismantled and completely removed, within one month following the end of each relevant annual hunting season; and indigenous vegetation is not used in the construction of maimai; and no clearance of vegetation occurs, other than that immediately underneath the maimai, and the minimum clearance necessary to maintain single file foot access to the maimai; and the structures are maintained in good order and repair for the season.
Rule 31 (13.2.4(h))	Coastal Management Zone	Discretionary Activity	The erection, reconstruction, placement, alteration, extension, demolition, removal or abandonment of structures not expressly provided for or prohibited by other rules of this plan.
Rule 32 (13.2.4(i))	Coastal Management Zone	Permitted Activity	Notwithstanding rule 13.2.4(h) the removal of any structure by Environment Bay of Plenty or its agents, which is derelict or abandoned and for which no person or agency can be found who is willing to take responsibility for the ownership and maintenance of the structure, provided that the structure is not registered as being of historic value and that there shall be no adverse effect on the Sites of District or Local Significance (CMA) demarcated on the maps, or any of the values for areas of significant conservation value identified in the Third Schedule – Areas of Significant Conservation Value.
Rule 33 (13.2.4(k))	Coastal Habitat Preservation Zone	Discretionary Activity	Notwithstanding Rule 13.2.4(l), the erection, reconstruction, placement, alteration or extension of any of the following structures: <ul style="list-style-type: none"> structures for the specific purpose of providing protection for the values associated with such areas; or structures for the specific purpose of providing educational, scientific or passive recreational opportunities; or structures which will have the effect of providing protection for the values associated with such areas; or <p>minor structures which will have the effect of providing educational, scientific or passive recreational opportunities which will not compromise or threaten the integrity or values of such areas; or</p> <p>structures associated with network utilities and navigational aids; or</p> <p>structures erected, reconstructed, placed, altered, or extended prior to the date on which this plan was publicly notified.</p>
Rule 34 (13.2.4(l))	Coastal Habitat Preservation Zone	Prohibited Activity	Erection, reconstruction, placement, alteration, or extension of any structure on or after the date on which this plan became publicly notified.

Rule Number	Zone	Classification	Description of Activity
Rule 35 (13.2.4(m))	Coastal Habitat Preservation Zone	Discretionary Activity	The demolition or removal of structures.
Rule 36 (13.2.4(n))	Harbour Development Zone	Discretionary Activity	Erection, reconstruction, placement, alteration, extension, removal or demolition of any structure, in the Harbour Development Zone, not expressly provided for by another rule.
Rule 37 (13.2.4(o)(i))	Port Zone	Non Notified Limited Discretionary Activity	<p>With the exclusion of the Sulphur Point North Facing Berth area and the area south of the petrochemical wharf at Mount Maunganui as shown on Map 1 of the Eighth Schedule to this plan, the erection, reconstruction, placement, alteration, extension, removal or demolition of any structure (excluding cranes) within the area that the Port of Tauranga Limited has been granted a section 384A occupation permit as shown on Planning Map 11d.</p> <p>Environment Bay of Plenty restricts the exercise of its discretion to the following matters:</p> <ul style="list-style-type: none"> • the compatibility of the structure and its intended use with the purpose of the Port Zone, • the finished visual appearance when viewed from a public place, • the effects of glare and lighting, • structural integrity, • effects on the hydrodynamic and geomorphic regime of the harbour, • effects during construction on other harbour users, aviation, navigation and public safety, • the review of conditions and the timing and purpose of that review, • the amount and type of any financial contribution, • compliance monitoring. <p>Applications will be considered without the need to obtain the written approval of affected persons.</p>
Rule 38 (13.2.4(o)(ii))	Port Zone	Limited Discretionary Activity	<p>Any erection, reconstruction, placement, alteration or extension of any building or structure that exceeds the specified airport slopes and surfaces of Tauranga airport as shown on Planning Map 11d.</p> <p>Discretion is limited to the matters listed in 13.2.4(o)(i) with the following addition:</p> <ul style="list-style-type: none"> • the effects of the activity on the flight safety and operations of aircraft into and out of Tauranga airport. <p>Note: Any requirements of the Civil Aviation Authority, the Civil Aviation Act 1990 and the Civil Aviation rules including in relation to lighting and marking of any structure will need to be met.</p>
Rule 39 (13.2.4(p)(i))	Port Zone	Limited Discretionary Activity	<p>Subject to 13.2.4(p)(ii), the erection, reconstruction, placement, alteration or extension of any wharf crane that exceeds the specified airport slopes and surfaces of Tauranga airport as shown on Planning Map 11d.</p> <p>Discretion is limited to:</p> <ul style="list-style-type: none"> • the effects of the activity on the flight safety and operations of aircraft into and out of Tauranga airport.

Rule Number	Zone	Classification	Description of Activity
Rule 40 (13.2.4(p)(ii))	Port Zone	Permitted Activity	<p>Notwithstanding rule 13.2.4(p)(i), the erection, reconstruction, placement, alteration or extension of a wharf crane located in the area of the existing wharf at Sulphur Point and the Sulphur Point Extension North provided that:</p> <ul style="list-style-type: none"> • the crane or any alteration or extension to it does not exceed 90 metres (Moturiki datum) in height when extended; and • the number of wharf cranes permitted within the area of the existing wharf at Sulphur Point and the Sulphur Point Extension North is limited to a total of five. Any additional wharf cranes are subject to rule 13.2.4(p)(i). <p>In this rule, 'extension' and 'extended' refer to the maximum vertical extension that can be achieved by any part of the crane.</p> <p>Note: The existing wharf and the Sulphur Point Extension North are shown in the Outline Development Plan referred to as Drawing No. 270-27 Amendment B contained in the Eighth Schedule to this plan.</p>
Rule 41 (13.2.4(q))	Port Zone	Discretionary Activity	The erection, reconstruction, placement, alteration, extension, removal or demolition of any structure not expressly provided for by another rule.

Disturbance, Deposition and Dredging

Rule Number	Zone	Classification	Description of Activity
Rule 44 (14.2.4(a))	Coastal Habitat Preservation Zone	Prohibited Activity	The construction of open drains, removal of sand, shell, shingle and minerals, dredging and spoil disposal.
Rule 45 (14.2.4(b))	All zones	Discretionary Activity	Any disturbance of, deposition on, dredging of, or removal of sand, shingle and shell, from the foreshore or seabed, not expressly provided for or prohibited by the other rules of this plan.
Rule 46 (14.2.4(c))	All zones except the Coastal Habitat Preservation Zone	Permitted Activity	Disturbance of the foreshore or seabed for the maintenance of drains subject to compliance with the following standards and terms: <ul style="list-style-type: none"> • excavation will not result in an increase in the original dimensions of the drain; • the spoil will be disposed of onto land outside the coastal marine area; and • the drain is not in the Coastal Habitat Preservation Zone or the sites of district or local significance in the coastal marine area identified in the maps.
Rule 47 (14.2.4(d))	All zones	Prohibited Activity	Disposal on to the coastal marine area of any spoil from land-based activities, other than diversion of coastal water, reclamation and beach replenishment.
Rule 48 (14.2.4(e))	All zones	Permitted Activity	Where a rule in this plan states that the erection, reconstruction, alteration, extension, demolition or removal of structures is a <u>permitted activity</u> , then so is deposition on and disturbance of the foreshore or seabed, for that purpose.
Rule 49 (14.2.4(e))	All zones	Controlled Activity	Where a rule in this plan states that the erection, reconstruction, alteration, extension, demolition or removal of structures is a <u>controlled activity</u> , then so is deposition on and disturbance of the foreshore or seabed for that purpose.
Rule 50 (14.2.4(e))	All zones	Discretionary Activity	Where a rule in this plan states that the erection, reconstruction, alteration, extension, demolition or removal of structures is a <u>discretionary activity</u> , then so is deposition on and disturbance of the foreshore or seabed for that purpose.
Rule 51 (14.2.4(e))	All zones	Prohibited Activity	Where a rule in this plan states that the erection, reconstruction, alteration, extension, demolition or removal of structures is a <u>prohibited activity</u> , then so is deposition on and disturbance of the foreshore or seabed for that purpose.

Rule Number	Zone	Classification	Description of Activity
Rule 52 (14.2.4(f))	All zones except the Coastal Habitat Preservation Zone	Permitted Activity	The disturbance of foreshore or seabed by the use of vehicles provided that the vehicle use is for any of the following activities: <ul style="list-style-type: none"> • surf life saving operations; • emergency situations including (but not restricted to) fire fighting, oil spills, rescue operations, salvage of vessels and sea mammal strandings; • burial of dead animals washed up on the foreshore; • the removal of litter, nuisance matter, or driftwood and debris which may affect navigation and safety of vessels; • the launching or retrieval of vessels; • the transportation of recreational equipment to the waters edge; • Coastcare projects; • beach grooming undertaken by either a district council or its agents; • New Zealand Defence Force temporary military training activities, provided that Environment Bay of Plenty, the Department of Conservation and adjacent territorial authorities have been advised before the training takes place; • local authority, Government, and educational institution data collection, monitoring, maintenance and law enforcement activities, provided the vehicles do not exceed 1.8 tonnes kerb weight.
Rule 53 14.2.4(g)	All zones	Permitted Activity	Burial of dead animals washed up on the foreshore.
Rule 54 (14.2.4(h))	All zones	Discretionary Activity	Disturbance of, or deposition on, the foreshore or seabed resulting from artillery gunfire, naval gunfire, or aerial bombardment, for military training, except within a 1 nautical mile radius of Paepae o Aotea (Volkner Rocks).
Rule 55 (14.2.4(h))	All zones	Non-complying Activity	Disturbance of, or deposition on, the foreshore or seabed resulting from artillery gunfire, naval gunfire or aerial bombardment, for military training, within a 1 nautical mile radius of Paepae o Aotea (Volkner Rocks).
Rule 56 (14.2.4(i))	All zones except the Coastal Habitat Preservation Zone	Permitted Activity	Disturbance of, and deposition on, the foreshore or seabed for temporary military training activities of the New Zealand Defence Forces other than those controlled by Rules 14.2.4(h) and 14.2.4(h) provided that Environment Bay of Plenty, the Department of Conservation, adjacent territorial authorities and the relevant iwi authority are advised before the training takes place.
Rule 57 (14.2.4(j))	All zones	Discretionary	Removal, damage, modification or destruction of indigenous vegetation that is growing in the foreshore or seabed.
Rule 58 (14.2.4(k))	All zones	Prohibited Activity	The grazing of stock in the coastal marine area.
Rule 59 (14.2.4(l))	All zones	Permitted Activity	Disturbance and deposition for the taking of driftwood from the coastal marine area provided it does not involve the use of vehicles on the foreshore.

Rule Number	Zone	Classification	Description of Activity
Rule 60 (14.2.4(m))	All zones	Controlled Activity	<p>Disturbance of, deposition or dredging of the foreshore or seabed to maintain river flood protection and drainage schemes presently operated by Environment Bay of Plenty or its agents and the Waihi Drainage District Society Incorporated. Environment Bay of Plenty reserves control over these matters:</p> <ul style="list-style-type: none"> • the duration of the consent; • information and monitoring requirements; • administrative charges; • the quantity, nature and composition of the material to be disturbed, dredged or deposited; • any adverse effects on indigenous flora, fauna, natural character or cultural values; • the location and method of disturbance, deposition or dredging; • the frequency or timing of disturbance, deposition or dredging. <p>This rule does not apply where the purpose of the disturbance, deposition or dredging is to create new flood protection schemes, or to extend existing works (including but not limited to dredging and excavation).</p>
Rule 61 (14.2.4(n))	All zones	Discretionary Activity	Removal for profit (mining) of sand, shell and shingle from the active beach system of the open coast until the third anniversary of this plan becoming operative. For the purpose of this rule the active beach system is that area on the open coast between the 8.5 metre bathymetric contour and mean high water springs.
Rule 62 (14.2.4(o))	All zones	Discretionary Activity	Removal for profit (mining) of sand, shell and shingle from outside the active beach system of the open coast. For the purpose of this rule the active beach system is that area on the open coast between the 8.5 metre bathymetric contour and mean high water springs.
Rule 63 (14.2.4(p))	All zones	Prohibited Activity	From the third anniversary of this plan becoming operative, removal for profit (mining) of sand, shell and shingle from the active beach system on the open coast. For the purpose of this rule the active beach system is that area on the open coast between the 8.5 metre bathymetric contour and mean high water springs.
Rule 64 (14.2.4(q))	All zones	Discretionary Activity	Removal for profit (mining) of minerals other than sand, shell and shingle from within the coastal marine area.
Rule 65 (14.2.4(r))	All zones	Discretionary Activity	Disposal to the coastal marine area of spoil from sand, shell, shingle or mineral removal for profit (mining).
Rule 66 (14.2.4(s))	Harbour Development Zone	Prohibited Activity	The permanent disposal of any dredging spoil unless the dredging spoil is being used for a consented reclamation or impoundment.
Rule 67 (14.2.4(t))	All Zones	Discretionary Activity	<p>Deposition of dredge spoil on the foreshore or seabed which:</p> <ul style="list-style-type: none"> • is from the Port of Tauranga Limited's dredging operations, and • is deposited within the boundaries of the dumping sites identified in the Eighth Schedule – Outline Development Plan Port of Tauranga 1994-2004.

Rule Number	Zone	Classification	Description of Activity
Rule 68 (14.2.4(u))	Port Zone	Non Notified Limited Discretionary Activity	<p>Disturbance of (including removal of sand, shingle, shell, or other natural material from) or deposition on the foreshore or seabed for the purpose of erection, reconstruction, placement, alteration or extension of any structure expressly controlled by rule 13.2.4(o). Environment Bay of Plenty restricts the exercise of its discretion to the following matters:</p> <ul style="list-style-type: none"> • the area, quantity, location and timing of disturbance or deposition, • the materials deposited, • effects on the hydrodynamic and geomorphic regime of the harbour, • coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan, • effects on other harbour users, navigation, and public safety during construction, • site specific historical or cultural values, • the review of conditions and the timing and purpose of that review, • the amount and type of any financial contribution, • compliance monitoring, <p>Applications will be considered without the need to obtain the written approval of affected persons.</p>
Rule 69 (14.2.4(v))	Port Zone	Non Notified Limited Discretionary	<p>Any disturbance (including removal of sand, shingle, shell, or other natural material from) of the foreshore or seabed for the following activities as expressly described in the Eighth Schedule to this plan:</p> <ul style="list-style-type: none"> • construction of the Sulphur Point Wharf Extension North Sitting Basin, • construction of the Sulphur Point Wharf Extension South Sitting Basin, • construction of the Sitting Basin between the existing Mt Maunganui Wharf and the southern face of the petrochemical wharf, • the Mount Maunganui Wharfs Future Berth Deepening as shown on plan 270-25A, • and maintenance dredging; <p>Environment Bay of Plenty restricts the exercise of its discretion to the following matters:</p> <ul style="list-style-type: none"> • the area, quantity, location and timing of disturbance, • effects on the hydrodynamic and geomorphic regime of the harbour and open coastline, • effects on marine life and ecosystems, • coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan, • effects on other harbour users, navigation and public safety during construction, • site specific historical or cultural values, • the review of conditions and the timing and purpose of that review, • the amount and type of any financial contribution, • compliance monitoring. <p>Applications will be considered without the need to obtain the written approval of affected persons.</p>

Rule Number	Zone	Classification	Description of Activity
Rule 70 (14.2.4(w))	Port Zone	Non Notified Limited Discretionary	<p>Deposition onto the foreshore or seabed for the following reclamation as expressly described in the Eighth Schedule to this plan:</p> <ul style="list-style-type: none"> • construction of the Sulphur Point Wharf Extension North, • construction of the Sulphur Point Wharf Extension South, • construction of the Mt Maunganui Wharf Extension South between the existing Mt Maunganui Wharf and the southern face of the petrochemical wharf. <p>Environment Bay of Plenty restricts the exercise of its discretion to the following matters:</p> <ul style="list-style-type: none"> • the material, quantity, area, location and timing of deposition, • effects on the hydrodynamic and geomorphic regime of the harbour, • coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan, • effects on other harbour users, navigation and public safety during construction, • site specific historical or cultural values, • the review of conditions and the timing and purpose of that review, • the amount and type of any financial contribution, • compliance monitoring, <p>Applications will be considered without the need to obtain the written approval of affected persons.</p>
Rule 71 (14.2.4(x))	Port Zone	Prohibited	The permanent disposal of any dredging spoil unless the dredging spoil is being used for an authorised reclamation or impoundment.

Reclamations

Rule Number	Zone	Classification	Description of Activity
Rule 75 (15.2.4(a))	All zones	Prohibited Activity	Reclamations for the following purposes: <ul style="list-style-type: none"> • disposal of dredged material as the primary purpose of the reclamation; or • extensions to or creation of farmland, playing fields, urban, and industrial areas excepting ports, or other marine servicing facilities and storage; or • carparks as the primary purpose of the reclamation; or • rubbish disposal, including industrial, horticultural, farm and household.
Rule 76 (15.2.4(b))	All zones	Discretionary Activity	Any reclamation not expressly provided for or prohibited by the other rules of this plan.
Rule 77 (15.2.4(c))	All zones	Discretionary Activity	Removal of reclamation.
Rule 78 (15.2.4(d))	Coastal Habitat Preservation Zone	Prohibited Activity	Reclamation, except for reclamation which occurred before 27 January 1995.
Rule 79 (15.2.4(e))	Port Zone	Non Notified Limited Discretionary	Reclamation for the activities listed below, as expressly described in the Eighth Schedule to this plan: <ul style="list-style-type: none"> • construction of the Sulphur Point Wharf Extension North, • construction of the Sulphur Point Wharf Extension South, • construction of the Mt Maunganui Wharf Extension South between the existing Mt Maunganui Wharf and the southern face of the petrochemical wharf: <p>Environment Bay of Plenty restricts the exercise of its discretion to the following matters:</p> <ul style="list-style-type: none"> • the material, area, quantity, location and timing of reclamation, • effects on the hydrodynamic and geomorphic regime of the harbour, • coastal water quality including the provisions of chapter 9 – Coastal Discharges and the Thirteenth Schedule to this plan, • effects on other harbour users, navigation and public safety during construction, • site specific historical or cultural values, • the review of conditions and the timing and purpose of that review, <ul style="list-style-type: none"> • the amount and type of any financial contribution, • compliance monitoring, <p>Applications will be considered without the need to obtain the written approval of affected persons.</p>

Exotic Plants

Rule Number	Zone	Classification	Description of Activity
Rule 82 (16.2.4(a))	Coastal Habitat Preservation Zone	Prohibited Activity	Notwithstanding Rule 16.2.4(d), the introduction of exotic plant species.
Rule 83 (16.2.4(b))	All Zones	Prohibited	The introduction or spreading of Spartina into the coastal marine area.
Rule 84 (16.2.4(c))	All zones	Prohibited Activity	The eradication or control of Spartina by mechanical harvesting.
Rule 85 (16.2.4(d))	All zones	Discretionary Activity	The introduction of exotic plant species other than Spartina provided that the species is already present in the area of the intended introduction. Note: introduction of exotic species not already in the area would be a non-complying activity.

Hazardous Substances

Rule Number	Zone	Classification	Description of Activity
Rule 87 (17.2.4)	All zones	Prohibited Activity	The dumping, or incineration of hazardous substances.

Historic and Cultural Heritage

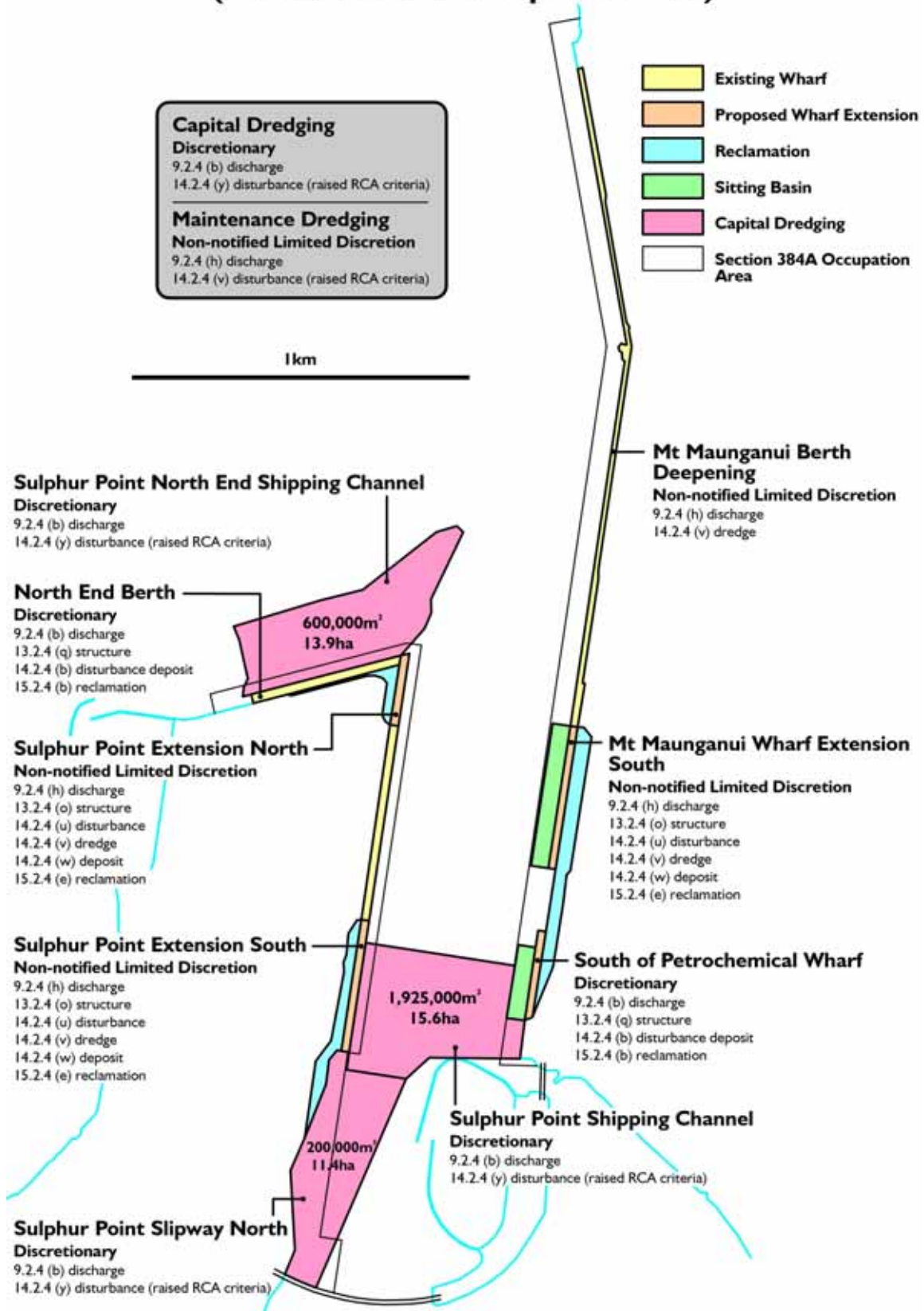
Rule Number	Zone	Classification	Description of Activity
Rule 88 (18.2.4)	All zones	Discretionary Activity	All activities which would affect the remains of any vessel wrecked before 1900.

Noise

Rule Number	Zone	Classification	Description of Activity
Rule 89 (20.2.4(a))	All zones except the Port Zone	Permitted Activity	<p>The emission of noise within the coastal marine area of the Tauranga and Ohiwa harbours provided that the noise does not exceed the following conditions: Night Time – 45 dBA L10; and an LMAX of the lower of 75 dBA or the background sound level plus 30. Day Time – 55 dBA L10. The day time period is between 7.00 a.m. – 10.00 p.m.</p> <p>The following noise emissions are exempt from these conditions (note: section 16 of the Act still applies):</p> <ul style="list-style-type: none"> • noise generated by navigational aids, safety signals, warning devices, or emergency pressure relief valves; • noise generated by emergency work undertaken to protect life or limb, or to prevent loss or serious damage to property, or minimise or prevent environmental damage; • noise generated by the discharge of firearms by licensed hunters; • noise generated by the use of weapons and the subsequent detonation of munitions by the New Zealand Defence Forces; • noise generated by the use of vessels within the indicative ski areas identified in the maps to this plan (Note: the actual boundaries of ski lanes may vary depending on weather and tidal conditions); • noise generated by any activity within the Port Zone identified in the maps to this plan. <p>For the purposes of this rule, the entrances of the Tauranga Harbour are defined by lines drawn across the Katikati and Tauranga entrances at U13 744104, U13 744100, U14 892914, U14 897914, respectively.</p> <p>For the purposes of this rule, the entrance of the Ohiwa Harbour is defined by a line drawn across the Ohiwa Entrance at W15 744485, W15 748485.</p> <p>The noise levels will be measured and assessed in accordance with the requirements of NZS 6801: 1991 Measurement of Sound and NZS 6802:1991 Assessment of Environmental Sound. Noise will be measured at:</p> <ol style="list-style-type: none"> (i) Whichever is the lesser of, a residential property boundary or 20 metres from a residential building. (ii) The boundaries of the Coastal Habitat Preservation Zone and the sites of significance identified in the maps, the Sixth Schedule – Significant Marshbird Habitat Areas and the Seventh Schedule – Significant Indigenous Vegetation Areas.

Rule Number	Zone	Classification	Description of Activity
Rule 90 (20.2.4(b))	Port Zone	Permitted Activity	<p>(i) Emission of noise from within the Port Zone provided that:</p> <ul style="list-style-type: none"> • The long-term average sound level (L_{dn}) shall not exceed 55 dBA at any point outside the 55 dBA noise control boundary (Sheet 11a of the maps to this plan), nor 65 dBA at any point outside the 65 dBA noise control boundary; • The short-term average sound level (L₁₀) shall not exceed 60 dBA between 0700 and 2200, nor 50 dBA between 2200 and 0700 at any point outside the 55 dBA noise control boundary; • The night time maximum sound level (L_{max}) shall not exceed 75 dBA between the hours of 2200 and 0700 at any point outside the 55 dBA noise control boundary; and • The short term average sound level (L₁₀) shall not exceed 65 dBA between 0700 and 2200, nor 60 dBA between 2200 and 0700, at any point on land zoned for residential purposes outside the 65 dBA noise control boundary, but within the 55 dBA boundary. <p>The following noise emissions are exempt from these conditions (Note: section 16 of the Act still applies):</p> <ul style="list-style-type: none"> • noise generated by navigational aids, safety signals, warning devices, or emergency pressure relief valves; • noise generated by emergency work undertaken to protect life or limb, or to prevent loss or serious damage to property, or minimise or prevent environmental damage. <p>The 55 dBA and 65 dBA noise control boundaries and Port Zone are shown on the maps to this plan.</p> <p>Note: For rules relating to land use restrictions between the 55 dBA and 65 dBA noise control boundaries refer to the Tauranga District Plan.</p> <p>(ii) Sound levels shall be measured in accordance with NZS6801:1991 Measurement of Sound.</p> <p>Terms used shall be defined as in NZS6801:1991 Measurement of Sound. The following definitions shall apply for terms not covered in NZS6801:1991.</p> <p>LONG-TERM AVERAGE SOUND LEVEL – shall be the L_{dn} measured over a consecutive five-day period.</p> <p>SHORT-TERM AVERAGE SOUND LEVEL – shall be the inverse logarithmic average of any four L₁₀ (15 minutes) values obtained within a 2 hour period during a single day (0700 to 2200) or night (2200 to 0700).</p>
Rule 91 (20.2.4(a) and (b))	All zones	Discretionary Activity	The emission of noise within the coastal marine area of the Ohiwa Harbour and Tauranga Harbour which does not comply with the conditions in Rules 20.2.4(a) and (b).

Summary of rules affecting Port of Tauranga works specified in the 8th Schedule (Port Outline Development Plan)



C1489-port

Notes: 13.2.4(o)(ii) allows notification if structure exceeds the specified airport slopes and surfaces of Tauranga Airport as shown on planning map 11d. Wharf cranes are subject to rule 13.2.4(p).
All references to RCA criteria are removed from this plan by the NZCPS 2010

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PART VII

SCHEDULES

FIRST SCHEDULE

(This schedule has been removed in giving effect to the New Zealand Coastal Policy Statement 2010)

[pages 163 to 168 removed]

SECOND SCHEDULE

RIVER MOUTHS

The Act provides a specific formula for setting the boundary of the coastal marine area on rivers entering the sea. Environment Bay of Plenty, district councils and the Minister of Conservation are required to agree on the location of river mouths. The agreed river mouths are set out in this schedule and the maps. The Act provides that:

The landward boundary of the coastal marine area shall be 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.*

For convenience, the agreed river mouths for the rivers listed in this schedule are shown on the maps of the plan.

For rivers and streams not listed in this schedule, the mouth of the river is defined by a straight line representing a continuation of mean high water springs on each side of the river.

- WAI AU RIVER: At Map Grid References 6,413,640 N - 2,771,090 E, located 50 metres downstream of Steele Road, Athenree.
- URETARA STREAM: Between Map Grid References 6,401,510 N - 2,768,060 E and 6,401,530 N - 2,768,070 E, located 125 metres downstream of the eastern side of the State Highway 2 bridge across the Uretara Stream.
- TUAPIRO CREEK: Between Map Grid References 6,407,630 N - 2,769,210 E and 6,407,670 N - 2,769,230 E, located 175 metres downstream of the eastern side of the State Highway 2 bridge across the Tuapiro Creek.
- TE MERE STREAM: At Map Grid References 6,398,400 N - 2,767,670 E, located 25 metres downstream of the eastern side of the disused Paeroa/Apata rail bridge abutment across the Te Mere Stream.
- TE MANIA STREAM: At Map Grid References 6,397,880 N - 2,768,150 E, located 25 metres downstream of the eastern side of the disused Paeroa/Apata rail bridge abutment across the Te Mania Stream.
- AONGATETE RIVER: Between Map Grid References 6,394,510 N - 2,770,670 E and 6,394,540 N - 2,770,710 E, located 200 metres downstream of the Whatakao Stream tributary entering the Aongatete River.
- WAINUI RIVER: Between Map Grid References 6,391,860 N - 2,771,360 E and 6,391,850 N - 2,771,390 E, located at the disused Paeroa/Apata river bridge abutment across the Wainui River.
- STREAM NEAR APATA: At Map Grid References 6,390,840 N - 2,773,820 E, located 25 metres downstream of the eastern side of State Highway 2 bridge across the stream.
- WAIPAPA RIVER: Between Map Grid References 6,389,490 N - 2,775,190 E and 6,389,470 N - 2,775,210 E, located 100 metres downstream of the eastern side of the State Highway 2 bridge across the Wairoa River.
- TE PUNA STREAM: Between Map Grid References 6,386,500 N - 2,777,930 E and 6,386,490 N - 2,777,950 E, located 100 metres downstream of the eastern side of the State Highway 2 bridge across the Te Puna Stream.
- WAIROA RIVER: Between Map Grid References 6,385,500 N - 2,782,810 E and 6,385,500 N - 2,782,990 E, located 900 metres downstream of the eastern side of the State Highway 2 bridge across the Wairoa River.
- KAITUNA RIVER: Between Map Grid References 6,377,660 N - 2,810,780 E and 6,377,770 N - 2,810,780 E, located at the intersection of the Kaituna River and the cut-off loop of the Kaituna River adjacent to Ford Road.
- WAITAHANUI STREAM: Between Map Grid References 6,386,510 N - 2,826,960 E and 6,360,940 N - 2,826,990 E, located 75 metres downstream of the East Coast main trunk rail bridge across the Waitahanui.
- TARAWERA RIVER: Between Map Grid References 6,360,960 N - 2,843,240 E and 6,360,940 N - 2,843,340 E, located 500 metres downstream of the State Highway 2 bridge across the Tarawera River.
- RANGITAIKI RIVER: Between Map Grid References 6,358,460 N - 2,851,320 E and 6,358,420 N - 2,851,410 E, located 450 metres downstream of the Boat Ramp.
- WHAKATANE RIVER: Between Map Grid References 6,353,360 N - 2,859,540 E and 6,353,300 N - 2,859,660 E, located 600 metres downstream of the State Highway 2 bridge across the Whakatane River.
- NUKUHOU RIVER: At Map Grid Reference 6,344,730 N - 2,870,350 E, located 200 metres downstream of the Cheddar Valley Road access bridge.

WAIOTAHU RIVER: At Map Grid Reference 6,346,990 N - 2,877,930 E, located 200 metres downstream of the State Highway 2 bridge.

WAIIOEKA RIVER: At Map Grid Reference 6,346,500 N - 2,885,750 E, located 650 metres downstream of the northern end of the island which is situated immediately downstream of the State Highway 2 bridge.

OTARA RIVER: At Map Grid Reference 6,347,030 N - 2,886,250 E, located 300 metres downstream of the bend in the river opposite the northernmost point of the Opotiki Town stopbank on the eastern bank of the Otara River.

WAIUA RIVER: At Map Grid Reference 6,347,790, N - 2,895,580 E, located 125 metres downstream of the State Highway 35 bridge.

TIROHANGA RIVER: At Map Grid Reference 6,347,680 N - 2,891,340 E, located 25 metres downstream of the State Highway 35 bridge.

TORERE RIVER: At Map Grid Reference 6,351,350 N - 2,904,180 E, located 100 metres downstream of the State Highway 35 bridge.

HAWAI RIVER: At Map Grid Reference 6,354,840 N - 2,908,500 E 200 metres downstream of the State Highway 35 bridge.

MOTU RIVER: Between Map Grid References 6,361,370 N - 2,914,160 E and 6,361,880 N - 2,914,410 E located on a line between Trig 1315 in the North and Trig 7052 in the South.

HAPARAPARA RIVER: At Map Grid Reference 6,367,400 N - 2,920,140 E, located 500 metres downstream of the northern most of two power transmission cables which cross the river at this point.

KEREU RIVER: At Map Grid Reference 6,377,150 N - 2,926,000 E, located 225 metres downstream of the power transmission cable which crosses the river just north of the State Highway 35 bridge.

RAUKOKORE RIVER: Between Map Grid Reference 6,382,080 N - 2,938,920 E and 6,382,230 N - 2,939,260 E, located where the northern most power transmission cable crosses the river.

WHANGAPARAOA RIVER: Between Map Grid Reference 6,391,420 N - 2,951,340 E and 6,391,200 N - 2,951,370 E, located 800 metres downstream of the first major tributary entering on the northern bank.

THIRD SCHEDULE

AREAS OF SIGNIFICANT CONSERVATION VALUE

These areas are referred to in chapter 3 – Plan Structure and identified in the maps to this plan. The site number can be used to find the location on the maps in this plan.

Additional detail is contained in *Areas of Significant Conservation Value in the Bay of Plenty Coastal Environment 1994*, available from Environment Bay of Plenty.

This schedule describes conservation values additional to those described in the Sixth Schedule – Significant Marshbird Habitat Areas, and the Seventh Schedule – Significant Indigenous Vegetation Areas.

SITE NAME: SHIPWRECK OF THE VESSEL TAUPO

SITE NUMBER: ASCV-1 **MAP SHEET:** 42

The wreck of Taupo is a scenic site of national significance because of the age of the vessel (119 years) and its intactness. It struck a rock off Stony Point Reef, Mauao (Mt Maunganui) on 18 February 1879. While refloated on 29 April 1881, it sank off Karewa Island. As a scenic dive site it is ranked higher than the Rainbow Warrior in Northland, Mikhail Lermontov in the Marlborough Sound, Tyrone off the Otago Peninsula, the Wiltshire and Wairarapa off Great Barrier Island and several wrecks in Fiordland. The wreck is fully protected as an archaeological site under the Historic Places Act. DOC Ref: 04-012.

SITE NAME: TUHUA (MAYOR ISLAND)

SITE NUMBER: ASCV-2 **MAP SHEET:** 40b, 41b

Tuhua is of high value as a wildlife habitat and is the breeding area of the vulnerable reef heron (*Egretta sacra*). Because of a diverse and unique assemblage of flora and fauna, the northern parts of Tuhua's waters have been gazetted as a marine reserve (Tuhua Marine Reserve). All waters within one nautical mile of Tuhua outside the marine reserve are a restricted fishing area administered by the Minister of Fisheries.

The marine flora and fauna are typical of the other offshore island in north-eastern New Zealand such as the Poor Knights Islands and Great Barrier Island. However, there are a number of distinctive features which make the waters of Tuhua a nationally significant ecosystem. They contain a diverse and unique assemblage of fauna and flora. This ecosystem consists of a diverse assemblage of seaweed, sponges and corals. In the waters are top carnivores such as billfish, tuna and sharks. Subtropical reef species mix with fish at or near their northernmost range.

Tuhua is New Zealand's only peralkaline rhyolitic volcano. Because of its youthful age, it has a number of features of very high quality. It includes a series of coastal exposures of ignimbrite flows and pumice flows. The seashore of Tuhua is the exclusive source of the mineral Tuhualite. DOC Ref: 04-002.

SITE NAME: KAREWA ISLAND

SITE NUMBER: ASCV-3 **MAP SHEET:** 43a

Karewa Island is a Wildlife Sanctuary Reserve, with some hundreds of tuatara on the island. These tuatara depend on the continued productivity of the surrounding marine ecosystems, especially the wellbeing of petrels and shearwaters which co-exist with tuatara. Karewa Island is of national significance because it is the habitat of a significant population of the nationally threatened tuatara.

Karewa Island is ranked as an outstanding Site of Specific Wildlife Interest. Grey-faced petrels (*Pterodroma macroptera gouldi*), the flesh-footed shearwater (*Puffinus carneipes*), northern diving petrel (*Pelacanooides urinatrix*) and blue penguins (*Eudyptula minor*), all breed in colonies on the island. Karewa is the only nesting site of the flesh-footed shearwater in the Bay of Plenty.

The reef system is regionally significant as it contains a wide range of fauna and flora and some species which are found on deep offshore reefs.

The wreck of the Union Steamship Company steamer Taranaki is still present at the south-western corner. It was wrecked on 29 November 1878 and is the oldest wreck of an iron-screw vessel in the Bay of Plenty and the oldest wreck of an iron-screw steamer found off an offshore island in New Zealand. It is an archaeological site of historic significance protected under the Historic Places Act. DOC Ref: 04-006.

SITE NAME: TAURANGA MOANA (TAURANGA HARBOUR)

SITE NUMBER: ASCV-4 MAP SHEET: 2b, 3b, 5b, 6b, 7b, 8b, 9b, 10b, 11b, 12b, 13b, 14b

Tauranga Harbour has four distinctive components: (i) wetland along its margins; (ii) estuaries where the many rivers and streams enter the harbour; (iii) extensive inter-tidal flats; and (iv) the sub-tidal area. This extensive range of habitats supports a wide range of birds and has resulted in Tauranga Harbour being ranked as an Outstanding Site of Special Wildlife Interest (SSWI). The harbour meets the International Union for the Conservation of Nature (IUCN) criteria as a wetland of international importance for wading birds.

Tauranga Harbour is important as a habitat for breeding and/or feeding for eight nationally vulnerable species of coastal birds: the New Zealand dotterel (*Charadrius obscurus*), banded dotterel (*Charadrius bicinctus*), wrybill (*Anarhynchus frontalis*), reef heron (*Egretta sacra*), royal spoonbill (*Platalea regia*), Australasian bittern (*Botaurus stellaris poiciloptilus*), Caspian tern (*Hydroprogne caspia*), and banded rail (*Rallus philippensis assimilis*), the nationally rare variable oystercatcher (*Haematopus unicolor*) and the regionally vulnerable North Island fernbird (*Bowdleria punctata vealeae*). Two nationally endangered species, the white heron (*Egretta alba modesta*), and the black stilt (*Himantopus novaezelandiae*) are occasionally seen feeding in Tauranga Harbour.

There is a wide range of local, national and international migratory shorebird species which feed on the intertidal flats and roost on nearby shell banks and on sandy spits. The most important wader roosts are found at Bowentown Beach, Bowentown shellbanks, Matahui Point, Tuapiro, Sulphur Point and Waipu Bay.

Of note is the population of international migrant wader birds. The Ornithological Society of New Zealand has estimated that between 3,859 and 6,900 eastern bar-tailed godwits arrive from Siberia and northern Alaska in the second half of September. These birds feed on crustaceans, molluscs and worms living on the intertidal flats to gain body weight before their migration back to Siberia and northern Alaska in February to breed. Between 432 and 1,501 non-breeding godwits winter on Tauranga Harbour each year. Other international migrants include turnstone, knots, whimbrel, lesser golden plover, green shank and Siberian tattler. Important endemic birds are the wrybill, South Island pied oystercatcher and the variable oystercatcher. After wintering, most migrate to the South Island inland riverbeds and farmland to breed.

Variable oystercatchers are a nationally rare species. About 3% of their total population are found on Tauranga Harbour. About 3% of the total population of nationally vulnerable New Zealand dotterel can be found on Tauranga Harbour. Banded dotterel are also seen in significant numbers, and comprise approximately 5% of the national population.

Occasional visits from killer whales (*Orcinus orca*) and elephant seals (*Mirounga leonina*) are noteworthy.

The harbour is a nursery for flounder (*Rhombosolea spp.*), yellow eye mullet and a breeding area for bronze whaler sharks. DOC Ref: 04-008.

SITE NAME: SHIPWRECK OF THE BARQUE MARTHA

SITE NUMBER: ASCV-5 MAP SHEET: 11b

The Martha was built at Sectuate Massachusetts, United States of America in 1805. It was constructed as a wooden three masted ship and used for whaling operations, including New Zealand. She was converted to a hulk in 1883 at Sulphur Point. An archaeological inspection was undertaken after she was damaged during dredging to form the Sulphur Point marina. Today a significant part of the hull remains under the breakwater. The wreck is significant for being one of the older hulls in New Zealand. It is an archaeological site protected under the Historic Places Act. DOC Ref: 04-0013.

SITE NAME:	MAUAO (MOUNT MAUNGANUI) (INCLUDING MOTURIKI ISLAND AND MOTUOTAU ISLAND)	
SITE NUMBER:	ASCV-6	MAP SHEET: 9b, 11b

On Motuotau Island grey-faced and diving petrels, red-billed gulls and little blue penguins all roost. Mauao (Mount Maunganui) is significant as one of the few Bay of Plenty mainland breeding colonies of the grey-faced petrel (*Pterodroma macroptera gouldi*).

The Mauao (Mount Maunganui), Moturiki and Motuotau Island reef system is the only mainland coastal rocky reef headland and nearshore island system between Coromandel Peninsula and Waihou Bay in the eastern Bay of Plenty. The reefs around the base of Mauao (Mount Maunganui) act as a setting area for juvenile crayfish, paua and kina. The western part of the area on the edge of the Tauranga Harbour entrance contains rocky reefs subject to strong currents exceeding 5 knots. This strongly influences the composition of the benthic communities in this zone. This site and the Bowentown Heads are the only such naturally occurring habitats of this type in the Bay of Plenty.

Moturiki and Motuotau Islands are eroded remnants of volcanic cones. This erosion has contributed to their visually striking appearance both above and below the water. DOC Ref: 04-009.

SITE NAME:	MAKETU/WAIHI ESTUARIES AND OKUREI POINT	
SITE NUMBER:	ASCV-7	MAP SHEET: 15, 16b, 17b

In the mid part of the Maketu estuary there are extensive intertidal flats and channels which contain large cockle and pipi beds. Significant numbers of juvenile flounder, kahawai (*Arripis trutta*), yellow eye mullet (*Aldrichetta forsteri*), grey mullet and eels are found in the Maketu and Waihi estuaries.

The Kaituna River Mouth, Maketu/Little Waihi estuary complex meet the following Ramsar criteria for an internationally significant wetland.

- 1(c) It is a particularly good representative example of a common type of wetland.
- 2(a) It supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plant or waterfowl and an appreciable number of individuals of any one or more of these species.
- 2(c) It is of special value as a habitat of plants or waterfowl at a critical stage of their biological cycle. In the case of international migrants – it is summering over. For other species it is during breeding.
- 3(c) Percentage of individuals of a population.
 - (a) Of the variable oystercatcher national population, 5.6%, i.e. 112 birds reside at the wetland.
 - (b) Of the New Zealand dotterel national population, 1.4%, i.e. 42 birds reside at the wetland.

Maketu and Little Waihi Estuary are important feeding and roosting areas for migratory birds and for waders. Forty-eight species of waders, wetland and shorebirds as well as migrant visitors are found in Maketu and Little Waihi Estuaries and Kaituna wetlands. The waterfowl include nine nationally vulnerable species, including the New Zealand dotterel (*Charadrius obscurus*) which breeds on Maketu Spit, caspian tern (*Hydroprogne caspia*), banded rail (*Rallus philippensis assimilis*) which breeds in the area, wrybill (*Anarhynchus frontalis*), Australasian bittern (*Botaurus stellaris poiciloptilus*), banded dotterel (*Charadrius bicinctus*), reef heron (*Egretta sacra*), white heron (*Egretta alba modesta*), royal spoonbill (*Platalea regia*) of which there are some dozen birds. Nationally rare species found in this area include the variable oystercatcher (*Haematopus unicolor*), Pacific golden plover, far eastern curlew, Asiatic whimbrel, sharp-tailed sand piper, curlew sandpiper, red necked stint, sanderling and eastern little tern and the regionally vulnerable North Island fernbird.

Maketu and Little Waihi Estuaries are important feeding areas for waders such as eastern bar-tailed godwit, pied stilt and variable oyster catcher, ruddy turnstone, red necked stint, whimbrel sp., golden

plover, Mongolian dotterel, pectoral sandpiper and sharp-tailed sand piper. These birds arrive in September and depart in February – March. Of interest is the departure to Siberia and other northern latitudes when large numbers of birds arrive from further south to feed before continuing their migration north, and thus Maketu and Little Waihi are important staging posts for migration.

The entrances of Maketu and Little Waihi Estuaries are located on either side of the Okurei Point headland. This geomorphological phenomenon of converging littoral drift is the only example found in New Zealand. In addition, only one example is known from Australia, making the New Zealand example of international significance. DOC Ref: 04-010.

SITE NAME: ASTROLABE REEF

SITE NUMBER: ASCV-8 **MAP SHEET:** 44

Astrolabe Reef is a temporary haulout site for New Zealand fur seals. The only regular seal haulout in the Bay of Plenty is on nearby Motunau Island where in some years seals can be found all year round. These seals make trips to feed on the fish in the waters surrounding Astrolabe Reef.

The waters surrounding Astrolabe Reef are rich in fish, including maomao (*Scorpius violaceus*), trevally (*Pseudocaranx dentex*), kahawai (*Arripis trutta*), yellowtail kingfish (*Seriola lalandi*), mako (*Isurus oxyrinchus*) and striped marlin (*Tetrapterous audax*). This ecosystem is uncommon in New Zealand as it has both tropical fish such as marlin and a strong pelagic school fish component.

The presence of vertical rock faces, with underwater caves and tomes, as well as very large boulders and the presence of high densities of pelagic fish in a very small area, has resulted in Astrolabe being regarded as a nationally significant scenic dive site which attracts overseas tourists. The 80 metre height of one prominent pinnacle is a key feature. DOC Ref: 04-004.

SITE NAME: MOTUNAU (PLATE) ISLAND

SITE NUMBER: ASCV-9 **MAP SHEET:** 46

Motunau Island is a Maori-owned wildlife sanctuary protected under the Wildlife Act 1953. It is rated as a site of Special Wildlife Interest. It is a rat-free island which is inhabited by some hundreds of the nationally endangered tuatara. These high densities of tuatara are dependent on the wellbeing of petrels and shearwaters, which co-exist with the tuatara, and the continued productivity of the surrounding marine ecosystems. A large colony of grey-faced petrel (*Pterodroma macroptera gouldi*) breed on the island. Small numbers of flesh-footed shearwater (*Puffinus carneipes*), fluttering shearwater (*Puffinus gavia*) and diving petrel (*Pelacanooides urinatrix*) also inhabit the island. It also has a breeding colony of the white-fronted tern. Motunau Island is the only regularly used New Zealand fur seal haulout in the Bay of Plenty.

The area is notable as a regionally threatened ecosystem containing surface schooling trevally, kahawai and blue maomao.

The waters between the two parts of Motunau Island form a seascape of national importance for snorkellers. This seascape and the caves on the Poor Knights Islands are one of the few areas in New Zealand where cup sponge hydroids and bryozoans can be seen by snorkellers. Because of the rarity of these organisms at such shallow depths, the site is of national importance. DOC Ref: 04-005.

SITE NAME: **MOUTOHORA (WHALE ISLAND) AND RURIMA ISLETS (TOKATA, RURIMA & MOUTOKI ISLANDS)**

SITE NUMBER: **ASCV-10** **MAP SHEET: 20, 21a, 22, 23, 24b**

Moutohora is a Crown-owned Wildlife Refuge Reserve administered by the Department of Conservation. Moutoki and Rurima Islands are Wildlife Refuges in Maori ownership.

This area has been under investigation by the Department of Conservation since 1988 as a potential Protected Marine Area, including part Marine Reserve and part Taiapure.

It is the only site on the Bay of Plenty coast which contains all of the habitat types representative of the area, including inter-tidal sedimentary habitat, inter-tidal rocky shore, offshore reefs, offshore sedimentary habitats, shallow water gasohydrothermal vent volcanic habitat, offshore island.

Moutohora is ranked as a site of high Special Wildlife Interest (SSWI) because of the presence of breeding colonies of seabirds including the grey-faced petrel (*Pterodroma macroptera gouldi*), sooty shearwater (*Puffinus griseus*) and other threatened species such as NZ dotterel (*Charadrius obscurus*) and Caspian tern (*Hydroprogne caspia*). Ngati Awa and the Department of Conservation have established a project to re-establish tuatara on Moutohora.

Moutohora is an island volcano with several regionally significant volcanic features. The sub-tidal area south of Moutohora is characterised by several shallow water gasohydrothermal vents which support unique assemblages of marine life which are recognised as specific gasohydrothermal ecosystems; these include bacterial and algobacterial mats.

Several underwater features at the site contain distinctive underwater scenery: the north-west reef of Moutohora, the north-east reef of the Rurimas, and the gasohydrothermal vents and associated algal mats at "The Bubbles".

The wreck of the Tasman, a 179 ton, 100 ft wooden screw coastal steamer, sank on the Tasman Reef in 1921. DOC Ref: 04-007.

SITE NAME: **CALYPSO VENT**

SITE NUMBER: **ASCV-11** **MAP SHEET: 49**

The feature is a mound of volcanic origin some 10 metres in diameter and 6 to 8 metres in height with associated gasohydrothermal vents. The volcanic mound with its associated gasohydrothermal vents supports a diverse bottom fauna including pogonophores and stilbonematine nematodes, together with a symbiotic ectobacteria, all thought to be specifically adapted to the volcanic environment at this site. DOC Ref: 04-001.

SITE NAME: **OHIWA HARBOUR/OHOPE BEACH**

SITE NUMBER: **ASCV-13** **MAP SHEET: 24b, 25b, 26b, 27b**

Part of the estuarine margins of Ohiwa Harbour and several islands in the harbour are protected under different pieces of legislation: Tern Island is a wildlife refuge reserve, Pataua Island is a scientific reserve, Uretara Island and Tauwhare Pa are scenic reserves. Motuotau Island is a nature reserve. Hokianga Island is a Maori Reserve. Several sites are protected by Historic Places Trust designations.

Ohiwa Harbour is classified as an outstanding Site of Special Wildlife Value (SSWI) for the presence of significant breeding colonies of nationally threatened species: New Zealand dotterel (*Charadrius obscurus*) and the presence of regionally threatened and rare species: banded dotterel (*Charadrius bicinctus*), variable oystercatcher (*Haematopus unicolor*), Caspian tern (*Hydroprogne caspia*), banded rail (*Rallus philippensis assimilis*), North Island fernbird (*Bowdleria punctata vealeae*) and the presence of a range of national and international migratory wildlife species notably the bartailed godwit (*Limosa lapponica baueri*), reef heron (*Egretta sacra*) and royal spoonbill (*Platalea regia*). The harbour has been identified as a wetland of international importance, especially for wading birds.

It contains 1-2% of the New Zealand dotterel population which reside on the harbour, and is a nationally significant post breeding flocking location for 5% of the New Zealand dotterel population. It also contains approximately 5% of the banded dotterel national population, and 2% of the variable oystercatcher population reside on the harbour.

The harbour supports natural beds of mussels, pipis, cockles, scallops and oysters. The harbour is nationally important for its fisheries and has been ranked of outstanding value especially for fish at critical stages of their biological cycles. DOC Ref: 04-011.

SITE NAME:	WHAKAARI (WHITE ISLAND)/PAEPAE O AOTEA (VOLKNER ROCKS)	
SITE NUMBER:	ASCV-14	MAP SHEET: 47, 48a

Whakaari (White Island) is a privately owned scenic reserve.

Whakaari (White Island) is a unique ecosystem in New Zealand, with both terrestrial and marine species and communities vulnerable to volcanic activity. It is classified as a Site of Special Wildlife Interest (SSWI) of moderate to high value due to the presence of breeding colonies of seabirds, namely the gannet (*Sula bassana serrator*), grey-faced petrel (*Pterodama macroptera gouldi*), and northern blue penguin (*Eudyptula minor iredalei*). Paepae o Aotea (Volkner Rocks) are one of three breeding areas recorded in New Zealand of the grey ternlet (*Procelsterna cerulea albivitta*). These marine birds feed in the waters around the islands and beyond.

The coastal marine area of Whakaari (White Island), Paepae o Aotea (Volkner Rocks) and Laisson's Pinnacle are characterised by a unique physical environment and associated plant and animal communities of considerable scientific interest. The marine fauna includes a unique species assemblage reflecting the regular volcanic activity at parts of the site. Several species appear to reach their southern limit at the site, including the Firebrick starfish (*Astrodicides truncayus*), the urchins *Diadema palmeri*, *Centrostephanus rodgersii*, and *Brissus gigas*, the starfish *Astrostole rodolphi*, and the nudibranch *Galeojanolus ionnae*. A 1992 survey identified two new species of anemone, and a new species of black coral.

The marine species assemblages associated with submarine gasohydrothermal vents in the area have been identified as specific gasohydrothermal ecosystems and are of considerable international interest to science. Species of particular interest include the pogonophore *Siboglinum* which contains symbiotic chemosynthesising bacteria, and the stilbonematine nematodes which are covered with symbiotic chemosynthetic ectobacteria.

Whakaari (White Island) and Paepae o Aotea (Volkner Rocks) are recognised as an area of outstanding underwater scenery with spectacular underwater dropoffs and a rich variety and abundance of fish.

Southern Whakaari (White Island) was the site of a sulphur extraction and processing operation between 1865-1930. The site is of historical significance for the sulphur operation and as an historically significant tourist attraction in the region.

Whakaari (White Island) is New Zealand's most active volcano and is regarded as having international significance for its geological features and unusual landforms. The island has an A-ranking in the New Zealand Geopreservation Index and is the focus of scientific study by the Offshore Islands Research Group. DOC Ref: 04-003.

SITE NAME:	WAIOTAHU ESTUARY	
SITE NUMBER:	ASCV-15	MAP SHEET: 27b

Waiotahi Estuary is the largest estuarine system in the Opotiki ecological district, bounded by the most intact sandspit and dune landform, which is gazetted Scenic Reserve, in this district. It is ranked as a regionally important whitebait fishery. The estuary assists in support of an important offshore juvenile marine fish habitat.

It has an SSWI Rating of moderate/high, for wildlife values. It is the habitat and feeding area of the following nationally threatened species: New Zealand dotterel (*Charadrius obscurus*), Australasian bittern (*Botaurus stellaris poiciloptilus*), banded dotterel (*Charadrius bicinctus*), Caspian tern (*Hydroprogne caspia*), banded rail (*Rallus philippensis assimilis*), reef heron (*Egretta sacra*), and also of the regionally threatened North Island fernbird (*Bowdleria punctata vealeae*) and the rare variable oyster catcher (*Haematopus unicolor*). It is the feeding area of the migratory eastern bartailed godwit (*Limosa lapponica intepres baueri*). DOC Ref: 05-001.

SITE NAME: WAIOEKA/OTARA ESTUARY

SITE NUMBER: ASCV-16 **MAP SHEET:** 27b, 28

The Waioeka/Otara Estuary supports a variety of birdlife including common coastal species, such as wading birds, migratory species and water fowl. Several threatened species feed and nest in the estuary including the nationally threatened New Zealand dotterel (*Charadrius obscurus*), Australian bittern (*Botaurus stellaris poiciloptilus*), banded rail (*Rallus philippensis assimilis*), Caspian tern (*Hydroprogne caspia*), and regionally threatened North Island fernbirds (*Bowdleria punctata vealeae*) and the rare variable oyster catcher (*Haematopus unicolor*) and white-fronted tern (*Sterna striata*).

The estuary assists in support of an important offshore juvenile marine fish habitat. Whitebait spawning sites have been located in the upper estuary. One, in the Otara River, is the most extensive found in the Bay of Plenty. DOC Ref: 05-002.

SITE NAME: WAIAUA ESTUARY

SITE NUMBER: ASCV-17 **MAP SHEET:** 29b

The Waiaua Estuary site has a moderate to high SSWI rating. Wildlife includes national threatened species New Zealand dotterel (*Charadrius obscurus*) 6-plus breeding pairs, Australian bittern (*Botaurus stellaris poiciloptilus*), banded rail (*Rallus philippensis assimilis*), Caspian tern (*Hydroprogne caspia*), and regionally threatened North Island fernbirds (*Bowdleria punctata vealeae*) and the rare variable oyster catcher (*Haematopus unicolor*) and white-fronted tern (*Sterna striata*).

The estuary assists in support of an important offshore juvenile marine fish habitat. Whitebait spawning sites have been located in the upper estuary. One, in the Otara River, is the most extensive found in the Bay of Plenty. DOC Ref: 05-002.

SITE NAME: MOTU

SITE NUMBER: ASCV-18 **MAP SHEET:** 29b, 30, 31b, 32a

The Motu Estuary has a moderate/high SSWI rating. High numbers of coastal birds nest, feed and migrate through the estuary. Nationally threatened species include New Zealand dotterel (*Charadrius obscurus*), banded dotterel (*Charadrius bicinctus*), Caspian tern (*Hydroprogne caspia*) and reef heron (*Egretta sacra*). Rare species include variable oyster catcher (*Haematopus unicolor*). It is a nesting site for common birds pied stilts (*Himantopus himantopus leucocephalus*), southern black-backed gulls (*Larus dominicanus*) and white-fronted terns (*Sterna striata*).

Tokata Rock, a stack located below the Maraenui Bluff, is rated as category two RAP in the Motu ecological district PNA survey report as a nesting area for white-fronted terns (*Sterna striata*) and red-billed gulls (*Larus novaehollandiae scopulinus*).

The site encompasses a nationally significant snapper spawning area. It is the only snapper spawning ground in the Bay of Plenty. The estuary supports an important offshore marine juvenile fish habitat, a regionally significant kahawai fishery and an important whitebait fishery. DOC Ref: 05-004.

SITE NAME: HAPARAPARA ESTUARY

SITE NUMBER: ASCV-19 **MAP SHEET:** 32a

The Haparapara and Waikakariki Streams in the Haparapara Estuary have been identified as having outstanding scientific and ecological value for their extremely high diversity of native fish species, their high habitat value and the absence of introduced trout. It is the only salmonoid free river system in the Motu ecological district and one of the very few in the country. The river system is a habitat of threatened native fish species, particularly the giant Kokopu (*Galaxias argentus*) and short-jawed Kokopu (*Galaxias postvectis*).

The Haparapara Estuary has a moderate SSWI rating for its wildlife values and wetland plant assemblage. Wildlife include threatened species; banded dotterel (*Charadrius bicinctus*), variable oyster catcher (*Haematopus unicolor*), and wading species; pied stilt (*Himantopus himantopus leucocephalus*) and game birds and field species. DOC Ref: 05-005.

SITE NAME: WAIORORE REEF

SITE NUMBER: ASCV-20 **MAP SHEET:** 33

The Waiorore Reef site is the best example of a relatively intact representative coastal succession of remnant pohutukawa forest on sea cliffs adjoining an extensive intertidal rock platform leading to a succession of subtidal reefs out to the mudline.

The intertidal platform supports species plant and animal communities typical of those which can be found on the greywacke rock platforms of the Eastern Bay of Plenty coastline. The seaward succession of offshore reefs support a rich and diverse range of plant and animal communities typical of the shallow weed, kina-grazed rock, kelp forest, deep sponge reef and deep sediment habitats that occur offshore in the Eastern Bay of Plenty. DOC Ref: 05-006.

SITE NAME: RAUKOKORE ESTUARY & COASTAL LAGOON

SITE NUMBER: ASCV-21 **MAP SHEET:** 35b, 36b

The Raukokore Estuary and coastal lagoon has an SSWI rating of moderate/high for its habitat value, which is diminishing, and wildlife values. Threatened species nesting include banded dotterel (*Charadrius bicinctus*), Caspian tern (*Hydroprogne caspia*), variable oyster catcher (*Haematopus unicolor*), numerous wading species, game birds and common birds. DOC Ref: 05-008.

SITE NAME: ORETE POINT

SITE NUMBER: ASCV-22 **MAP SHEET:** 36b, 37a

The intertidal platform from Waihou Bay to Orete Point is a site recommended for protection in the New Zealand Geopreservation Index. It is an example of a good Cretaceous sequence showing overturned Mata and Raukumara series fossil-bearing rock layers. DOC Ref: 05-009.

SITE NAME: ORUAITI/WAIKANAPANAPA

SITE NUMBER: ASCV-23 **MAP SHEET:** 36b, 37a

The intertidal and subtidal areas at Oruaiti and Waikanapanapa is the only example of a Miocene age soft rock sandstone/siltstone coastal environment in the Bay of Plenty region. The soft rock intertidal shore wavecut platforms and the adjacent subtidal area support a different community of plants and animals from the hard rock habitat on adjacent parts of the coast. The soft rock golden limpet (*Cellana flava*) is commonly found in the intertidal area, near its northern limit on the East Coast of New Zealand.

The best representative examples in the region of three distinct coastal landscape types occur here contiguously; from the titled stratified greywacke intertidal shore of Waihou Bay in the west through the fine sand pocket beach, dune system and coastal pohutukawa forest of Oruaiti Beach, to the sedimentary wavecut platforms and cliffs of Waikanapanapa in the east. DOC Ref: 05-010.

SITE NAME: WHANGAPARAOA BAY**SITE NUMBER: ASCV-24 MAP SHEET: 37a, 38a**

The Waitewake River Estuary and Whangaparaoa Estuary has a high SSWI rating for the presence of breeding pairs of national threatened species, i.e. New Zealand dotterel (*Charadrius obscurus*) and banded dotterel (*Charadrius bicinctus*) and supports a wide range of other coastal bird species including variable oyster catcher (*Haematopus unicolor*), pied stilt (*Himantopus himantopus leucocephalus*), tātler species and turnstone (*Arenaria interpres*) and also migrating species: eastern bar tailed godwit (*Limosa lapponica interpres baueri*), and game birds and common species. The birds which nest in the estuaries feed on the intertidal beach between the estuaries at low tide. The Waitewake River Estuary is rated of national significance on the WERI index for its diverse avifauna. Whitebait (*Galaxias maculatus*) spawning areas are located in the upper Whangaparaoa Estuary. DOC Ref: 05-011.

FOURTH SCHEDULE

NATURAL FEATURES

AND

LANDSCAPES

These narrative descriptions of the outstanding and regionally significant natural features and landscapes are to accompany the map representations in this plan.

OUTSTANDING NATURAL FEATURES AND LANDSCAPES

- 01 Tauranga Harbour:** The entire harbour, its estuarine fringe and unmodified islands. Generic Landscape Policy for Harbour, Headland, Estuarine, Duneland and Islands (see Fifth Schedule). Map Sheets 2c, 3c, 5c, 6c, 7c, 8c, 9c, 10c, 11c, 12c, 13c, 14c.
- 02 Mauao (Mt Maunganui), Moturiki Island and Motuotau Island:** The combined landscape of Mauao (Mt Maunganui), Moturiki Island and Motuotau Island, including the Mt Maunganui beach adjacent to the islands. Generic Landscape Policy for Headland, Duneland and Islands (see Fifth Schedule). Map Sheet 9c.
- 03 Tuhua (Mayor) Island:** The entire island landscape. Generic Landscape Policy for Islands (see Fifth Schedule). Map Sheet 40b, 41b.
- 04 Kohi Point and Otarawairere Bay and catchment:** The land which forms the visual backdrop to Whakatane east of the Whakatane – Ohope road, including the vegetated point down to and including the rocky outcrops and the visual catchment of Otarawairere Bay. Generic Landscape Policy for Headland (see Fifth Schedule). Map Sheet 24b.
- 05 Ohiwa Harbour:** The entire harbour, its estuarine fringe and unmodified islands. Generic Landscape Policy for Harbour, Headland, Duneland, Estuarine and Islands (see Fifth Schedule). Map Sheet 25c, 26c.
- 06 Moutohora (Whale Island):** The entire island landscape. Generic Landscape Policy for Islands (see Fifth Schedule). Map Sheet 21b.
- 07 Whakaari (White) Island:** The entire island landscape. Generic Landscape Policy for Islands (see Fifth Schedule). Map Sheet 48b.
- 08 Waiotahi Spit and estuary mouth:** The spit landform and the Waiotahi estuary mouth. Generic Landscape Policy for Duneland and Estuarine (see Fifth Schedule). Map Sheet 27c.
- 09 Motu River:** The Motu river mouth and associated river flats, and extending eastward to the enclosing ridgeline. Generic Landscape Policy for Headlands, Scarps, Duneland and Bays (see Fifth Schedule). Map Sheet 31c, 32b.
- 010 Whanarua Bay:** A series of small gravel beaches interspersed with wave-cut platforms and extensive offshore reefs, islets and islands, with the bays fringed with dense mature coastal forest, and including the land backdrop to the enclosing ridgeline. Generic Landscape Policy for Bay, Scarp and Islands (see Fifth Schedule). Map Sheet 34b, 35c.
- 011 Cape Runaway:** The entire headland landform from coastal edge (including offshore reefs and islets) to ridgeline. Generic Landscape Policy for Headland and Scarp (see Fifth Schedule). Map Sheet 38b.

REGIONALLY SIGNIFICANT NATURAL FEATURES AND LANDSCAPES

- S1 Orokawa Bay:** The visual catchment of Orokawa Bay. Generic Landscape Policy for Bay (see Fifth Schedule). Map Sheet 1b.
- S2 Bowentown Heads:** The volcanic cone landforms which form the heads. Generic Landscape Policy for Headland (see Fifth Schedule). Map Sheet 2c.
- S3 Matakana Island:** The afforested eastern portion of Matakana Island excluding the westerly (inner harbour) farmed area and northerly wetland area. Generic Landscape Policy for Duneland (see Fifth Schedule). Map Sheet 3c, 4b, 5c, 6c, 8c, 9c, 11c.
- S4 North Matakana Island Wetlands:** The northern end of Matakana Island including all wetland areas and associated native shrubland. Generic Landscape Policy Duneland (see Fifth Schedule). Map Sheet 2c, 3c.
- S5 Tanners Point:** The vegetated headland cliffs of Tanners Point. Generic Landscape Policy for Headland (see Fifth Schedule). Map Sheet 3c.

- S6 Ongare Point vegetated edge:** The vegetated coastal edge of the Ongare Point headland. Generic Landscape Policy for Headland and Estuarine (see Fifth Schedule). Map Sheet 3c.
- S7 Kauri Point vegetated edge:** The vegetated coastal edge of the Kauri Point headland. Generic Landscape Policy for Headland and Estuarine (see Fifth Schedule). Map Sheet 3c.
- S8 Motuhoa Island:** The entire island landscape. Generic Landscape Policy for Islands (see Fifth Schedule). Map Sheet 8c, 10c.
- S9 Karewa Island:** The entire island landscape. Generic Landscape Policy for Islands (see Fifth Schedule). Map Sheet 43.
- S10 Okurei Point:** The coastal edge and point of the Maketu headland. Generic Landscape Policy for Headland (see Fifth Schedule). Map Sheet 16c.
- S11 Waihi Estuary:** The estuary and associated wetland margins. Generic Landscape Policy for Estuarine (see Fifth Schedule). Map Sheet 16c, 17c.
- S12 Motiti Island:** The entire island landscape (including off-shore islets). Generic Landscape Policy for Islands (see Fifth Schedule). Map Sheet 45b.
- S13 Escarpment and Pohutukawa along the Matata Straights:** The land from the road edge (State Highway 2) to the top of the escarpment. Generic Landscape Policy for Scarps (see Fifth Schedule). Map Sheet 18b, 19b.
- S14 Kohioawa Beach dunefield and wetlands:** The land on the seaward side of State Highway 2 from Otamarakau to the Matata wetlands. Generic Landscape Policy for Duneland (see Fifth Schedule). Map Sheet 18b, 19b.
- S15 Matata Wetlands:** The land to the seaward side of State Highway 2 east of the Tarawera River mouth, including all of the Matata wetlands and beach. Generic Landscape Policy for Duneland (see Fifth Schedule). Map Sheet 19b.
- S16 Distal point of Ohiwa Spit:** The undeveloped end of Ohiwa Spit generally east of the golf course from the ocean to the harbour. Generic Landscape Policy for Duneland (see Fifth Schedule). Map Sheet 25c.
- S17 Uretara Island:** The entire island landscape. Generic Landscape Policy for Islands (see Fifth Schedule). Map Sheet 25c.
- S18 Pataua Island:** The entire island landscape. Generic Landscape Policy for Islands (see Fifth Schedule). Map Sheet 26c.
- S19 Waiotahi Estuary:** The estuary and associated wetland margins. Generic Landscape Policy for Estuarine (see Fifth Schedule). Map Sheet 27c.
- S20 Pohutukawa tunnels over State Highway 2 at Waiotahi Beach:** The stretch of road and roadside adjacent to Waiotahi Beach over which mature pohutukawa trees form a tunnel. Generic Landscape Policy for Duneland (see Fifth Schedule). Map Sheet 27c.
- S21 Tarakeha:** The headland which forms the separation between Opape and Ngawaikui Stream bays back to State Highway 35. Generic Landscape Policy for Headland (see Fifth Schedule). Map Sheet 29b.
- S22 Haurere Point:** The headland separating Ngawaikui Stream and Torere bays. Generic Landscape Policy for Headland (see Fifth Schedule). Map Sheet 29b.
- S23 Haumiara Point:** The headland which provides visual enclosure at the eastern end of Hawaii Bay. Generic Landscape Policy for Headland (see Fifth Schedule). Map Sheet 30.
- S24 Whituare Bay:** The visual catchment of Whituare Bay back to the first enclosing ridgeline. Generic Landscape Policy for Bay (see Fifth Schedule). Map Sheet 30.

- S25 Maraenui escarpment:** The vegetated escarpment from Whituare Bay eastwards to the modified Maraenui flats. Generic Landscape Policy for Scarps (see Fifth Schedule). Map Sheet 30, 31c.
- S26 Whitianga Bay to Ohae Point:** The land from Orangoihunui Point to Ohae Point, including wave cut intertidal platforms with pohutukawa on low cliffs back to the first enclosing ridgeline. Generic Landscape Policy for Bay and Headland (see Fifth Schedule). Map Sheet 32b.
- S27 Motunui Island and associated reefs:** The entire island landscape and surrounding reefs. Generic Landscape Policy for Islands (see Fifth Schedule). Map Sheet 32b.
- S28 Raukokere River Mouth:** The beach mouth area and associated wetlands and lagoon. Generic Landscape Policy for Duneland and Bays (see Fifth Schedule). Map Sheets 35c, 36c.
- S29 Oruaiti Beach, offshore rocks and Waikanapanapa cliffs:** The offshore rocks between Waihou Bay and Oruaiti Beach, the environs of Oruaiti Beach and the cliffs of Waikanapanapa. Generic Landscape Policy for Duneland and Terraces (see Fifth Schedule). Map Sheets 36c, 37b.
- S30 Whangaparaoa dunefield, wetlands and estuary:** The dunelands west of State Highway 35 in Whangaparaoa Bay and including the Whangaparaoa River mouth and estuary. Generic Landscape Policy for Duneland (see Fifth Schedule). Map Sheets 37b, 38b.
- S31 Kopongatahi Point:** The knoll on the southern side of Cape Runaway. Generic Landscape Policy for Headland (see Fifth Schedule). Map Sheet 38b.
- S32 Steep coastal hills between Cape Runaway and Lottin Point:** The hills of this area back to the enclosing ridgeline and down to the coastal edge, including the offshore reefs. Generic Landscape Policy for Scarps (see Fifth Schedule). Map Sheet 38b, 39b.

FIFTH SCHEDULE

MANAGEMENT GUIDELINES

FOR

NATURAL FEATURES

AND LANDSCAPES

It is recommended that these guidelines be read in conjunction with *A Landscape Assessment of the Bay of Plenty Coastal Environment*, Environment Bay of Plenty 1993.

S5.1 **HEADLANDS**S5.1.1 Natural Character

Guidelines

- a. Restrict the scale, density and skyline effects of development on headlands so as to maintain their natural landform characteristics.
- b. Prevent earthworks which have an adverse visual effect on the natural landform of headlands.
- c. Protect, in their natural state, the characteristic components of headland landforms (i.e. cliff, escarpment, rocks, remnant native vegetation).
- d. Encourage planting which reinforces the natural pattern of headland landforms.
- e. Restrict the installation of aerial utilities and service corridors on headlands.

Explanation/Principal Reasons

Headlands are by their very nature visually obvious components of the landscape. Protection of the natural character of headlands will contribute substantially to the perceived naturalness of the environment of which they are a part.

Development can be successfully incorporated on headland landforms without adverse effects on natural character if components such as the skyline, natural edge, natural landform and the patterns of the landscape are recognised, protected and reinforced.

S5.1.2 Public Access

Guideline

Where appropriate, promote sensitive access to headland vantage points for public views.

Explanation/Principal Reasons

Headlands provide natural vantage points. People enjoy being able to get to vantage points and right to the edge of the coast. It is desirable to encourage legal public access to and around significant coastal headlands to enhance the recreational values of the coastal environment. Public access can be secured over private land through agreements with land owners or through subdivision as part of an esplanade strip or reserve.

S5.1.3 Visual Corridors

Guideline

Protect visual corridors between public viewing points and headlands.

Explanation/Principal Reasons

Headlands tend to form a visually dominant component of the landscape due both to their characteristic height and projection out into the sea. They are generally the more widely visible components of the coastal environment.

For this reason some distant, and other close views of distinctive headlands which form an important component of the visual environment should be protected in the long term as a component of the public view.

Specific views to significant headlands should be identified and protected within the district plans.

S5.1.4 Subdivision

Guideline

Where subdivision is to occur, refer to section 9 of this section.

Explanation/Principal Reasons

Because of their greater than average visibility, headlands are particularly sensitive to changes in landuse which could alter the character of the landscape.

Subdivision is one such landuse which could adversely affect the natural character and visual quality of headlands. The components of subdivision (including roading, utilities, land clearance and building development) can, however, be managed to recognise, protect and in some cases enhance the headland landscape. In particular, protection of the open space character of headlands is important. Methods to achieve appropriate subdivision of headlands can include the preparation of a comprehensive scheme plan for subdivision, either by the district council or developer. Covenanting of important native vegetation would also be appropriate.

S5.2 **DUNELANDS**

S5.2.1 Natural Character

Guidelines

- a. Protect natural duneland landforms from inappropriate use and development.
- b. Protect and enhance existing wetlands as part of the duneland visual continuum.
- c. Discourage the installation of aerial utilities and service corridors on dunelands and spits.

Explanation/Principal Reasons

Dunelands have a characteristic landform pattern which is a typical visual component of the natural character of the coastal environment. Duneland wetlands are an important, sensitive element within the duneland continuum, deserving special protection. The flat character of dunelands and their typical flat plains hinterland means that there is little immediate visual backdrop and generally few opportunities for the visual integration of structures, including aerial utilities.

S5.2.2 Foredunes

Guidelines

- a. Protect foredunes from subdivision and development.
- b. Protect foredunes from intensive pastoral farming and forestry landuses (note that this guideline does not apply to duneland which is landward of the foredune).

Explanation/Principal Reasons

Foredunes are particularly sensitive components of the coastal environment. They are prone to rapid degradation and require protection to retain their natural character. Their characteristic landform pattern is an important visual component of the coastal environment.

S5.2.3 Backdunes

Guideline

Protect backdunes and spits from visually inappropriate subdivision, use and development.

Explanation/Principal Reasons

Degraded dunelands can be rehabilitated through the sensitive planting of appropriate native species. The establishment of good intact vegetative cover on dunelands improves their stability as well as their visual integrity.

S5.2.4 Subdivision

Guideline

Where subdivision is to occur, refer to subsection 9 of this section.

S5.3 **ESTUARINE**S5.3.1 Natural Character

Guidelines

- a. Protect estuarine areas and their land backdrop from visually inappropriate use and development.
- b. Discourage incremental encroachment on estuarine edges.
- c. Where reclamation is to occur, encourage visually sensitive contouring of the resultant land-sea interface.
- d. Protect and maintain existing visually intact sequences of native vegetation from salt water to land.

Explanation/Principal Reasons

Estuaries are highly productive, sensitive ecosystems. They tend to have suffered degradation both by direct impacts such as reclamation, stock grazing and dumping and indirect impacts such as overland and stream based runoff, spray drift. Native vegetation which remains is of particular value both visually and ecologically and should be protected.

S5.3.2 Subdivision

Guideline

Where subdivision is to occur, refer to sub-section 9 of this section.

Explanation/Principal Reasons

Subdivision of land abutting estuaries needs to recognise the sensitivity of estuarine systems and to buffer them from any direct or cumulative adverse effects which may occur as a result of the development. In particular, vegetation clearance, construction impact (such as runoff, stormwater outfalls, and earthworks) and reclamation may adversely affect visual values of wetlands and estuaries.

S5.3.3 Development

Guideline

Ensure boat sheds, jetties and other structures are sited and designed to minimise any adverse visual effects on estuarine areas.

Explanation/Principal Reasons

Structures which require a waterfront or water based location, such as boatsheds and jetties, have the potential to generate adverse effects on estuaries, particularly in the construction phase but also in the long term.

It is recognised, however, that public structures of this nature can provide an important facility.

There is a well established style of boatsheds, jetties and other nautical structures which can be employed in the design of any new structure to enhance its appropriate siting and design and to reduce any adverse visual effects.

S5.3.4 Rehabilitation

Guideline

Encourage and promote revegetation of estuarine edge areas with appropriate native coastal species.

Explanation/Principal Reasons

The buffering effects of edge vegetation in filtering out silt, nutrients and other harmful substances from runoff are important to the protection of estuarine ecosystems. Edge vegetation also provides an attractive visual transition between estuaries and land. Rehabilitation of degraded estuarine edges should be encouraged for these multiple benefits.

S5.4 **HARBOUR**

S5.4.1 Natural Character

Guidelines

- a. Prevent marina development in visually sensitive harbour locations.
- b. Ensure moorings are located in areas where they do not have an adverse visual effect.
- c. Where moorings exist, ensure the numbers are such that in any one location there remains a predominance of open water.
- d. Prohibit marine farming in areas of high visual sensitivity.
- e. Minimise the installation of aerial utilities and service corridors sited below the level of mean high water springs.

Explanation/Principal Reasons

Harbours are the flat, largely tidal, water bodies of the coastal environment. Their visual sensitivity is primarily due to the lack of integrating elements such as land form or vegetation. Structures within this environment are generally able to be seen in their entirety and if not sensitively designed and located can detract from the natural character of the harbour environment.

S5.4.2 Rehabilitation

Guideline

Promote the physical or visual enhancement of degraded harbours.

Explanation/Principal Reasons

The physical and visual pollution of harbours can occur incrementally over time. Opportunities to improve harbour quality, either by the removal of derelict structures with no historical significance or through the improvement of water quality should be taken advantage of.

S5.5 **BAYS**S5.5.1 Natural Character

Guidelines

- a. Restrict the scale and density of subdivision and redevelopment in the visual catchment of bays to maintain their natural landform characteristics.
- b. Restrict development on skyline ridges which form the enclosure to coastal bays.
- c. Restrict earthworks that have an adverse visual effect on the natural landform of bays.

Explanation/Principal Reasons

Bays are characterised by their discrete enclosed character, and their generally small scale environment. The landform and vegetation of bays generally provide good opportunities for the integration of appropriately scaled development. Development on the skyline should be avoided due to its visual prominence and lack of containment within the bay itself.

S5.5.2 Subdivision

Guideline

Where subdivision is to occur, refer sub-section 9 of this section.

Explanation/Principal Reasons

Bays tend to have a natural landform and vegetative pattern which provides good opportunities for the successful integration of appropriately-scaled development. Many bays have small traditional settlements which contribute positively to the visual character and diversity of the coastal environment.

Subdivision and papakaianga developments should respect the context of natural landform character and vegetative pattern to successfully integrate development.

Retention of the open space character of bays (either by the clustering of buildings or through their separation) and the avoidance of suburban styled regular strip development along the roadways should be of paramount importance.

S5.5.3 Rehabilitation

Guidelines

- a. Encourage and promote vegetation of earthwork cuts often associated with roading and access tracks.
- b. Encourage and promote planting that is compatible with the natural pattern of the landform in bays.

Explanation/Principle Reasons

Vegetation, planted or natural, which is compatible with the natural patterns of the landscape (for example, in gullies or around escarpments) can substantially enhance the visual character and quality of the environment and assist in integrating development by providing a framework, backdrop and screening.

Planting can also assist the ecological health of the landscape by reducing erosion, runoff and providing habitat for New Zealand flora and fauna.

S5.6 **SCARPS**

S5.6.1 Natural Character

Guidelines

- a. Protect scarps from visually inappropriate use and development.
- b. Protect intact native vegetation cover.
- c. Encourage and promote retention of intact vegetation cover.
- d. Discourage the installation of aerial utilities and service corridors in scarps.
- e. Restrict new earthworks to that associated with the maintenance of existing roads.

Explanation/Principal Reasons

Scarps are highly sensitive components of the coastal environment. They consist of steeply sloping land, much of which has been depleted of its natural vegetative cover. Where roads or access tracks cut across scarps, they tend to create highly visible scars in the landscape. This should be avoided wherever possible.

S5.6.2 Subdivision

Guidelines

- a. Discourage subdivision of scarps.
- b. Where subdivision is to occur, refer to sub-section 9 of this section.

Explanation/Principal Reasons

Scarps are steeply sloping landforms not given to subdivision due to the difficulty of creating a building platform or accessway.

Wherever possible, subdivision should not encroach upon scarp landforms.

S5.6.3 Rehabilitation

Guideline

Encourage and promote revegetation of modified scarps with appropriate native species.

Explanation/Principal Reasons

The sensitive nature of the scarp landform and their susceptibility to erosion make rehabilitation, through revegetation with appropriate native species, an important opportunity to enhance the character of the coastal environment.

S5.7 **TERRACE**S5.7.1 Natural Character

Guidelines

- a. Protect terrace escarpments from development.
- b. Restrict the scale, density and skyline effects of development on terraces to maintain their landform characteristics.
- c. Prevent earthworks which have an adverse visual effect on the natural landform of terraces.
- d. Protect intact native vegetation cover.
- e. Restrict the installation of aerial utilities and service corridors on terraces.

Explanation/Principal Reasons

Terrace landforms include a characteristic escarpment with an upper plain. In some places there is a lower plain towards the coastline and in others the terrace escarpment forms a coastal cliff.

This escarpment is the most sensitive component of the terrace unit. Retaining this component intact and well vegetated will contribute strongly to protecting the natural character of the coastal environment.

Terraces often have an open character and skyline which is sensitive to the siting of structures or utilities. Siting of these elements without a visual backdrop should be avoided.

S5.7.2 Rehabilitation

Guideline

Encourage and promote planting which reinforces the natural pattern of the terrace landform.

Explanation/Principal Reasons

The opportunity exists to improve the visual quality of terraces, and particularly their escarpment, by planting to reinstate native plant communities which reinforce the natural pattern of the landscape.

S5.7.3 Subdivision

Guideline

Where subdivision is to occur, refer to sub-section 9 of this section.

Explanation/Principal Reasons

Opportunities for appropriate subdivision or papakaianga housing on terraces exist if the sensitive nature of the landform character is taken into account. This involves selecting areas isolated from the escarpment and which have a landform or vegetative backdrop and context. Appropriate planting can be used to assist in integrating these developments.

The open space character of terraces should be protected either through the clustering of houses or through discrete location and separation. Strip development along the State Highway should be avoided.

S5.8 **ISLANDS**

S5.8.1 Natural Character

Guidelines

- a. Protect the landform profile of islands when viewed from land or sea.
- b. Prevent earthworks which have an adverse visual effect on the natural landform of islands.
- c. Protect intact native vegetation cover.
- d. Prevent the installation of aerial utilities on islands.

Explanation/Principal Reasons

Islands tend to be experienced predominantly as part of a view across water. As a focal point of the view they tend to come under greater visual analysis than a land based unit. Distance, however, plays a part in reducing the degree of which change in the island's landscape is visible.

Protection of the natural qualities of the sky or outline of the island (including its landform and vegetation) is important.

S5.8.2 Rehabilitation

Guideline

Where appropriate, encourage and promote planting which reinforces the natural pattern of the island landform.

Explanation/Principal Reasons

Planting which reinforces the natural landform and pattern of an island landscape will improve the visual qualities of that island.

S5.8.3 Subdivision

Guideline

Where subdivision is to occur, refer to section 9 of this schedule.

S5.9

SUBDIVISION

Where subdivision is to occur in any generic landscape area, the following should apply:

- a. Retain the natural landform characteristics of the site and protect significant landforms in their natural state.
- b. Encourage and promote clustering of buildings to maintain a high proportion of open space and to minimise adverse visual effects.
- c. Encourage and promote buildings of an appropriate scale and density that respond to the landform characteristics.
- d. In areas without a landform backdrop (i.e. spits and ridge tops) encourage and promote appropriate building forms that minimise adverse visual effects on the skyline and are compatible with the natural landform characteristics.
- e. Encourage and promote the use of colour schemes that are compatible with the natural colours of the landscape.
- f. Encourage and promote the integration of development through the use of appropriate native coastal plant species planted in relation to landform characteristics.
- g. Give priority to the retention of public open space at, and public access to, the coastal edge and prominent landforms to maintain amenity values.
- h. Unless otherwise impracticable, esplanade reserves and/or strips should be taken when land is subdivided along the coastal edge.
- i. Where esplanade reserves and/or strips are not taken for whatever reason, ensure the natural character of the coastal edge is maintained by other mechanisms.

SIXTH SCHEDULE

SIGNIFICANT MARSHBIRD

HABITAT AREAS

The site number can be used to find the location on the maps in this plan. Relevant policies are contained in chapter 6 – Significant Areas of Flora and Fauna.

Additional detail is contained in:

Protection and Restoration of Marshbird Habitat in Tauranga Harbour (1993) and Marshbird Habitat of Ohiwa Harbour (1994). Both available from the Department of Conservation and Environment Bay of Plenty. The site names in these reports area also used in this schedule.

Site Name	Species of Note	Other Species	Site Number	Map Sheet
Island View	Banded rail North Island fernbird		CHPZ-1	2a
Emerton Road	Banded rail North Island fernbird		CHPZ-1	2a
Seaforth Road	Australasian bittern Banded rail North Island fernbird	Australasian harrier	CHPZ-1	2a
Waiau River	Australasian bittern Banded rail North Island fernbird	Australasian harrier Pukeko	CHPZ-1	2a
Koutunui	Australasian bittern Banded rail North Island fernbird	Australasian harrier Pukeko	CHPZ-1	2a
Athenree Settlement	Banded rail	Pukeko	SSCMA-1	2a
Bowentown Road	Banded rail North Island fernbird		SSCMA-1	2a
Athenree Road	Banded rail North Island fernbird	Spur winged plover Pukeko White-faced heron	SSCMA-1	2a
Hikurangi	Australasian bittern Banded rail North Island fernbird	Pukeko Eastern bar-tailed godwit White-faced heron Australasian pied stilt Eastern knot	CHPZ-2	2a
Wolseley Road	Banded rail North Island fernbird	New Zealand kingfisher Paradise shelduck White-faced heron	SSCMA-2	2a, 3a
North-Western End of Matakana Island	Banded rail North Island fernbird Australasian bittern Spotless crane	Australasian harrier Pukeko Black shag New Zealand scaup Grey duck Little shag Welcome swallow	SSL-8	2a, 3a
Tuapiro Point	Banded rail North Island fernbird		SSL-7	3a
Tuapiro Creek North	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher	CHPZ-3	3a
Tuapiro Creek South	Banded rail Marsh crake North Island fernbird	Pukeko New Zealand kingfisher	CHPZ-3	3a
Ongare	North Island fernbird	Pukeko White-faced heron	SSCMA-3	3a
Hume Highway North	Banded rail North Island fernbird	Australasian harrier New Zealand kingfisher Silvereye	SSL-109 CHPZ-4	3a, 5a, 6a
Stokes Road Wetland	North Island fernbird		SSCMA-4	3a, 5a
Tahawai Stream Wetland	Marsh crake North Island fernbird		CHPZ-7	3a
Katikati Inlet	Australasian bittern North Island fernbird	Australasian harrier Pukeko White-faced heron	CHPZ-7	3a, 5a
Park Road Shoreline	Banded rail	New Zealand kingfisher	SSCMA-5	5a

Site Name	Species of Note	Other Species	Site Number	Map Sheet
Beach Road Inlet	Banded rail North Island fernbird		CHPZ-8	5a
Mid Matakana Island Shoreline	Banded rail North Island fernbird	White-faced heron New Zealand kingfisher	CHPZ-5	6a
Tetley Road Inlet	Banded rail Spotless crane		SSCMA-6	5a
Tirohanga	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher Paradise shelduck	SSCMA-60	6a
North-Eastern Blue Gum Bay	North Island fernbird		SSL-10	6a
Te Rereatukahia Stream	Australasian bittern North Island fernbird	Australasian pied stilt Pukeko	CHPZ-9	5a
Mania Stream Mouth	Australasian bittern North Island fernbird	Pukeko	CHPZ-9	5a
Waitekohe Stream Mouth	Australasian bittern North Island fernbird	White-faced heron Pukeko	CHPZ-10	5a
Walker Road East	Banded rail North Island fernbird	Little shag White-faced heron	CHPZ-10	5a
Northern Blue Gum Bay	Australasian bittern Banded rail North Island fernbird	White-faced heron Pukeko New Zealand kingfisher Welcome swallow	SSL-10 CHPZ-6	6a
Southern Blue Gum Bay	Australasian bittern Banded rail North Island fernbird	Australasian harrier Caspian tern New Zealand kingfisher White-faced heron	SSL-10 CHPZ-6	6a, 8a
Waiherehere Inlet	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher	SSL-11 CHPZ-6	6a
Matahui Road	Australasian bittern Banded rail North Island fernbird	Australasian harrier	SSCMA-7	7a
Matahui Point Peninsula	Australasian bittern North Island fernbird		CHPZ-11	5a, 7a
Aongatete River Mouth	Australasian bittern Banded rail North Island fernbird	Australasian Harrier Pukeko	CHPZ-11	7a
Aongatete River Estuary	Australasian bittern Banded rail North Island fernbird	White-faced heron Pukeko	CHPZ-11	7a
Hunters Creek	Australasian bittern Banded rail North Island fernbird	Australasian harrier Pukeko <i>Leilopisma smithi</i> (shore skink)	CHPZ-18	8a
Hutt Road	Banded rail North Island fernbird	Pukeko New Zealand kingfisher	CHPZ-18	8a
Morton Road	Australasian bittern Banded rail North Island fernbird	Pukeko	CHPZ-13	7a
'Prestidges' Island Wetland	Australasian bittern North Island fernbird	Australasian harrier White-faced heron	CHPZ-13	7a
Prestiges Road	Banded rail North Island fernbird	White-faced heron Pukeko	CHPZ-13	7a
Te Hopai Island	Banded rail North Island fernbird	Southern black-backed gull White-faced heron Australasian pied stilt Lesser knot	CHPZ-14	7a

Site Name	Species of Note	Other Species	Site Number	Map Sheet
Rangiwaea Island Foreshore	North Island fernbird	White-faced heron Variable oystercatcher Caspian tern	SSCMA-19	8a
Opureora Inlet	North Island fernbird	Pukeko New Zealand kingfisher	CHPZ-19	8a
Opureora Islet	North Island fernbird		SSCMA-17	8a
Wainui River West	Banded rail North Island fernbird	Pukeko New Zealand kingfisher White-faced heron	CHPZ-13	7a
Wainui River South	Banded rail North Island fernbird	Pukeko New Zealand kingfisher White-faced heron	SSL-13 CHPZ-13	7a
Wainui River East	Banded rail North Island fernbird	Pukeko Paradise shelduck	CHPZ-13	7a
Stewart Road Inlet	Banded rail North Island fernbird	Pukeko Australasian harrier New Zealand kingfisher White-faced heron	CHPZ-13	7a
Stewart Road	Australasian bittern Banded rail North Island fernbird	Pukeko New Zealand kingfisher White-faced heron Whitefronted tern	CHPZ-13	7a
Turner Road	Banded rail North Island fernbird	New Zealand kingfisher	SSCMA-8	7a
Apata	Banded rail Marsh crake North Island fernbird	Pukeko New Zealand kingfisher Paradise shelduck	SSCMA-8	7a
Apata Rail	Banded rail North Island fernbird		SSL-14	10a
Pahoia	Australasian bittern Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher	CHPZ-15	7a, 10a
Pahoia Beach Pahoia	Banded rail North Island fernbird	Pukeko New Zealand kingfisher White-faced heron	CHPZ-15	7a
Nga Kautuakina Point	North Island fernbird	White-faced heron Eastern bar-tailed godwit	SSCMA-9	7a
Te Pungaatai Inlet	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher	CHPZ-16	7a
West Waipapa Estuary	Banded rail	Pukeko Waterfowl White-faced heron	CHPZ-17	7a, 10a
Waipapa River	Banded rail North Island fernbird	Pukeko New Zealand kingfisher	CHPZ-17	10a
East Waipapa Estuary	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher	CHPZ-17	7a, 10a
Omokoroa Golf Course	Banded Rail	Eastern bar-tailed godwit White-faced heron Australasian pied stilt South Island pied oystercatcher Hudsonian godwit Asiatic black-tailed godwit Caspian tern	CHPZ-17	7a, 8a

Site Name	Species of Note	Other Species	Site Number	Map Sheet
Opureora Spit	Banded rail Spotless crane North Island fernbird	New Zealand dotterel Variable oystercatcher Coastal birds	CHPZ-19	8a
Motungaio Island	North Island fernbird	Variable oystercatcher Caspian tern	CHPZ-20	8a
Motutangaroa Isle Foreshore	North Island fernbird	Variable oystercatcher	SSCMA-20	8a
East Rangiwaia Island	Banded rail North Island fernbird	Pukeko New Zealand kingfisher <i>Leiopisma infrapunctatum</i> (speckled skink)	CHPZ-22	8a
Rangiwaia Island Estuary	North Island fernbird	Pukeko New Zealand kingfisher	CHPZ-21	8a
Mangawhai Bay	Banded rail	Australasian harrier Pukeko White-faced heron Australasian pied stilts Caspian tern Paradise shelduck	SSCMA-10	8a, 10a
Mangawhai Bay Inlet	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher White-faced heron	SSCMA-11	10a
Omokoroa	Banded rail	Pukeko	SSCMA-12	10a
Jess Road	Banded rail	Pukeko New Zealand kingfisher	SSL-15 SSCMA-13	10a
Te Puna Stream Mouth	Banded rail North Island fernbird	Pukeko New Zealand kingfisher White-faced heron	SSCMA-17	10a
Snodgrass Road Inlet	Banded rail	Australasian harrier Pukeko New Zealand kingfisher Paradise shelduck	CHPZ-18	10a
Newnham Road	Australasian bittern Banded rail North Island fernbird	Pukeko New Zealand kingfisher	SSCMA-14	10a
Park Lane (Oturū Creek) Inlet	Australasian bittern Banded rail North Island fernbird	Pukeko New Zealand kingfisher White-faced heron	SSCMA-15	10a
Waipa Road	Banded rail North Island fernbird	Pukeko New Zealand kingfisher White-faced heron	SSCMA-16	10a
Oikimoke Point	Banded rail Spotless crane North Island fernbird	Pukeko New Zealand kingfisher	SSL-18 CHPZ-23	11a
Oikimoke Road	Australasian bittern Banded rail North Island fernbird	Pukeko Australasian harrier South Island pied oystercatcher Australasian pied stilt White-faced heron Spur-winged plover Caspian tern Black shag	SSL-19 CHPZ-24	11a
Wairoa River Mouth – Western Bank	North Island fernbird	Australasian harrier Black shag	SSCMA-22	11a
Wairoa River Island	Banded rail North Island fernbird		SSL-21 CHPZ-25	11a

Site Name	Species of Note	Other Species	Site Number	Map Sheet
Wairoa River Railway (Seaward Side)	Australasian bittern Banded rail North Island fernbird	Australasian harrier White-faced heron	CHPZ-25	11a
Wairoa River Railway (Inland Side)	Spotless crane North Island fernbird	Australasian harrier	SSL-20	11a
Hangarau	North Island fernbird		SSCMA-51	11a
Bethlehem Valley	Australasian bittern Banded rail North Island fernbird	Australasian harrier Pukeko Spur-winged plover White-faced heron Little shag New Zealand kingfisher Southern black-backed gull Welcome swallow	SSL-110 SSCMA-23	11a
Matua Estuary	Banded rail North Island fernbird	Australasian harrier Pukeko White-faced heron	SSL-110 SSCMA-23	11a
McCardle's	Banded rail North Island fernbird	Pukeko	SSL-23 CHPZ-26	11a
Central Waikareao Estuary	Banded rail North Island fernbird	Pukeko New Zealand kingfisher Australasian pied stilt White-faced heron Eastern bar-tailed godwit Caspian tern Red-billed gull Welcome swallow	SSL-23 CHPZ-26	11a
Southern Waikareao Estuary	Banded rail	Pukeko Southern black-backed gull Red-billed gull Caspian tern	SSL-24 SSCMA-24	11a, 13a
Western Waimapu Estuary	Banded rail	Pukeko Australasian pied stilt Red-billed gull White-faced heron	SSL-25 CHPZ-27	13a
Waimapu Estuary	Banded rail North Island fernbird	Australasian harrier Pukeko	SSL-25 CHPZ-27	13a
Poike	Banded rail Spotless crane North Island fernbird	Pukeko White-faced heron	SSL-111 CHPZ-28	13a
Maungatapu	Banded rail North Island fernbird		SSL-27 SSCMA-25	13a
Kaitemako Stream Mouth	Banded rail North Island fernbird	Pukeko Black shag White-faced heron	SSL-27 SSCMA-25	13a
Tye Park Inlet	Banded rail		SSL-112 SSCMA-112	13a, 14a
Ngapeke Road West	Banded rail North Island fernbird	Australasian harrier Pukeko	SSL-28 SSCMA-26	13a, 14a
Ngapeke Road East	Banded rail North Island fernbird	Australasian harrier Pukeko	SSCMA-27	14a

Site Name	Species of Note	Other Species	Site Number	Map Sheet
Waitao Stream Mouth (West)	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher South Island pied oystercatcher Eastern bar-tailed godwit Caspian tern	SSL-29 CHPZ-29	14a
Waitao Stream Mouth (East)	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher	SSL-29 CHPZ-29	14a
Mangatawa	Banded rail	Pukeko New Zealand kingfisher White-faced heron	SSCMA-28	14a
Tip Lane (Sewage Treatment Works)	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher	SSL-30 CHPZ-30	12a, 14a
Te Maunga Causeway	North Island fernbird	Pukeko White-faced heron	SSL-113 SSCMA-29	12a, 11a
Matapihi	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher White-faced heron	SSL-114 SSCMA-52	11a
Waipu Bay	Spur wing plover		SSCMA-52	12a
Hungahungatoroa Marae	Banded rail	Pukeko Australasian pied stilt	SSCMA-30	11a, 12a, 13a
Tauranga Airport	Banded rail	Australasian harrier Pukeko Banded dotterel	SSCMA-32	11a, 12a
Port Ohope	North Island fernbird	Australasian harrier Silvereye Welcome swallow	SSL-68 SSCMA-48	25a
Awarapatuna Stream Inlet	Australasian bittern North Island fernbird	New Zealand kingfisher White-faced heron Pukeko Australasian pied stilt Spur-winged plover	SSL-50 CHPZ-31	25a
Tunanui Stream Inlet	Australasian bittern Banded rail North Island fernbird	Paradise shelduck Welcome swallow Pied Stilt Spur-winged plover	CHPZ-32 SSL-51	25a
Burma Road	Banded rail North Island fernbird	Australasian harrier	SSCMA-36	25a
Pukehoko	North Island fernbird	White-faced heron	SSCMA-37	25a
Waiotane Stream	Banded rail North Island fernbird	New Zealand kingfisher Pukeko Paradise shelduck	SSL-52 CHPZ-33	
Wainui Stream	Banded rail North Island fernbird	Pukeko New Zealand kingfisher Paradise shelduck White-faced heron Spur-winged plover	SSL-53 SSCMA-54	25a
Paparoa Road Inlet	Banded rail North Island fernbird	Pukeko Spur-winged plover Australasian pied stilt	SSL-53 CHPZ-34	25a
Wainui Wetland	Banded rail Spotless crane North Island fernbird	Pukeko Paradise shelduck	SSL-54 CHPZ-39	25a, 26a
Ouaki Creek	Australasian bittern Banded rail North Island fernbird	Pukeko	SSL-55 SSCMA-55	25a

Site Name	Species of Note	Other Species	Site Number	Map Sheet
Toritiro Point	North Island fernbird		SSL-56 SSCMA-38	25a
Hiwarau Road Wetland	Spotless crane North Island fernbird	Australasian harrier Pukeko Tui Bellbird North Island fantail Grey warbler Silvereye	SSL-58 SSCMA-56	26a
Te Awairoa Stream	Banded rail North Island fernbird	New Zealand kingfisher	SSCMA-57	26a
Papanui Road	Banded rail	Pukeko Welcome swallow White-faced heron	SSCMA-40	26a
State Highway Number 1 (Overflow Bridge)	Banded rail North Island fernbird	Australasian harrier Pukeko New Zealand kingfisher Spur winged plover White-faced heron Australasian pied stilt	SSL-117 CHPZ-35	26a
Pataua Island Marshes	Banded rail	Pukeko	SSL-61 CHPZ-36	26a
Ruatuna Road Inlet	North Island fernbird	New Zealand kingfisher	SSCMA-39	26a
Pukeruru Point Inlet	North Island fernbird	New Zealand kingfisher Pukeko White-faced heron	SSL-118 SSCMA-41	25a, 26a
Ohiwa Scenic Reserve Inlet	Banded rail North Island fernbird	Pukeko	SSL-63 SSCMA-42	25a
Ohiwa Loop Road "Peninsula"	Banded rail North Island fernbird		SSCMA-44	25a
Reeves Road Embayment	Banded rail North Island fernbird	New Zealand kingfisher Pukeko	SSCMA-43	25a
Uretara Island	Banded rail North Island fernbird	Australasian harrier New Zealand kingfisher Grey warbler North Island fantail Tui	SSL-66 CHPZ-38	25a
Motuotutu Island	Banded rail North Island fernbird	Southern black-backed gull	SSL-65 CHPZ-37	25a
Tern Island	North Island fernbird	New Zealand dotterel Variable oystercatcher Southern black-backed gull	SSL-64 SSCMA-46	25a
Ohiwa Spit	New Zealand dotterel		SSL-121	25a, 27a

SEVENTH SCHEDULE

SIGNIFICANT INDIGENOUS VEGETATION AREAS

The site number can be used to find the location on the maps in this plan. Relevant policies are contained in chapter 6 – Significant Areas of Flora and Fauna.

Additional detail is contained in the publication: *Significant Indigenous Vegetation of the Bay of Plenty Coastal Zone* (Beadel 1994), which is available from Environment Bay of Plenty. The site names used in the report are also used in this schedule.

SITE NAME:	OROKAWA SCENIC RESERVE	MAP SHEET: 1a
RANKING:	NATIONAL	SITE NO: SSL-2

Orokawa Scenic Reserve is a representative, relatively good quality example of the coastal vegetation of Waihi Ecological District and contains the best example of the remaining coastal forest in the ecological district. One threatened and local plant occurs in the reserve, *Pimelea tomentosa*, classed as vulnerable. *Hebe pubescens* var. *pubescens*, a plant endemic to the Coromandel Ecological Region, also occurs in the reserve.

SITE NAME:	TUHUA (MAYOR ISLAND)	MAP SHEET: 40a, 41a
RANKING:	NATIONAL	SITE NO: SSL-1

Tuhua is a nationally significant site for pohutukawa forest, free from the effects of possum. Its flora (about 370 species) is the largest of any of the Bay of Plenty islands, which reflects the relatively large size of the island and the diversity of habitats (including freshwater wetlands).

Several threatened and local plants have been recorded from Tuhua: *Pterostylis nana* (endangered), *Euphorbia glauca* (vulnerable), *Cyclosorus interruptus* (rare), *Lepidium oleraceum* (rare), *Ranunculus macropus* (rare), *Rorippa divaricata* (vulnerable), *Hibiscus trionum* (vulnerable), *Pisonia brunonicina* (rare), *Sicyos australis* (local), *Corybas cryptanthus* (local), *Marattia salicina* (rare), *Pimelea tomentosa* (vulnerable). Also, *Nestegis apetala* (local) reaches its southern limit on Tuhua.

SITE NAME:	ATHENREE 1	MAP SHEET: 2a
RANKING:	NATIONAL	SITE NO: CHPZ-1

Athenree 1 is a large wetland, much of which is relatively unmodified, comprising a representative example of the estuarine vegetation of Tauranga Harbour. Much of this site is in the Athenree Wildlife Management Reserve.

SITE NAME:	BOWENTOWN SAND DUNES (Including recreation reserve)	MAP SHEET: 2a
RANKING:	REGIONAL	SITE NO: SSL-4

This site contains good quality representative sand dune vegetation communities characteristic of Tauranga ecological district. The indigenous flora is relatively diverse. An interesting feature of these communities is the presence of seedling and sapling coastal five finger among the *Muehlenbeckia complexa* and *Isolepis nodosa*. *Tetragonioides* (New Zealand spinach) is also locally common among the *Muehlenbeckia complexa* and *Isolepis nodosa*. One plant of *Pimelea arenaria* (rare) was recorded from this site in 1983. *Desmoschoenus spiralis* (pingao) is locally common at this site (classed as local).

SITE NAME:	ATHENREE 2	MAP SHEET: 2a
RANKING:	DISTRICT	SITE NO: SSL-3

Athenree 2 is a relatively large example of the freshwater wetland vegetation, characteristic of Tauranga ecological district.

SITE NAME:	BOWENTOWN HEADS	MAP SHEET: 2a
RANKING:	DISTRICT	SITE NO: SSL-5

Bowentown Heads is a good example of remnant pohutukawa forest and secondary mixed forest on volcanic hard coast. New Zealand spinach (*Tetragonia tetragonioides*) occurs at this site.

SITE NAME:	TUAPIRO ESTUARY	MAP SHEET: 3a
RANKING:	DISTRICT	SITE NO: SSL-6, CHPZ-3

This is a large, relatively good quality, diverse example of the estuarine vegetation of Tauranga Harbour. In places the searush tussockland at this site varies from that present elsewhere in the harbour, being shorter and less dense. There is a narrow fringe of freshwater wetland vegetation.

This site includes a good example of pohutukawa forest, with a reasonably intact understorey. *Asplenium terrestre* subsp. *maritimum* occurs in the pohutukawa forest. This species is only known from one other mainland site on the east coast of the North Island.

SITE NAME:	MATAKANA ISLAND 1 (Wetlands at north-western end and sand dunes)	MAP SHEET: 2a, 3a, 4a, 6a, 8a, 9a
RANKING:	NATIONAL	SITE NO: SSL-8

This site contains high quality, representative examples of sand dune communities and wetland communities which are of national significance.

A natural spinifex-pingao community occurs along the majority of the frontal foredune of Matakana Island. Pingao (classed as local) is also common on these sites and over sixty plants of *Pimelea arenaria* (classed as rare) were recorded in 1989. Another species of botanical interest which occurs on the island is *Melicytus novae-zelandiae*. This species occurs on several other islands in the Bay of Plenty but is rare on the mainland.

The wetlands at the northwestern end of Matakana Island contain one of the best populations of *Thelypteris confluens* (rare) and *Cyclosorus interruptus* (rare) in New Zealand. *Ranunculus macropus* (rare) also occurs in the wetlands.

The understorey in the pine plantations is generally dominated by indigenous species. The association includes:

- (i) Dense *Baumea juncea* and *Isolepis nodosa* with locally common oioi.
- (ii) *Zoysia pauciflora* common among abundant pine needle litter with local *Lobelia anceps*, *Earina mucronata*, *Dendrobium cunninghamii* and *Thelymitra longifolia*.
- (iii) At a few small sites there are no pines and sand is the dominant cover with scattered *Coprosma acerosa*, *Isolepis nodosa*, *Zoysia pauciflora* and *Pseudographalium* sp (*P. lutealbum* agg., "Pseudographalium Coast").

Two threatened and local species, *Desmoschoenus spiralis* (local) and *Pimelea arenaria* (indeterminate) have been recorded from beneath the pine plantations.

SITE NAME:	MATAKANA ISLAND 3	MAP SHEET: 3a
RANKING:	DISTRICT	SITE NO: SSL-108

These wetlands are part of a larger wetland system (see Matakana Island 1; a site ranked as National). The wetlands in Matakana Island 3 are of significant conservation value, despite being more modified than those in Matakana Island 1.

SITE NAME:	KAURI POINT	MAP SHEET: 3a
RANKING:	LOCAL	SITE NO: SSL-9

This is a good example of the remaining areas of pohutukawa forest within the ecological district.

SITE NAME:	MATAKANA ISLAND 2 (Estuarine wetlands north of Blue Gum Bay)	MAP SHEET: 3a, 5a, 6a
RANKING:	DISTRICT	SITE NO: SSL-109, CHPZ-4

This is a relatively large, good quality representative example of the vegetation, characteristic of Tauranga ecological district.

SITE NAME:	KAREWA ISLAND (Wildlife Sanctuary)	MAP SHEET: 43a
RANKING:	REGIONAL	SITE NO: SSL-107

Karewa Island contains a good quality, representative example of the vegetation of Motiti Ecological District. No introduced animals live on the island. *Lepidium oleraceum* (classed as rare) and *Pisonia brunoniana* (classed as local) grow on the island. *P. brunoniana* reaches its present day southern limit of distribution on the island.

SITE NAME:	KATIKATI 1	MAP SHEET: 3a, 5a
RANKING:	REGIONAL	SITE NO: CHPZ-7

Katikati 1 is a relatively large, good quality, representative example of the wetland vegetation of Tauranga Harbour. It contains relatively extensive examples of three of the common vegetation types in the harbour: searush tussockland, oioi sedgeland and mangrove scrub/shrublands.

SITE NAME:	KATIKATI 2	MAP SHEET: 5a
RANKING:	DISTRICT	SITE NO: CHPZ-8

Katikati 2 is a relatively large area of mangrove scrub with small areas of saltmarsh. These vegetation types are characteristic of the Tauranga ecological district.

SITE NAME:	TUTAETAKA ISLAND	MAP SHEET: 5a
RANKING:	LOCAL	SITE NO: SSL-12

This is a good remnant example of pohutukawa forest within the ecological district.

SITE NAME:	BLUE GUM BAY 1	MAP SHEET: 6a, 8a
RANKING:	NATIONAL	SITE NO: SSL-10, CHPZ-6

Blue Gum Bay 1 is an extensive wetland, much of which is a relatively unmodified, representative example of the estuarine and freshwater vegetation of Tauranga Harbour.

SITE NAME:	TIROHANGA	MAP SHEET: 5a, 6a
RANKING:	NATIONAL	SITE NO: CHPZ-12

This site contains the largest example of mangrove scrub and shrublands in the harbour. It is a good quality, representative example of the estuarine vegetation of Tauranga Harbour.

SITE NAME:	BLUE GUM BAY 2	MAP SHEET: 6a
RANKING:	DISTRICT	SITE NO: SSL-11, CHPZ-6

Blue Gum Bay 2 is contiguous with and complementary to the Blue Gum Bay category one area, which is a large good quality, representative example of the wetland vegetation of Tauranga Harbour.

SITE NAME:	HUNTERS CREEK	MAP SHEET: 8a
RANKING:	NATIONAL	SITE NO: CHPZ-18

Hunters Creek contains a relatively intact, high quality representative example of a contiguous estuarine and freshwater wetland vegetation sequence.

SITE NAME:	AONGATETE ESTUARY	MAP SHEET: 7a, 5a
RANKING:	NATIONAL	SITE NO: CHPZ-11

Aongatete Estuary contains large areas of representative mangrove stands, which are diverse in stature and density. These stands are contiguous with saltmarsh of high quality characteristic of Tauranga Harbour.

SITE NAME:	TE HOPAI ISLAND	MAP SHEET: 7a
RANKING:	NATIONAL	SITE NO: CHPZ-14

Te Hopai Island is probably the least modified substantial area of estuarine vegetation in Tauranga Harbour and contains a high quality, diverse, representative vegetation sequence. Several of the vegetation types occur nowhere else in the harbour.

SITE NAME:	TAHUNAMANU ISLAND	MAP SHEET: 8a
RANKING:	DISTRICT	SITE NO: SSCMA-18

Tahunamanu Island supports a representative example of the vegetation growing on sandspits. Small examples of *Sarcocornia quinqueflora* herbfield occur throughout the harbour; this is one of the larger and better quality examples.

SITE NAME:	MOTUNGAIO ISLAND	MAP SHEET: 8a
RANKING:	DISTRICT	SITE NO: CHPZ-20

Motungaio Island is a good example of a vegetation sequence grading from saltmarsh to manuka scrub and forest. This site is near the Opureora Category One Area and is complementary to the Opureora site.

SITE NAME:	OPUREORA	MAP SHEET: 8a
RANKING:	DISTRICT	SITE NO: CHPZ-19

This is the only site in Tauranga Harbour where a *Stipa stipoides*-*oioi*-*Baumea juncea*-*searush* tussockland association was recorded during the 1992 survey. It also contains a relatively good quality example of sandspit habitat. This site is near Motungaio Island.

SITE NAME:	RANGIWAEA ISLAND	MAP SHEET: 8a
RANKING:	DISTRICT	SITE NO: CHPZ-21

Rangiwaea Island is a good example of manuka scrub on sand, contiguous with saltmarsh. These vegetation types are characteristic of the Tauranga ecological district. Pingao (*Desmoschoenus spiralis*) is present on the sandspit at this site (classified as local).

SITE NAME:	WAINUI ESTUARY 2	MAP SHEET: 7a
RANKING:	DISTRICT	SITE NO: CHPZ-13

This area is a relatively large, good quality example of wetland vegetation types, which are characteristic of Tauranga Harbour. It is next to and complementary to Wainui Estuary 1 site.

SITE NAME:	WAINUI ESTUARY	MAP SHEET: 7a
RANKING:	REGIONAL	SITE NO: SSL-13, CHPZ-13

This site contains representative examples of *oioi* sedgeland inland from the main harbour adjacent to a tidal stream, and manuka-raupo-toetoe shrubland, characteristic of Tauranga Harbour.

SITE NAME:	APATA ESTUARY	MAP SHEET: 7a, 10a
RANKING:	DISTRICT	SITE NO: SSL-14, CHPZ-15

Apata Estuary contains a large, good quality stand of mangroves, with relatively narrow strips of saltmarsh along the margins.

SITE NAME:	WAIPAPA ESTUARY 2	MAP SHEET: 7a, 8a, 10a
RANKING:	DISTRICT	SITE NO: CHPZ-17

Waipapa Estuary 2 is a relatively large, good quality example of mangrove stands and saltmarsh. Mangrove scrub and shrublands form the cover over much of this area.

SITE NAME:	MOTUHOA ISLAND	MAP SHEET: 8a, 10a
RANKING:	LOCAL	SITE NO: SSL-123

This is a good example of the remaining areas of pohutukawa forest within the ecological district.

SITE NAME:	WAIPAPA ESTUARY 1	MAP SHEET: 10a
RANKING:	REGIONAL	SITE NO: CHPZ-17

This site contains a representative, relatively large area of high quality *oioi* sedgeland inland from the main harbour adjacent to a tidal stream.

SITE NAME:	MOUNT MAUNGANUI 1	MAP SHEET: 9a
RANKING:	DISTRICT	SITE NO: SSL-119

This is a good example of remnant pohutukawa forest on volcanic hard coast.

SITE NAME:	MOUNT MAUNGANUI 2	MAP SHEET: 9a
RANKING:	LOCAL	SITE NO: SSL-119

These sites provide a buffer to the pohutukawa forest of Mount Maunganui.

SITE NAME:	MOTUOTAU ISLAND (Scenic Reserve)	MAP SHEET: 9a
RANKING:	REGIONAL	SITE NO: SSL-26

Although very small, Motuotau Island is a representative example of coastal forest. It is also of considerable value as an example of pohutukawa forest free from the effects of possums or other browsing mammals.

SITE NAME:	TE PUNA ESTUARY (District)	MAP SHEET: 10a
RANKING:	DISTRICT	SITE NO: SSL-16

This site is a good quality example of manuka forest.

SITE NAME:	MATUA ESTUARY	MAP SHEET: 11a
RANKING:	DISTRICT	SITE NO: SSL-110, SSCMA-23

The Matua site is a good example of saltmarsh which has been heavily modified in the past (i.e. extensive drains, grazing and fencing). It is recovering well and will probably continue to improve in quality.

SITE NAME:	WAIROA ESTUARY 1	MAP SHEET: 11a
RANKING:	REGIONAL	SITE NO: SSL-21, CHPZ-25

Wairoa Estuary 1 is a small island in the Wairoa River which contains a good quality representative vegetation sequence, characteristic of Tauranga ecological district. This was the only site where *Limosella lineata* was recorded during the 1992 survey.

SITE NAME:	WAIROA ESTUARY 2	MAP SHEET: 11a
RANKING:	DISTRICT	SITE NO: SSL-20, CHPZ-25

Wairoa Estuary 2 is a relatively large and diverse example of estuarine vegetation with associated freshwater wetland vegetation.

SITE NAME:	WAIROA ESTUARY 3	MAP SHEET: 11a, 13a
RANKING:	DISTRICT	SITE NO: SSL-22

Wairoa Estuary 3 is a representative example of freshwater wetland vegetation adjacent to a river channel. This is adjacent to and complementary to Wairoa 1 site.

SITE NAME:	WAIKAREAO ESTUARY	MAP SHEET: 11a
RANKING:	DISTRICT	SITE NO: SSL-23, CHPZ-26

Waikareao Estuary contains a relatively large example of estuarine vegetation with contiguous freshwater wetlands characteristic of the vegetation of Tauranga ecological district.

SITE NAME:	WAIMAPU ESTUARY 1	MAP SHEET: 13a
RANKING:	NATIONAL	SITE NO: SSL-25, CHPZ-27

Waimapu Estuary contains a high quality, representative example of a freshwater wetland contiguous with saltmarsh. It contains the best example of *Coprosma propinqua* subsp. *propinqua* shrubland remaining in the Tauranga Harbour. The area in Waimapu Estuary is now the only example of any size remaining in the harbour.

SITE NAME:	WAIMAPU ESTUARY 2	MAP SHEET: 13a
RANKING:	DISTRICT	SITE NO: SSL-25, CHPZ-27

This area contains good examples of these wetland vegetation types which are characteristic of Tauranga Harbour and is adjacent to and complementary to SS Waimapu Estuary 1.

SITE NAME:	MOTITI MAP SHEET: 45a	
RANKING:	DISTRICT	SITE NO: SSL-103

This site contains the largest remaining example of indigenous vegetation in the Motiti ecological district and is virtually the only example of indigenous vegetation remaining on Motiti Island. A yellow flowered pohutukawa tree occurs on Motiti Island.

SITE NAME:	MOTUPUTA ISLAND	MAP SHEET: 45a
RANKING:	DISTRICT	SITE NO: SSL-104

Motuputa Island is a small island to the east of Motiti. It contains a small population of *Lepidium oleraceum*, classed as rare. No introduced animals live on the island.

SITE NAME:	MOTITI ISLETS (Motukahakaha Island, Turitea Island, Motupatiki Island)	MAP SHEET: 45a
RANKING:	DISTRICT	SITE NO: SSL-105

These small islets together contain good quality small examples of coastal vegetation characteristic of the Motiti ecological district. No introduced animals have been recorded from these islands.

SITE NAME:	TAUMAIHI ISLAND	MAP SHEET: 45a
RANKING:	REGIONAL	SITE NO: SSL-106

Taumaihi Island is a small island to the south of Motiti Island. It contains a small population of *Euphorbia glauca*. Kiore are the only introduced animals living on the island.

SITE NAME:	PAPAMOA SAND DUNES	MAP SHEET: 14a, 15
RANKING:	DISTRICT	SITE NO: SSL-31

Papamoa Sand Dunes are a relatively good quality example of sand dune vegetation characteristic of Tauranga ecological district. *Pimelea arenaria* (classed as rare) and pingao (classed as local) grow at this site.

SITE NAME:	KAITUNA SAND DUNES	MAP SHEET: 15
RANKING:	NATIONAL	SITE NO: SSL-32

This site contains a relatively large population of *Austrofestuca littoralis*, a species classed as rare. This is the best population of *Austrofestuca littoralis* in the Bay of Plenty and is a representative example of sand dune communities in the region. *Desmoschoenus spiralis* (pingao), classed as local, also grows at this site.

SITE NAME:	KAITUNA RIVER	MAP SHEET: 16a
RANKING:	DISTRICT	SITE NO: SSL-33, SSCMA-33

This site contains one of the last small remnants of the Kawa swamp, a once large wetland covering much of the Maketu Plains. Some of the vegetation types present here are not well-represented at other sites in the ecological district.

SITE NAME:	MAKETU SPIT	MAP SHEET: 16a
RANKING:	DISTRICT	SITE NO: SSL-34

This site contains a small population (five plants) of *Austrofestuca littoralis*, a species classed as rare.

SITE NAME:	ARAWA	MAP SHEET: 16a
RANKING:	REGIONAL	SITE NO: SSL-35

This site contains one of the few remaining examples of the wetland vegetation of the Kawa swamp which once covered hundreds of acres west of Maketu. Two threatened plants grow in the wetland: *Thelypteris confluens* (rare) and *Cyclosorus interruptus* (rare). The Arawa wetland is one of two known locations for these species in the Tauranga ecological district, a regionally uncommon species occurs at this site being *Mimulus repens*.

SITE NAME:	WAIHI ESTUARY	MAP SHEET: 16a, 17a
RANKING:	DISTRICT	SITE NO: SSCMA-34

Waihi Wildlife Management Reserve contains relatively intact saltmarsh vegetation that, together with saltmarsh in the Waewaetutuki wetland, is representative of the remaining saltmarsh in Waihi Estuary. There are two regionally uncommon species present at this site: *Mimulus repens* and *Bolboschoenus caldwellii*.

SITE NAME:	WAEWAETUTUKI (PART)	MAP SHEET: 16a
RANKING:	DISTRICT	SITE NO: SSL-36, SSCMA-33

This site is part of one of the last substantial examples of freshwater wetland vegetation on the Pongakawa Plains. Prior to drainage the plains were largely wetland. The saline vegetation, together with that in the Waihi Wildlife Management Reserve, is representative of the remaining saltmarsh in Waihi Estuary. Another significant feature is the contiguous sequence of freshwater and saline wetland vegetation.

SITE NAME:	MOTUNAU	MAP SHEET: 46
RANKING:	REGIONAL	SITE NO: SSL-102

Motunau (Plate Island) contains good quality representative examples of the vegetation characteristic of Motiti Ecological District. No introduced browsing animals occur on these islands.

SITE NAME:	PUKEHINA 1	MAP SHEET: 17a
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RANKING:	DISTRICT	SITE NO: SSL-115
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This site contains a representative example of a landform and vegetation that is characteristic of the coast between Pukehina and Otamarakau. The site selected is the best remaining example of this feature in Tauranga ecological district.

SITE NAME:	PUKEHINA 2	MAP SHEET: 17a
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RANKING:	LOCAL	SITE NO: SSL-115
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Pukehina 2 is a relatively good example of indigenous vegetation on volcanic soft coast.

SITE NAME:	OTAMARAKAU	MAP SHEET: 18a
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RANKING:	DISTRICT	SITE NO: SSL-37
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This site contains a small population (five plants) of *Austrofestuca littoralis*, a species classed as rare. Pingao (*Desmoschoenus spiralis*) also grows at this site, classed as local.

SITE NAME:	HAUONE	MAP SHEET: 18a
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RANKING:	DISTRICT	SITE NO: SSL-38
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This site contains relatively good quality, representative examples of the coastal sand dune vegetation characteristic of the ecological district.

SITE NAME:	HEREPURU 2	MAP SHEET: 18a, 19a
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RANKING:	DISTRICT	SITE NO: SSL-39
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Apart from Matata Scenic Reserve, this area of forest is the only other example of coastal forest in the district. *Pimelea tomentosa*, classed as vulnerable, has been recorded from Ohinekoao Scenic Reserve.

SITE NAME:	HEREPURU 1	MAP SHEET: 18a, 19A
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RANKING:	REGIONAL	SITE NO: SSL-40
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This site contains a representative, relatively good quality example of the coastal sand dune and wetland vegetation of Otanewainuku Ecological District. Sand dunes and scattered associated wetlands occur along the entire coastal margin of the ecological district. *Desmoschoenus spiralis* (pingao) grows at this site, classed as local.

SITE NAME:	MATATA SCENIC RESERVE	MAP SHEET: 19a
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RANKING:	NATIONAL	SITE NO: SSL-39
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Matata Scenic Reserve comprises over 500 ha, of which approximately 140 ha are in the coastal zone. The reserve is ranked as being of exceptional botanical value. It contains the largest area of coastal forest remaining in the Otanewainuku Ecological District and Northern Volcanic Plateau Ecological Region. Much of it is in relatively good condition and it contains representative examples of the vegetation of the ecological district and region. One of the vegetation types (hard beech forest with pohutukawa common) only occurs along the Bay of Plenty coast, and Matata Scenic Reserve contains the largest remaining example of this type. Matata Scenic Reserve contains the best known population of *Pimelea tomentosa* (vulnerable) in the Otanewainuku Ecological District and one of the best populations known in the country.

SITE NAME:	MATATA 4	MAP SHEET: 19a
RANKING:	DISTRICT	SITE NO: SSL-41

This site contains relatively good quality, representative examples of the coastal sand dune vegetation characteristics of the ecological district. It forms part of a vegetation sequence extending inland into Matata Scenic Reserve, although part of the sequence has been modified and the two sites are separated by State Highway 2.

SITE NAME:	MATATA 2 (Part Matata Wildlife Refuge)	MAP SHEET: 19a
RANKING:	NATIONAL	SITE NO: SSL-42

Matata Wildlife Refuge contains the best representative example of saline wetlands with adjacent freshwater wetlands in the Te Teko Ecological District. These wetlands are contiguous with sand dunes (also protected by Wildlife Refuge status) which are of district significance (see SS Matata 3). Two small populations of *Cyclosorus interruptus* (rare) grow in the reserve.

SITE NAME:	MATATA 3 (Part Matata Wildlife Refuge)	MAP SHEET: 19a
RANKING:	DISTRICT	SITE NO: SSL-42

The primary value of this area is that it serves as a buffer around SS Matata 2, a site of national significance. Pingao (classed as local) is scattered along the foredune.

SITE NAME:	TARAWERA RIVER	MAP SHEET: 19a, 22
RANKING:	LOCAL	SITE NO: SSL-43

This site contains one of the best populations of pingao in the Te Teko Ecological District.

SITE NAME:	WAHIEROA DUNES 1 (Part Recreation Reserve and part private land)	MAP SHEET: 22
RANKING:	NATIONAL	SITE NO: SSL-45

Wahieroa Dunes 1 contains kanuka forest and scrub on sand dunes which are now rare in New Zealand so that this site is of considerable significance. *Desmoschoenus spiralis* (pingao) grows locally at this site, classed as local.

SITE NAME:	WAHIEROA DUNES 2	MAP SHEET: 22
RANKING:	DISTRICT	SITE NO: SSL-44

This site provides a buffer to the kanuka forest (SS Wahieroa Dunes 1), a site of national significance. Wahieroa Dunes 2 contains a good example of the sand dune vegetation characteristic of the Te Teko Ecological District.

SITE NAME:	THORNTON 1 (Part Thornton Lagoon Wildlife Management Reserve)	MAP SHEET: 22
RANKING:	REGIONAL	SITE NO: SSL-116

This site contains a spinifex-pingao tussockland and is the best remaining example of indigenous foredune communities in the Te Teko Ecological District and Whakatane Ecological Region. *Tetragonia tetragonioides* (New Zealand spinach) grows at this site. This plant is uncommon in the Coromandel-Bay of Plenty-East Cape region.

SITE NAME:	THORNTON 2 (Includes Recreational Reserve and Part Thornton Lagoon Wildlife Management Reserve)	MAP SHEET: 22, 23
RANKING:	DISTRICT	SITE NO: SSL-116

The primary value of this site is as a buffer zone to protect the spinifex-pingao tussockland on the foredune (SS Thornton 1 site). Pingao (classed as local) grows on the sand dunes.

SITE NAME:	MOUTOKI AND RURIMA ISLANDS [Wildlife Sanctuary (Maori Ownership)]	MAP SHEET: 20
RANKING:	REGIONAL	SITE NO: SSL-101

Moutoki and Rurima Islands contain good quality representative examples of the vegetation characteristic of the ecological district. The vegetation types present do not grow on either Moutohora or Whakaari. Kiore were eradicated from Rurima in 1983 and no introduced animals live on the islands today.

Sicyos australis (maawhai) reaches its present day southern limit of distribution on Moutoki Island. This species is classed as local. Pingao, also classed as local, occurs on Rurima Island. *Asplenium flaccidum* subsp. *haurakiense* reaches its southern limit of distribution on these islands. *Meliclytus novae-zelandiae*, a species generally confined to islands, grows on Moutoki and Rurima. It is not known from elsewhere in the ecological district. Another species recorded on the islands, New Zealand spinach (*Tetragonia tetragonioides*), is uncommon in the Coromandel-Bay of Plenty-East Cape region.

SITE NAME:	MOUTOHORA [(Whale Island) Wildlife Management Reserve]	MAP SHEET: 21
RANKING:	REGIONAL	SITE NO: SSL-100

The vegetation of Moutohora has been highly modified. Pohutukawa forest, mahoe forest, kanuka shrubland, bracken and grasses dominate the present day vegetation. Canopy species such as pohutukawa, mahoe and kanuka are regenerating naturally and kanuka, bracken and *Isolepis nodosa* are replacing grasses and bare areas.

There is a small area of kanuka forest on sand, which is a regionally rare vegetation type. Another vegetation type of regional significance growing on the island is pohutukawa forest. A very significant feature is the rapid natural regeneration of coastal forest because of the absence of browsing animals.

SITE NAME:	WHAKATANE ESTUARY	MAP SHEET: 24a
RANKING:	DISTRICT	SITE NO: SSL-46, SSCMA-35

There are few saline wetlands remaining in the Te Teko Ecological District. These wetlands are the only remaining examples in the Whakatane Estuary.

SITE NAME:	KOHI POINT (Includes Kohi Point Scenic Reserve)	MAP SHEET: 24a
RANKING:	REGIONAL	SITE NO: SSL-47

Kohi Point Scenic Reserve contains small areas of pohutukawa forest, with a more extensive area of secondary forest that has been developed following burning. This is now a representative example of the coastal vegetation of the district. *Pimelea tomentosa* grows in the reserve, classed as vulnerable.

SITE NAME:	OHOPE MAP SHEET: 24a (Part Ohope Scenic Reserve)	
RANKING:	NATIONAL	SITE NO: SSL-48

Ohope Scenic Reserve comprises about 490 ha, of which approximately 116 ha are in the coastal zone. The entire reserve is ranked of being of exceptional botanical conservation value. This site contains the best example of pohutukawa forest in the Taneatua Ecological District and one of the best examples of pohutukawa forest on the mainland in New Zealand. It is of national significance. *Pimelea tomentosa* grows in the reserve, classed as vulnerable.

SITE NAME:	OHOPE SPIT (Including Recreation Reserve)	MAP SHEET: 25a
RANKING:	DISTRICT	SITE NO: SSL-68, SSCMA-47

Ohope Spit has the best example of sand dune vegetation in the ecological district. There are a few pingao (*Desmoschoenus spiralis*) plants, classed as local.

SITE NAME:	TAUWHARE PA (Includes Tauwhare Pa Scenic Reserve)	MAP SHEET: 25a
RANKING:	LOCAL	SITE NO: SSL-49, SSCMA-53

Tauwhare Pa is a good example of pohutukawa forest adjacent to harbour margins.

SITE NAME:	ARAWAPUTUNA CREEK	MAP SHEET: 25a
RANKING:	LOCAL	SITE NO: SSL-50

Arawaputuna Creek is a small freshwater wetland contiguous with saline wetlands.

SITE NAME:	ISLETS NEAR OHAKANA ISLAND	MAP SHEET: 25a
RANKING:	DISTRICT	SITE NO: SSL-67

These small islets contain significant examples of pohutukawa adjacent to the harbour margins and the understorey is in good condition. New Zealand iceplant is common on the steep sides of the islets.

SITE NAME:	WHITIWHITI	MAP SHEET: 25a
RANKING:	REGIONAL	SITE NO: SSL-53, CHPZ-34

Whitiwhiti is a moderate sized area containing relatively good quality representative examples of estuarine and freshwater wetlands with hillslope vegetation. Sequences such as these are uncommon in the ecological district, especially on the mainland.

SITE NAME:	URETARA ISLAND (Includes Uretara Island Scenic Reserve)	MAP SHEET: 25a
RANKING:	NATIONAL	SITE NO: SSL-66, CHPZ-38

Uretara Island contains freshwater and saline wetlands contiguous with indigenous forest and scrub. It is a good quality, representative example of these vegetation types, which are characteristic of the Taneatua Ecological District. *Pimelea tomentosa* grows in the reserve, classed as vulnerable.

Along with Pataua Island, Motuotu Island and Nukuhou Conservation Area, this site contains one of the best examples of mangrove stands in the harbour.

SITE NAME:	MOTUOTU ISLAND (Nature Reserve)	MAP SHEET: 25a
RANKING:	NATIONAL	SITE NO: SSL-65, CHPZ-37

Motuotu Island Nature Reserve contains good quality, representative examples of the estuarine vegetation of the ecological district. These mangrove stands are close to the southern limit of distribution of mangrove communities in New Zealand (the limit is near Kutarere in Ohiwa Harbour). The mangrove stands on the island are diverse in stature and density. *Stipa stipoides* grows in the reserve, a species which reaches its southern limit on the eastern side of the North Island in Ohiwa Harbour.

SITE NAME:	OHIWA MAP SHEET: 25a (Includes Ohiwa Scenic Reserve)	
RANKING:	LOCAL	SITE NO: SSL-63, SSCMA-42

Ohiwa is a good quality example of pohutukawa forest contiguous with saltmarsh.

SITE NAME:	WHANGAKOPIKOPIKO (TERN ISLAND) (Wildlife Management Reserve)	MAP SHEET: 25a
RANKING:	DISTRICT	SITE NO: SSL-64, SSCMA-46

Tern Island is the largest sand island in the harbour supporting vegetation. The wetland vegetation around the margins, although small, is of relatively good quality and includes some of the larger areas of low herbfields in the harbour (i.e. *Samolus repens* and *Selliera radicans* herbfields). New Zealand spinach (*Tetragonia tetragonioides*) was recorded on the island. This species is uncommon in the Coromandel-Bay of Plenty-East Cape region.

SITE NAME:	UNNAMED ISLAND NEAR WHANGAKOPIKOPIKO (TERN ISLAND)	MAP SHEET: 25a
RANKING:	DISTRICT	SITE NO: SSCMA-45, SSL-17

Although very small, this island contains a relatively good quality example of indigenous vegetation, grading from saltmarsh to pohutukawa/*Olearia solandri*/manuka shrubland.

SITE NAME:	TORITORI	MAP SHEET: 25a
RANKING:	DISTRICT	SITE NO: SSL-69

Pimelea Tomentosa grows at this site and is classed as vulnerable.

SITE NAME:	NUKUHO	MAP SHEET: 25a, 26a
RANKING:	LOCAL	SITE NO: SSL-56, SSCMA-38

Nukuhou is a small inlet containing an area of mangroves and a small wetland. The manuka shrubland was unusual in that the understorey was dominated by dense oioi (differing from most other examples of manuka shrubland in the Ohiwa Harbour). It adjoins and complements SS Hiwarau.

SITE NAME:	HIWARAU (Includes Nukuhou Conservation Area)	MAP SHEET: 25a, 26a
RANKING:	NATIONAL	SITE NO: SSL-56, SSL-57, CHPZ-40

This site contains a large estuarine and freshwater wetland contiguous with forest. It contains some of the best wetland vegetation in the harbour, including one of the best quality, largest examples of mangrove scrub and shrublands (mangrove communities reach their southern limit in Ohiwa Harbour), the best freshwater wetlands adjacent to the harbour and the best remaining example of wetland manuka scrub and shrublands. The freshwater wetlands are probably the best remaining examples of their kind in the Taneatua Ecological District.

Pimelea tomentosa grows at this site, classed as vulnerable.

The tall forest on hillslopes is the largest remaining example contiguous with the harbour. It contains some of the only remnants of primary forest (e.g. tawa-puriri-mangeao-kohekohe forest and tawa-puriri-mangeao-pohutukawa forest) apart from pohutukawa adjacent to the harbour. It is also adjacent with Matekerepu Historic Reserve (approx. 23 ha) and Kotare Scenic Reserve (19 ha), although these two reserves are outside the coastal zone.

The species diversity of this site is relatively high. Some species grow there which have not been recorded elsewhere in the ecological district, or recorded from only a few other sites. Plant species recorded only from this site within the ecological district include:

Astelia grandis
Tetraria capillaris
Hierochloa redolens
Schoenus apogon
Leptinella squalida subsp. *squalida*

Sparganium subglobosum and *Drosera binata* also grow at this site. *Sparganium subglobosum* has only been recorded from one other site in the ecological district, while *Drosera binata* is known from only a few sites.

SITE NAME:	HIWARAU POHUTUKAWA	MAP SHEET: 26a
RANKING:	LOCAL	SITE NO: SSL-59

This site, although small, contains some of the largest (in girth) pohutukawa observed during the recent survey of Ohiwa Harbour.

SITE NAME:	(PART) HOKIANGA ISLAND	MAP SHEET: 26a
RANKING:	LOCAL	SITE NO: SSL-62, SSCMA-40

This small site contains the best examples of wetland vegetation around a shell sand spit in Ohiwa Harbour.

SITE NAME:	STIPA	MAP SHEET: 26a
RANKING:	DISTRICT	SITE NO: SSCMA-39

Stipa stipoides reaches its southern limit on the east coast of the North Island in Ohiwa Harbour (see Motuotu Island). It is known from only a few sites in the harbour. This is the largest known population in the harbour. This site also contains good examples of saline herbfields.

SITE NAME:	PATAUA ISLAND (Scientific Reserve)	MAP SHEET: 26a
RANKING:	NATIONAL	SITE NO: SSL-61, CHPZ-36

Pataua Island Scientific Reserve contains estuarine wetlands contiguous with indigenous forest and scrub. It contains good quality, representative examples of mangrove communities close to the southern limit of distribution of mangrove communities (refer to Motuotu Island). *Pimelea tomentosa* grows in the reserve, classed as vulnerable. *Stipa stipoides* grows in the reserve. An interesting feature of the wetland communities is the presence of *Hebe* sp. (*H. parviflora* agg., cf. *Veronica arborea*).

SITE NAME:	RUATUNA	MAP SHEET: 26a
RANKING:	LOCAL	SITE NO: SSL-60

These sites contain small remnants of lowland forest including several vegetation types under-represented within the Bay of Plenty coastal zone.

SITE NAME:	KUTARERE	MAP SHEET: 26a
RANKING:	LOCAL	SITE NO: SSCMA-40

This site contains the southern-most mangrove population on the East Coast of the North Island.

SITE NAME:	BRYAN 2	MAP SHEET: 27a
RANKING:	DISTRICT	SITE NO: SSL-73

This site contains a relatively good quality, although small, example of pohutukawa forest in the Opotiki Ecological District.

SITE NAME:	OSCAR REEVE	MAP SHEET: 27a
RANKING:	DISTRICT	SITE NO: SSL-70

The Black and Hard beech-dominant forest types do not grow in other reserves (and rarely elsewhere) within the district. *Pimelea tomentosa*, classed as vulnerable, grows in the reserve.

SITE NAME:	BRYAN 1	MAP SHEET: 27a
RANKING:	REGIONAL	SITE NO: SSL-72

Coastal forest dominated by pohutukawa, puriri, karaka and tawa would once have been common in the Opotiki Ecological District. However, very few examples now remain and the majority of the remnants are very small and highly modified. This site is the best and largest area remaining. It contains a few specimens of hard beech.

SITE NAME:	BRYAN 3	MAP SHEET: 27a
RANKING:	DISTRICT	SITE NO: SSL-71

These small remnants are some of the few remaining examples black beech-tawa-kohekohe and tawa-puriri-pohutukawa coastal forest in the Opotiki Ecological District. This site is complementary to SS Bryan 1.

SITE NAME:	WAIOTAHİ SPİT AND ESTUARY (Includes Waiotahi Historic and Scenic Reserve)	MAP SHEET: 27a
RANKING:	REGIONAL	SITE NO: SSL-74, CHPZ-41

This site contains good quality, representative examples of saline wetland and sand dune vegetation, characteristic of the Opotiki Ecological District. They are the best examples of this vegetation remaining in the ecological district. A few plants of *Desmoschoenus spiralis* (pingao) have been planted in the Waiotahi Spit Scenic and Historic Reserve.

SITE NAME:	WAIOTAHİ BEACH	MAP SHEET: 27a
RANKING:	DISTRICT	SITE NO: SSL-75

This site contains what is probably the best remaining example of pohutukawa forest in the Opotiki Ecological District.

SITE NAME:	HUNTRESS CREEK	MAP SHEET: 27a
RANKING:	DISTRICT	SITE NO: SSL-76

This is a small wetland near the mouth of Huntress Creek (Te Karaka Stream). It is a good example of the present day wetland vegetation in the ecological district.

SITE NAME:	TE MATAU	MAP SHEET: 28
RANKING:	DISTRICT	SITE NO: SSL-77

This is one of the few remaining examples of coastal forest in the Opotiki Ecological District.

SITE NAME:	TİROHANGA	MAP SHEET: 28
RANKING:	DISTRICT	SITE NO: SSL-78

This sickle-shaped wetland near the mouth of the Tirohanga Stream is a good example of the remnant wetlands in the Opotiki Ecological District.

SITE NAME:	TİROHANGA PA (Stewardship Land)	MAP SHEET: 28
RANKING:	LOCAL	SITE NO: SSL-78

This small site is the only example of New Zealand iceplant-pohuehue flaxland in the ecological district.

SITE NAME:	WAIUA ESTUARY	MAP SHEET: 29a
RANKING:	DISTRICT	SITE NO: SSCMA-49

This site contains a good example of saline wetlands around the margins of a small estuary. One of its primary values is as a buffer for the small mangrove colony, which is the eastern-most natural colony of mangroves in New Zealand. It is also near the southern limit of mangrove communities (Ohiwa Harbour).

SITE NAME:	OPAPE	MAP SHEET: 29a
RANKING:	DISTRICT	SITE NO: SSL-79

This site contains one of the best remaining freshwater wetlands in the district.

SITE NAME:	OPAPE HEADLAND 1	MAP SHEET: 29a
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RANKING:	NATIONAL	SITE NO: SSL-80
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This site contains the most substantial population of *Olearia pachyphylla* in New Zealand. *Olearia pachyphylla*, classed as vulnerable, is known from only one other site in New Zealand (Haurere headland).

SITE NAME:	OPAPE HEADLAND 2	MAP SHEET: 29a
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RANKING:	DISTRICT	SITE NO: SSL-81
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This site acts as a buffer to a nationally significant site containing the threatened shrub *Olearia pachyphylla*. It also contains the best example of raupo reedland in the ecological district. It links with Oroi Scenic Reserve and the Opape Lands proposed reserve.

SITE NAME:	HAURERE HEADLAND 1	MAP SHEET: 29a
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RANKING:	NATIONAL	SITE NO: SSL-83
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This site contains one of only two known populations of *Olearia pachyphylla*, classed as vulnerable. It is common at this site. This site is within a larger area identified as a Category Three Priority Area.

SITE NAME:	HAURERE HEADLAND 2	MAP SHEET: 29a
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RANKING:	DISTRICT	SITE NO: SSL-82
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This site acts as a buffer to a nationally significant site containing the threatened shrub *Olearia pachyphylla*.

SITE NAME:	PART TORERE CORRIDOR	MAP SHEET: 29a, 30
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RANKING:	DISTRICT	SITE NO: SSL-84
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The Torere Corridor is part of a large (1,095 ha) vegetation sequence extending from coastal pohutukawa forest and treeland, and induced scrub to moderately and highly modified lowland (steepland) forest. It provides the shortest link to a proposed ecological area (Paraumu), and buffers the pohutukawa-puriri-broadleaved tawa forest containing the southernmost known taraire.

SITE NAME:	TE URITUKITUKI	MAP SHEET: 31a
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RANKING:	REGIONAL	SITE NO: SSL-85
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This site contains one of the three best examples of pohutukawa-puriri-tawa forest in the Motu Ecological District.

SITE NAME:	MARAENUI	MAP SHEET: 31a
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RANKING:	DISTRICT	SITE NO: SSL-86
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This is the largest example of hard beech-dominant forest in the coastal zone of the Motu Ecological District.

SITE NAME:	(PART) MOTU CORRIDOR (Includes Tokata Scenic Reserve)	MAP SHEET: 31a, 32a
RANKING:	DISTRICT	SITE NO: SSL-87, SSCMA-50

This site contains the coastal section of a complete altitudinal sequence from coastal pohutukawa forest and treeland, and pohutukawa, puriri, broadleaved tawa forest to montane hard beech, tawari, kamahi, quintinia forest (5,463 ha). It links with the Raukumara Wilderness Area and incorporates the lower reaches of the Motu River and the Tokata Scenic Reserve.

SITE NAME:	PART WHITIANGA	MAP SHEET: 32a
RANKING:	REGIONAL	SITE NO: SSL-87

This site contains one of the three best examples of pohutukawa-puriri-tawa forest and tawa-pohutukawa-puriri forest in the Motu Ecological District. This site contains much of the Whitianga Category One Priority Area (total area 102.5 ha) and is contiguous with the Motu Corridor Category Two Priority Area (5,463 ha).

SITE NAME:	HAPARAPA RIVER	MAP SHEET: 32a
RANKING:	LOCAL	SITE NO: SSL-88

This is the only example of taraire-dominant forest in the coastal zone of the Motu Ecological District.

SITE NAME:	WHANARUA-KEREU CORRIDOR (PART)	MAP SHEET: 33, 34a, 35a
RANKING:	NATIONAL	SITE NO: SSL-89

This site is part of a complete altitudinal sequence from coastal pohutukawa forest to montane hard beech, tawarai, kamahi, tawheowheo forest comprising 9,552 hectares. It is a good quality, representative example of the coastal vegetation of the ecological district and contains one of the three best examples of pohutukawa-puriri-tawa forest and tawa-pohutukawa-puriri forest therein. *Carmichaelia williamsii* (classed as rare) reaches its present southern limit at Whanarua Bay.

SITE NAME:	PAEPAE O AOTEA (VOLKNER ROCKS)	MAP SHEET: 47
RANKING:	DISTRICT	SITE NO: SSL-99

Lepidum olevaceum grows on Paepae o Aotea (Volkner Rocks). *Lepidum olevaceum* is classed as rare. Paepae o Aotea (Volkner Rocks) is complementary to Whakaari (White Island), currently containing several species not currently known from Whakaari. The islands could act as a reservoir of seed for Whakaari (White Island) during times when Whakaari (White Island) is relatively stable.

SITE NAME:	WHAKAARI (WHITE ISLAND) (White Island Private Scenic Reserve)	MAP SHEET: 48a
RANKING:	INTERNATIONAL	SITE NO: SSL-98

Whakaari (White Island) is of international scientific importance as a place where an active volcano and its effects on plant (and animal) populations can be studied.

SITE NAME:	MOTU PAPAKU ISLAND	MAP SHEET: 35a
RANKING:	DISTRICT	SITE NO: SSL-90

Two of the three best examples of islands in the district.

SITE NAME:	MOTU KAIMEANUI ISLAND	MAP SHEET: 35a
RANKING:	DISTRICT	SITE NO: SSL-91

Motu Kaimeanui Island is one of the three best examples of an island in the Motu Ecological District. It exhibits a complete zonation from oioi and searush to coastal scrub and forest.

SITE NAME:	PAPATEA	MAP SHEET: 35a, 36a
RANKING:	DISTRICT	SITE NO: SSL-92

Tarairé is not found elsewhere in Pukeamaru Ecological District. The forest remnant in which it occurs is in excellent condition. Papatea is one of the few localities on the mainland where *Carmichaelia williamsii* (classed as rare) grows. The lagoon has a plant assemblage comprising *Ruppia polycarpa* and *Potamogeton pectinatus*, both uncommon elsewhere in the district.

SITE NAME:	(PART) TUPUAEHARURU	MAP SHEET: 36a, 37a
RANKING:	NATIONAL	SITE NO: SSL-93

This site is part of a large (3,640 ha) representative tract of vegetation forming a continuous altitudinal sequence from coastal to lowland forest. It includes the best examples of spinifex grassland and pohutukawa-dominant forests in the district.

The manuka shrubland on coastal-facing hillslopes has a high number of species, including three notable ones. *Pimelea tomentosa* is classed as vulnerable. The other two, *Pimelea longifolia* and *Lindsaea linearis*, are uncommon in the Bay of Plenty-East Cape locality.

SITE NAME:	WHANGAPARAOA 1	MAP SHEET: 37a, 38a
RANKING:	DISTRICT	SITE NO: SSL-94, SSCMA-51

A high diversity of representative vegetation types in relatively good condition grow on the large dune system, in lakelets in dune hollows and at the Whangaparaoa River mouth. Distinctive vegetation patterns resulting from tidal influences, salinity and drainage gradients are clearly visible here. The most extensive areas in the district of *Schoenoplectus pungens-Isolepis cernua*-arrow grass herb-sedgeland below high tide level, and searush-oioi rushland at or above high tide level are found here. The marsh ribbonwood-oioi rush-shrubland above high tide level is the best example in the district.

SITE NAME:	WHANGAPARAOA 2	MAP SHEET: 37a
RANKING:	LOCAL	SITE NO: SSL-95

This small stand is the only example of this forest type in the coastal zone of the Pukeamaru Ecological District. It is contiguous with the Whangaparaoa Category One Priority Area.

SITE NAME:	PART TIKIRAU	MAP SHEET: 38a
RANKING:	DISTRICT	SITE NO: SSL-96

This site is a well-defined and distinctive natural area (comprising 500 ha), approximately one third being covered in coastal forests of pohutukawa-karaka-puriri, tawa-puriri and tawa-(puriri). It has the largest tawa-(puriri) forest remnant in the western half of the district. *Olearia albida*, a typically coastal species, is common in the forest here but infrequent elsewhere in the district.

SITE NAME:	POTIKURA	MAP SHEET: 39a
RANKING:	LOCAL	SITE NO: SSL-97

This small remnant is the only example tawa-kohekohe-pohutukawa-puriri forest in the coastal zone of the Pukeamaru Ecological District.

SITE NAME:	MAUNGAHIHA	MAP SHEET: 39a
RANKING:	LOCAL	SITE NO: SSL-98

This is the only example of tawa forest in the Coastal Bioclimatic Zone of the Pukeamaru Ecological District.

EIGHTH SCHEDULE

OUTLINE DEVELOPMENT PLAN

PORT OF TAURANGA

1994-2004

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S8.1 Introduction

This plan has been prepared by the Port of Tauranga Limited to be incorporated in the Environment Bay of Plenty Bay of Plenty Regional Coastal Environment Plan (BOPRCEP). The Port Outline Development Plan is intended to scope all currently anticipated future port developments.

S8.1.1 Future Developments Considered

This Port Outline Development Plan considers possible new developments during the 10 year term of the BOPRCEP.

S8.1.1.1 Medium Term Developments

Included in this plan are the following:

- Sulphur Point Wharf Extension North (approx. 170 m)
- Sulphur Point Wharf Extension(s) South (approx. 385 m) – Wharf on the Northern End of Sulphur Point (approx. 480 m)
- New Wharf South of Main Mount Maunganui Wharfs (approx. 810 m)
- Berth Deepening and Reconstruction
- Capital Dredging
- Maintenance Dredging
- Secondary and Minor Structures

All dimensions, areas and volumes are approximate.

Inclusion in the plan does not mean that all these works will be undertaken in the 10 year period. At present it is not possible to predict the priority of various wharf extensions and works as they will be undertaken in response to or in anticipation of the developing needs of port customers.

S8.1.1.2 Topics

The following topics are covered in the plan:

Wharf structures, including associated reclamations, capital works dredging, maintenance dredging, spoil disposal (including beach renourishment), berth deepening projects, minor structures, and disturbance and deposition (sand extraction).

S8.1.1.3 Standards and Terms

For each of the topics listed above, this schedule defines:

- (a) permissible locations; and
- (b) materials to be used; and
- (c) activities to be associated with the topic in question.

In addition to these, the Bay of Plenty Regional Coastal Environment Plan (BOPRCEP) itself contains provisions which:

- (a) require consideration of the likely adverse effects of each activity specified in this schedule; and
- (b) define or provide the criteria for determining the limits on the likely adverse effects of each activity specified in this schedule; and
- (c) determine the time during which the activities may be undertaken; and
- (d) in one instance (for dredging), specify the conditions to control any adverse effects.

Further to these requirements, the schedule describes and discusses the characteristics of the areas to be affected, the likely adverse effects of the activities on these areas, and possible means of avoiding, remedying or mitigating these likely adverse effects. It is important to note however, that each of the activities specified in this schedule requires a coastal permit, and that Environment Bay of Plenty is able to set any conditions on the consent in accordance with its determination of the application under the provisions of this plan.

S8.1.2 Reference Levels

S8.1.2.1 Levels and Channel Depths

The datum for all reduced levels (RL) used is chart datum, approximately Mean Low Water Spring Tides (MLWST), and all channel depths are therefore relative to MLWST.

S8.2 Wharf Structures and Associated Reclamations

The wharf development projects envisaged in this plan generally require both wharf structures and the associated reclamations to be designed and built integrally. Accordingly, the characteristics and effects of structures and reclamations are considered together.

S8.2.1 Intended Location and Dimensions of New Wharf Structures and Reclamations

In each of the possible berth construction areas, the structure involved will have a height of approximately 4.55 m reduced level (RL) and, depending on detailed design, would be up to 40 m wide. A typical cross-section of the recently constructed Sulphur Point wharf is shown on Drawing Number 270-28. Other structures may have different widths and dimensions. Refer clause S8.2.2.

S8.2.1.1 Sulphur Point Wharf Extensions North and South

Extensions to the existing Sulphur Point Wharf on the eastern side of Sulphur Point are shown on Drawing Number 270-27B, together with the associated reclamations. Shipping channels and sitting basins required for these berths are shown on Drawing Number 270-21B. The principal dimensions parallel to mean high water are:

- **Northern Berth**

Length of Structure	170 m
Length of Reclamation	170 m
Area of Reclamation	0.6 ha

- **Southern Berth**

Length of Structure	385 m
Length of Reclamation	600 m
Area of Reclamation	1.8 ha

In both cases the width of reclamation is approximately 30 m.

S8.2.1.2 Sulphur Point North End Berth

This berth could be up to 480 m long and is shown on Drawing Number 270-27B, together with its associated dredged channel. However, there would be little or no associated reclamation.

S8.2.1.3 Mount Maunganui Wharf Extension South

This length of wharf would complete the last remaining gap existing in the alignment of the breastworks at Mount Maunganui. It is shown on Drawing Number 270-21B. The length available for wharf structures is approximately 810 m and is parallel to mean high water spring tides. The associated reclamation is the same length, with an average width of approximately 38 m and a total reclaimed area of 3.2 ha. In this area it is possible that future berths could be separate isolated structures rather than extensions to the existing wharfs.

S8.2.2 Design, Construction and Materials of New Wharf Structures and Associated Reclamations

S8.2.2.1 Structure

The design would comply generally with the relevant New Zealand and international technical loadings and materials standards and codes of compliance of the day.

Wharf structures in the Port of Tauranga have generally been constructed in reinforced and prestressed concrete, with a suspended deck supported by concrete piles. The marginal embankment under the wharf is formed by dredging and is rock armoured. However, steel sheetpiling has been used in the past and the use of sheetpiling, steel piling or other forms of construction is possible given changes in technology and economics. The general arrangement as used most recently at Sulphur Point is shown on Drawing Number 270-28. There may be circumstances that will require a berth to be separate from the main quay. In this case the structure could be linked to the land by bridges, e.g. similar to the tanker berth, or the structure could have its own reclamation.

S8.2.2.2 Reclamations

Reclamations are generally constructed of sandy sediments of marine origin dredged from the harbour and, where surfaced, are paved in asphalt or concrete paving blocks. Walls would generally be constructed of rock and then rock armoured, but it is possible particular areas may require the use of sheetpile or concrete retaining walls.

S8.2.3 Activities the New Structures and Associated Reclamations would be used for

The wharf structures, together with their associated reclamations, would be used for berthing of ships, and storage and transfer of cargo.

Of recent years there has been a significant increase in passenger vessels visiting the Port. Future developments could therefore include a specialised passenger terminal with appropriate facilities.

S8.2.3.1 Sulphur Point Berths

The berths will be used for berthing of ships and the transfer of cargo, generally within the range and type of commodities currently handled through the Port of Tauranga. Further cranes, cargo handling equipment and storage structures can be expected to be installed as the wharf is extended.

The existence of the airport approach, transitional surfaces and horizontal surface is shown on the planning maps (Volume 2 of the Bay of Plenty Regional Coastal Environment Plan). No fixed or movable object will penetrate the approach surface or the transitional surfaces without approval of the Airport Management. However, as with the existing cranes, plant on the extended wharfs at Sulphur Point will penetrate the horizontal surface and will be painted and lit to comply with Civil Aviation Authority requirements.

S8.2.3.2 Mount Wharf Extensions or New Berths

Cargo handled can be expected to be similar to the range of goods currently being loaded and discharged. The installation of further specialised loading/unloading equipment is possible, as is the extension of the multi-purpose crane coverage southwards.

The airport restrictions are noted and will be treated in the same way as in the past, as outlined for Sulphur Point.

S8.2.4 Characteristics of the Areas

S8.2.4.1 Sulphur Point Wharf Extensions North and South

A general description of this area is as follows:

Physical – Sulphur Point is a reclaimed site developed on what was previously an inter-tidal sand flat. Dredgings from the adjacent Stella Passage Channel immediately to the east were used as fill for the reclamation. Dredging of the Stella Passage for shipping is complete up to a line across the channel between the south end of the tanker berth and the south end of the Sulphur Point wharf. The deepened channel has a mean low water spring tide (MLWST) depth of 12.9 m and the waterway has increased in cross-sectional area by approximately 400%. This has consequently caused a sharp drop in current speeds and an associated impact on sedimentation in the area. The reduced current speeds are about .15 - .25 m per second which is too slow to permit bedload sediment transport through the dredged channel. Moreover, the reduced current speeds and the deepened channel combine to act as a sediment trap for the very fine sands and silts, so that slow accumulation of fine sediments occurs.

References:

Bathometry – the current water depths are recorded on Port of Tauranga Hydrographic Drawing No. P28/17, January 1994 (not shown).

Current and tidal information is described in the *Tauranga Harbour DHI Model 21* dated 1983 and *Port of Tauranga Model Study (Deepened Shipping Channel Proposal)* Bell, DSIR, 1991.

Sediment transport, erosion and accretion is described in *Sedimentary Transport – Tauranga Harbour Study* Black, 1984.

Ecological – Prior to wharf construction commencing at Sulphur Point in 1990 *“the eastern shore of Sulphur Point was a sandy, gently sloping beach ... and was a habitat used by invertebrates, fish, birds and people. Cockles are particularly large and abundant at the northern end. Both cockles and pipis were gathered for food. Another potential kaimoana, macamona liliana, were plentiful but too small (less than 40 mm) to be used for food. Sand was pitted with schnapper holes, indicating schnapper feeding grounds. There were abundant small flounder, mainly less than 10 cm long. Small numbers of birds were seen feeding on the exposed flats in shallow water at low tide. There were red-billed gulls, black-backed gulls, white-fronted terns, little black shag and variable oystercatchers.”*

A quantitative survey of invertebrate species disclosed that there were eight species of annelids, six bivalve molluscs, two univalve molluscs, five echinoderms and two crustaceans.

The identified marine ecology is not considered rare or endangered.

When undeveloped and ungrassed, the area at the tip of Sulphur Point had become the only wading bird roost in the southern end of Tauranga Harbour and was used by bartailed godwits, wrybill plovers, NZ dotterels and banded dotterels. The numbers of each species using Sulphur Point and the pairs breeding etc, was surveyed.

Reference:

Ecology – Marine habitat survey on the eastern side of the Sulphur Point reclamation was undertaken by the Royal Forest and Bird Society, A & B Graeme, and reported in *Tauranga Wharves Extension No 1, 1990, Environmental Impact Assessment*.

(a) Specific Description for Sulphur Point Wharf Extension North

Physical – At the very north of the eastern side where there is presently no wharf structures, the margin of the reclamation is protected with rock armour and immediately adjacent a sand batter drops underwater to a depth of 12.9 m, the dredged depth of the adjacent Town Reach/Stella Passage Channel. There is no beach.

Ecological – The dredging was completed in 1992 and the marine life in the seabed is expected to be sparse but recolonising. The ecology of the dredged area in the adjacent Stella Passage was described as the “Deep Harbour” community by R Grace.

Reference:

Environmental Assessment Programme for Tauranga Harbour Dredging and Inner Shelf Spoil Dumping Healy/McCabe/Grace/Harms, 1988.

(b) Specific Description for Sulphur Point Wharf Extension South

Physical – The southern end on the eastern side of the Sulphur Point reclamation still consists of a small modified beach as described above, except where sand extraction has taken place over a 100 m area just south of the current wharf. The unmodified channel seabed is a shell and black pebble lagged, black silt and sand substrate. Site exploration for sand extraction has shown mainly sandy material to depths of 7-8 m reduced level (RL), below which are estuarine silts and possibly weathered distal ignimbrites.

Reference:

Site Investigation, Works Consultancy Report 1670 and Addendums dated October 1991.

EIA Tauranga Wharf Extension, September 1990.

Ecological – Generally the description above still applies, except the bird population has been much reduced due to the area of Sulphur Point being either asphalted or grassed over, with the exception of the small sand mining area.

S8.2.4.2**Sulphur Point North End Berth**

Physical – The northern margin of the Sulphur Point reclamation is retained by a rock wall on a narrow beach which slopes down into the adjacent 6 m deep and 200 m wide lower Otumoetai Channel. Towards the west, there is a concrete ramp and passenger jetty servicing the Matakana Island ferry and which accesses the Port of Tauranga land. This facility operates with the agreement of the Port Company but may eventually have to be resited. Further west is the Tauranga Yacht & Power Boat Club and the Tauranga Marina.

Site investigations by way of boreholes and inspections have shown the Otumoetai Channel seabed to be predominantly coarse sand and shell. The marine sand extends to 13-14 m RL below which are estuarine silts.

Ecological – A biological evaluation of the site of the wharf and its associated shipping channel is as follows:

“This is a typical and healthy biological community found in a fast-flowing harbour channel. It supports a diversity of species with a few abundant species. These abundant species are scavengers and filter feeders depending largely on the supply of food swept along the channel from the harbour or the Waikareao Estuary. The scavengers are hermit crabs, cushion stars, sea cucumbers and carnivorous spotted whelks and bristle worms. Horse mussels are the most obvious filter feeders. These resident species are an intrinsic part of the wider harbour community.

The channel habitat provides a passage for fish movement and feeding opportunities for fish and birds. Fish feeding holes were observed during diving and a Gannet and a Caspian Tern were seen diving on pelagic fish. A number of Big Pied and Little Black Shags regularly perched on the dredge pipes.

Reclamations, dredging and various bridge and causeway structures have altered the profile and natural pattern of the harbour channels, however the total quantity of channel habitat is probably the same.

This particular area has been modified by successive reclamations at Sulphur Point.”

Reference:

Environmental Report on Proposed Dredging of northern Sulphur Point Shipping Berth, A & B Graeme, 1991.

S8.2.4.3 Mount Maunganui Wharf Extension South

Physical – The existing reclamation is contained by a rock wall and is bordered by a small beach. An inter-tidal shelf approximately 10 m wide drops steeply into the adjacent dredged Maunganui Roads channel to a depth of 12.9 m. The material on the beach and inter-tidal shelf is predominantly sand with some rocks and the dredged channel seabed is predominantly sand with some outcrops of silt.

Ecological – The area may be all regarded as modified, either from adjacent reclamation work in port activities or from the dredging of the channel. Surveys in the dredged Stella Passage were made by Grace (1988), while a survey of the Maunganui Roads was made by A & B Graeme (1991). The shallow and shelving area is characterised by a community of cushion stars, smaller bivalves and worms, whilst the dredged channel is characterised by a zone of predominantly horse mussel – starfish – sea cucumber communities.

S8.2.5 Likely Adverse Effects

S8.2.5.1 Sulphur Point Wharf Extensions North and South

The long term impact due to these wharf extensions will be very much the same as those due to the existing wharfs at Sulphur Point and Mount Maunganui and will represent a minor incremental increase in these effects.

(a) Sulphur Point Wharf Extension North

Physical – The small additional length of wharf, 170 m, and the small cross-sectional area of the wharf piles will have an insignificant hydrodynamic effect on current flows or sedimentation processes within the Stella Passage.

Ecological – Any recolonisation in either the mid-depth or deep water zones will be overlaid by new rock armour and, accordingly, will be lost.

(b) **Sulphur Point Wharf Extension South**

Physical – Approximately 1.8 ha of beach and inter-tidal zone will be covered by reclamation and approximately 1.2 ha by a rock armoured marginal embankment, whilst up to 15.6 ha in the Stella Passage adjacent to the wharf will be dredged and deepened to 12.9 m. The area of deepened channel will result in a reduced current velocity over this length, with associated increased sedimentation of fine sands and silts and enhanced trend towards ebb dominated currents. The dredged channel may require occasional maintenance dredging to maintain its depth on the up-harbour western edge of the dredged basin. These quantities are expected to be of the order of 1,000 – 10,000 m³ per year.

Reference:

Tauranga Harbour Study Part 4 – Sediment Transport Black, 1984.

Ecological – The area of shallow and shelving community, amounting to approximately 1.5 ha, will be lost. The narrow beach habitat and shallow sub-littoral margin will be lost to the birds that now use it, but this was a small area and had low use. The remaining ungrassed and unasphalted area of Sulphur Point will be lost to the birds that use it. The dredged area will recolonise as a deep harbour community.

S8.2.5.2

Sulphur Point North End Berth

Physical – The present rock wall and narrow beach will again be covered with a large rock armoured marginal embankment underneath the wharf structure.

A dredged sitting basin and shipping channel of up to 13.9 ha will be dredged alongside. It is expected this will marginally increase the current ebb dominance with peak tidal flows increasing by 0.05 – 0.1 m per second in the Otumoetai Channel. Sedimentation in the dredged basin will likely occur in the western sector, possibly amounting to up to an estimated 10,000 m³ per year, and there will be a tendency for an ebb spit to form at the north eastern extremity of Sulphur Point. Consequently, occasional maintenance dredging will be required to maintain these depths.

Ecological – Dredging this section of the channel will alter the profile and depth of the area. The hydrodynamics will be similar to the Maunganui Roads. Survey of the No 2 berth demonstrated a deep harbour community of horse mussel – starfish – sea cucumber, and it is expected that a similar community would establish in the lower Otumoetai Channel after dredging.

The shallow and shelving community will be lost. This is the zone richer in cushion stars, smaller bivalves and worms. This zone provides a greater food resource for fish. However, fish will still migrate and feed in the dredged channel.

The narrow beach habitat and shallow sub-littoral margin will be lost to the birds that use it. This is a small area and had low use. Its loss will not significantly degrade the biological value of the harbour.

S8.2.5.3

Mount Maunganui Wharf Extension South

Physical – The present rock wall, beach and inter-tidal zone will be covered by reclamation, whilst the present batter will be rock armoured marginal embankment covered with a wharf structure.

Ecological – The existing shallow and shelving communities will be lost, as will the narrow beach habitat, and will be replaced by a rocky habitat. However, there will be no substantial additional deepwater dredging other than the 50 m sitting basin alongside and, hence, no further effects on the seabed.

S8.2.6 Avoidance, Remedying and/or Mitigation

Extensive investigation and later modelling and monitoring of hydrodynamic and morphodynamic processes and changes commenced some 20 years ago and is an ongoing activity by the Port. Parts of this are referred to below and further on in the sections on dredging.

S8.2.6.1 Sulphur Point Wharf Extensions North and South

Physical – Hydrographic surveys undertaken of the Maunganui Roads Stella Passage/Town Reach Channel as increments of previous capital dredging were accomplished, have confirmed the current changes and siltation predictions of the two model studies in the area up to and under the harbour bridge. Monitoring in this way will be ongoing. To date, no significant adverse effects relating to the port dredging adjacent to Sulphur Point have been identified.

Ecological – In the event that open-piled wharf structures with under wharf rock marginal embankments are built, then based on work by A & B Graeme 1991:

“The habitat and biological community at No 2 berth (Mount Maunganui) is most likely to reflect the habitat and community that will become established at Sulphur Point after the dredging and wharf construction.

A new stable habitat will form on wharf piles and beneath the wharf. This is an uncommon and rich habitat in the harbour.

Species recorded at No 2 berth

(a) **Berth Area**

Species counted from two surface and two subsurface samples

<i>Cominella adspersa</i>	6
<i>Tawera spissa</i>	2
<i>Axiothella quadrimaculata</i>	3
<i>Pectinaria australis</i>	1
<i>Pagurus novaezelandiae</i>	14
<i>Asterina regularis</i>	3

(b) **Channel (100 metres offshore)**

Species counted from one surface and sub-surface sample

<i>Atrina zelandica</i>	1
<i>Pagurus novaezelandiae</i>	2
<i>Orange sponge attached to debris</i>	1
<i>Stichopus mollis</i>	1

The sub-surface sample consisted of coarse shell and sand and was devoid of live specimens.

(c) Wharf piles

The piles provide anchorage for a great variety of sessile organisms and associated species. These were:

*barnacles
many sponge species
sea anemones
tube-worms
Bryozoans
red seaweeds
crabs
Nudibranchs*

(d) Rocks, masonry and debris under the wharf

These structures provide a reef habitat for sessile and encrusting organisms and many fish. The following fish were recorded:

*Crayfish – plentiful
Red Moki
Parore
Goat fish
Mullet
Spotties
Herring shoals*

Beneath the wharf is a rich habitat which provides shelter and food for resident and passing fish.”

The loss of the bird roost area was addressed in 1990 with an agreement between the Port Company, the Department of Conservation and the Western Bay of Plenty District Council to establish a substitute bird roost at Panepane Point, Matakana Island. To this end, an area of some 4 ha was established and cleared, with provision for another 3 ha should it be required. Whilst the new roost is well populated with birds, it has been observed that the mix of species has not paralleled those previously existing at Sulphur Point.

Other effects, such as access, noise, recreation, visual etc, were addressed in 1980 with the various settlements between the Bay of Plenty Harbour Board and the then Tauranga City Council. These discussions resulted in the establishment of a large marina, boat launching and parking areas, buffer zone and landscaping, as well as creation of an 8 ha reserve.

S8.2.6.2 Sulphur Point Northern End Berth

Physical – Major changes are not expected in the Otumoetai Channel, but long term geomorphic and bathometric survey monitoring will detect the extent of change.

Ecological – Apart from the issue of birds mentioned above, the new stable habitat will form on wharf piles beneath the wharf, which is an uncommon and rich habitat in the harbour and will mitigate against the loss of the sublittoral and shelving communities lost. Refer S8.2.6.1 above.

S8.2.6.3 Mount Maunganui Wharf Extension South

Physical – The adverse effects are not significant.

Ecological – The habitat formed by the wharf piles will mitigate the loss of the small recolonising shelving community. Refer S8.2.6.1 above.

S8.3 Capital Works Dredging

Capital Works dredging will be associated with berth construction or berth reconstruction and berth deepening. The work will involve turning and sifting basins or widening and deepening the main shipping channels.

S8.3.1 Location and Quantities

The various possible sites for future improvements, together with their approximate dimensions, areas and quantities, are shown on Drawing Number 270-30.

DESCRIPTION	DIMENSIONS	DEPTHS PRESENT/FINAL	AREA ha	VOLUME
Sulphur Point Slipway North	Refer Drawing No. 270-30		11.4 ha	200,000 m ³
Sulphur Point Wharf Extension South	380 m long 180-500 m wide	~ 5/12.9	15.6 ha	1,925,000 m ³
Lower Otumoetai Channel, Sulphur Point Northern Berth	500 m long (ave) 220 m wide	~ 6/12.9	14.9 ha	600,000 m ³
Cutter Channel SW Widening	1,200 m long max 100 m wide	~ 8/12.9	8 ha	925,000 m ³
Cutter Channel NE Widening	1,000 m long 70 m (max) wide	~ 8/12.9	4.9 ha	330,000 m ³
Mt Maunganui Wharfs Sitting Basin Deepening	Various lengths and depths. Refer Drawing No. 270-25			
Maunganui Roads Widening	40 m wide 1,400 m long	6/12.9	5.6 ha	425,000 m ³
Cutter Channel/Maunganui Road Deepening	Deepening existing channels	12.9/14.1	-	280,000 m ³
Entrance Passing Lane	5300 m long 85-260 m wide	10.4/12	46.5	900,000 m ³
TOTAL			106.9 ha	5,585,000 m ³

S8.3.2 Characteristics of Material

The site investigation work associated with any capital works dredging would be undertaken to obtain the following information:

Physical – Borehole and material identification, grading information. Previous exploration has generally shown clean sand, shell and sometimes silt and rocks. The exception is the Stella Passage where silt from Pleistocene estuarine mud deposits, and pumice rich distal ignimbrites may be encountered below 8 m reduced level (RL). The weathered volcanic glass from the ignimbrites forms clay-sized particles which when disturbed sufficiently can create milky and turbid water. Rocks have been encountered in the Cutter Channel increasing in density towards Tanea Shelf.

Reference:

EIA Channel Deepening and Widening 1991-92.

Chemical – For future chemical works dredging, chemical analyses would be undertaken to ensure toxic chemicals are not present. To date, sediments dredged from Tauranga Harbour have possessed no adverse chemical characteristics.

Reference:

Physical and Chemical Characteristics of Material to be Dredged and Dumped as Spoil – Healy and McCabe, 1990.

Biological – Where borehole material appears to have an organic content, the organic content, nutrient content and microbiological testing will be undertaken. Generally, to date, material dredged or investigated has had insignificant content.

S8.3.3 Characteristics of the Areas

Over the past 20 years, the Port of Tauranga has been using the University of Waikato, the Danish Hydraulic Institute, Water Quality Centre (NIWA) and others to undertake extensive investigations on the physical and, to a lesser extent, the ecological aspects of the Tauranga Harbour and Entrance.

These include the following:

Tauranga Harbour Study Part 3 – Hydrodynamics Barnett, 1985

Part 4 – Sediment Transport Black, 1984

Part 5 – Morphological Study Healy, 1985

Port of Tauranga Model Study (Deepened Shipping Channel Proposal) Report No. 612/1, Bell, 1991

The Geomorphic Development, Bathymetric Stability, and Sediment Dynamics of Tauranga Harbour Dahm, 1983

Wave Climate and Sediment Transport within Tauranga Harbour in the vicinity of Pilot Bay de Lange, 1988

A general description of the areas is as follows:

Physical – Generally the capital works dredging involves either deepening existing channels (e.g. the south end of Sulphur Point and the lower Otumoetai Channel, both currently used only by small vessels and recreational traffic) or the widening of existing shipping channels (e.g. the Cutter Channel, Maunganui Roads and the Entrance Channel passing lane).

Hydrodynamically, the harbour channels have high ebb dominant current velocities varying from 0.15 – 0.25 m per second in the Stella Passage to 0.45 – 0.7 m per second in the Maunganui Roads and Cutter Channel. For any specific project, more comprehensive comments and information on the existing hydrodynamic and morphodynamic regimes would be provided.

Biological – Where dredging in any specific project would take place in an unmodified area, a benthic survey would be undertaken to provide information on the areas likely to be affected.

The Port Company has a long term commitment to ongoing investigations in the harbour and these investigations will continually add to the ecological and biological database.

S8.3.4 Likely Adverse Effects

Physical – Hydrodynamic changes and their magnitude and relevance will be predicted from either existing studies or remodelling. The effects of these hydrodynamic changes on the erosion and accretion at the identified sensitive locations will be predicted and checked by existing and ongoing monitoring programmes.

Modelling and monitoring of the harbour to date indicates certain areas of geomorphic change, but few of these changes would be considered as an “adverse effect”. It is well known that large harbours with strong sediment transport regimes are subject to large scale natural changes to their bathymetry.

The areas sensitive to change identified in the 1991 EIA include the lower Western Channel, Pilot Bay and part of Centre Bank. Geomorphically, the Centre Bank is the flood tidal delta, and such features eventually become inter-tidal as the harbour gradually infills.

New or extended shipping channels will be subject to future ongoing maintenance dredging.

Biological – Dredging of unmodified areas will result in the destruction of habitats for benthic life in those areas, but new habitats and communities will evolve. There will be a temporary increase in turbidity levels and suspended solids in the area adjacent to the dredging operation, but no long-term deleterious effects are expected or have been identified to date. For example, Grace (1993) surveyed the wharf pile and rock wall ecology along the Mount Maunganui wharfs and reported a rich flora and fauna which showed no impact that could be related to the dredging programmes.

S8.3.5 Avoidance, Remedying and/or Mitigation

As a result of the recent port channel deepening and widening works, there is an extensive monitoring programme presently underway by the University of Waikato. In particular, emphasis is on investigating:

- the changes in the harbour bathymetry as far west as Hunters Creek, including Centre Banks
- harbour current changes, possibly related to the dredging
- shoreline changes.

As a consequence, the following are possible ways to accomplish the avoidance or mitigation of effects in the case of capital works dredging:

Physical – The extensive knowledge and data base accumulated from long-term studies, and numerical harbour hydrodynamic and sediment transport modelling, provide information at the design stage so that potential adverse effects may be identified and kept to a minimum. The use of monitoring is expected to confirm and detect changes which may or may not constitute “adverse effects” at an early stage.

As noted above, although changes may occur in the harbour bathymetry, these changes have not, to date, been definitively identified as “adverse effects” arising from dredging or port development. Historical records show that very large natural changes occurred before any man made interference in the natural state of the harbour.

A possible change that may be considered to be adverse but may actually be naturally occurring would be shoaling of areas other than maintained shipping channels. Removal of these shoal areas and the use of the sand commercially could be effective mitigation.

A second possible adverse effect would be sand loss and erosion from local harbour beaches. Although erosion occurs periodically on Pilot Bay beach, and it is reported at Sulphur Point Beach near the Tauranga Yacht & Power Boat Club, on the west side of Sulphur Point and in front of the Whareoa Marae, none of these localised erosion cases, all of which involve very small volumes of sand, are attributed primarily to the capital works dredging of the harbour.

Mitigation of the beach erosion cases can be relatively easily achieved by beach renourishment – which will need to be an ongoing programme of beach replenishment. The volumes involved are small in each case.

Biological – Similar mitigation, where opportunities arise, to replace or create habitats such as the 1.2 hectare area of boulder reef between Stoney Point and Pilot Bay in 1992.

The monitoring of turbidity and suspended solid patterns to arrive at dredging procedures which will avoid lasting damage to marine life.

S8.4 Maintenance Dredging

S8.4.1 Location of Dredging

Maintenance dredging is a requirement of all the port's dredged shipping channels and berth sitting basins. The area maintained is shown on Drawing Number 324-56 and amounts to an area of approximately 260 hectares within the 8.5 km of shipping channel.

S8.4.2 Frequency of Maintenance

Maintenance dredging campaigns in the shipping channels will occur every 1-2 years and usually last 4-8 weeks. Within the sitting basins alongside grab dredging takes place in between ship arrivals intermittently throughout most of the year. Not all areas are dredged each campaign, with the exception of the Entrance Channel and the Cutter Channel which require regular maintenance.

S8.4.3 Maintenance Dredging Quantities

Based on past accretion rates, the following ranges are likely:

Entrance Channel 50,000 – 100,000 m³ per annum
Harbour 30,000 – 100,000 m³ per annum
Sitting Basins 5,000 – 10,000 m³ per annum

The actual quantities in any particular year will vary, depending on average weather, frequency of storms and the availability of dredging plant.

S8.4.4 Characteristics of the Areas

The areas to be maintained are the areas that have already been subject to capital dredging and, accordingly, may be regarded as modified areas. The following apply:

Physical – Materials to be dredged within the channels will be recent sedimentation, invariably loose sand either originating from bedload sediment transport, movement off the banks of the channels or bed forms penetrating the depth limits (e.g. sand waves, megaripples etc).

Siltation in the ship sitting basins may include finer sediment sizes and debris (rubbish, dead sea lettuce, wood etc), and may be contaminated from spillages of fertiliser bases.

More detailed descriptions of typical siltation are available from the *EIA Port Channel Deepening and Widening 1991-92*, and report *Physical and Chemical Characteristics of Material to be Dredged and Dumped as Spoil* – Healy/McCabe, 1990.

The channels are used extensively by all harbour users, both commercial navigation and recreational traffic.

Biological – Benthic sea life is generally sparse (refer Clause S8.3.4), although extensive recolonisation of shellfish within the Cutter Channel has occurred between dredging campaigns.

S8.4.5 Likely Adverse Effects

Physical – There are few adverse effects over and above those associated with the original capital works dredging of the channels. The operation is a relatively small scale one with only minor disruption to traffic in the channels.

Turbidity suspension and water discolouration is extremely minor for maintenance dredging and does not create a problem after allowing for reasonable mixing.

Biological – Turbidity and suspended solids adjacent to the dredge are not identified as a problem to the harbour ecology. Benthic organisms within the channel are, of course, largely destroyed by the dredging.

S8.4.6 Avoidance, Remedying and Mitigation

Physical – The renourishment of beaches such as Pilot Bay and the Mount Maunganui ocean beach with the dredged materials has occurred in the past and will likely be necessary in the future. This would mitigate other adverse effects.

Provision of a well maintained and marked channel for all harbour traffic.

Biological – Monitoring of turbidity in suspended solids to generally keep affected areas to shipping channels and to avoid damage in unmodified areas.

S8.5 Spoil Disposal

Dredged material will be disposed of by way of extraction for commercial use, beach renourishment or dumping, depending on the demand for extracted material and the quantities and the suitability of the material to be dredged.

S8.5.1 Disposal Locations

The following sites are shown on Drawing Number 324-75A and are described:

S8.5.1.1 Ocean Dump Ground

This is the existing site in which the bulk of dredged material has been disposed of since dredging started at the Port of Tauranga. It is suitable for clean sand of up to 5% silt content and, subject to full investigation, silt material in an undisturbed form suitably placed and capped.

S8.5.1.2 Ocean Dump Ground – Silt

This dump ground specifically for disturbed silt is at site as yet not located or defined but further offshore, approximately at the 50 m depth contour.

S8.5.1.3 Nearshore Beach Renourishment

To be located in shallow water between Mount Maunganui and Moturiki Island, and another on the south-eastern side of Motuotau Island.

S8.5.1.4 Pilot Bay

A temporary storage site prior to pumping ashore for the beach renourishment of Pilot Bay.

S8.5.1.5 Extraction Site, Sulphur Point

Temporary storage site prior to pumping ashore for the use by Sulphur Point Sand Supplies Limited and their sand retailing business.

S8.5.1.6 Land Site

Material from the sitting basins is brought ashore for disposal in an approved privately-owned and operated site.

S8.5.2 Timing of the Activity

Generally, disposal, either by way of dumping or extraction, will take place during either capital works dredging projects or maintenance dredging campaigns, subject to the provisions of the Bay of Plenty Regional Coastal Environment Plan (BOPRCEP) relating to timing of such activities. These operations may be 24 hour, seven days per week activities.

S8.5.3 Quantities Due to Maintenance Dredging

The quantities disposed of in each of the dump or disposal sites on an average annual basis.

Ocean Dump – 60,000 – 160,000 m³/per annum
Sulphur Point Sand Extraction Site – 40,000 m³/per annum
Pilot Bay Renourishment – 10,000 m³ every ten years
Mount Maunganui Ocean Beach – 0-100,000 m³/per annum

However, maintenance dredging will occur only when necessary, probably generally every 1-2 years.

S8.5.4 Characteristics of the Areas

In parallel with the studies undertaken inside the Tauranga Harbour (clause S8.3.3), similar research encompassing the Matakana Banks, the previous and present dump grounds, and the Mount Maunganui Ocean Beach have taken place over the past 20 years.

References:

- *Matakana Bank Ebb Tidal Delta Tauranga Harbour* Dahm, 1989
- *Dredge Spoil Dispersion from Inner Shelf Dump Mound* Harms, 1989
- *Progradation in the Vicinity of Tauranga Harbour* Healy, 1976
- Review of the Report *Matakana Bank Ebb Tidal Delta Tauranga Harbour – Preliminary Assessment of Sand Resources* Healy, 1991
- *Dredge Spoil and Inner Shelf Investigations off Tauranga Harbour* Healy/Harms/de Lange, 1991

Dealing with each of the areas described in S8.5.1 in turn:

S8.5.4.1 Ocean Dump Ground

This is the principal dump ground for the Port of Tauranga and, to date, this site (or immediately adjacent to it) has been used since 1958 to dump some 18,000,000 m³ of dredged spoil, including the 5,000,000 m³ dredged in 1992. This area has been extensively studied and subject to a number of Masterate and PhD theses under the supervision of Professor Terry Healy of the University of Waikato.

The history and characteristics of this area have been summarised in the EIA *Port Channel Deepening and Widening 1991-92* – Healy/McCabe/Thompson.

Monitoring is currently being undertaken on the recent dumping of material and reports on both the biological and physical effects is due in 1995. Briefly, the area may be described as:

Physical – The site is 1750 x 1500 m and 262 hectares in area. It is 4 km offshore and is in a depth of 20-30 m. The topography is gently undulating. The sediments are predominantly sand with pockets of up to 5% silt content.

Chemical – No chemical abnormalities exist in this marine environment.

Biological – Monitoring has shown biological communities are consistent with that associated with the gradation of medium depth down to deep water benthic communities. Generally, abundance is relatively sparse due to previous dumping but is recolonising – “*Interim Reports*” – Blom and Cole, 1992/93/94.

S8.5.4.2 Ocean Dump Site for Dredged Silt

Physical – This area will be chosen in an area where the seabed is predominantly muddy with sediment textures matching the disturbed silt dredgings. It is expected to be in approximately 50 m of water, probably approximately 17 km from the Entrance, and would be approximately 2-3 km square.

Biological – This area will be chosen to be well clear of areas of known reef habitats (e.g. Penguin Shoal, Pudney Rock, 5-Mile Reef, Karewa Island, etc) and would avoid areas with important benthic communities.

Chemical – There should be no chemical abnormalities.

S8.5.4.3 Ocean Beach Renourishment

Physical – In water depths of 5-8 m over a seabed of predominantly sand and shell.

Chemical – No chemical abnormalities.

Biological – Marine life is generally of low diversity with sparse sea life.

Reference:

Beach Nourishment from a Nearshore Dredge Spoil Dump at Mount Maunganui Beach – Foster, 1991.

S8.5.4.4 Pilot Bay Temporary Storage Site

Physical – This site is in approximately 7 m of water in an area of 300 m², approximately 200 m from the shore (Diagram 342-75A). The seabed is sandy.

Reference:

Wave Climate and Sediment Transport within the Tauranga Harbour and Vicinity of Pilot Bay – de Lange, 1988.

S8.5.4.5 Extraction – Dump Ground, Sulphur Point

Physical – Area 1 hectare, some 60 m offshore in depths of 7 m. The seabed is predominantly sand and silt.

Ecological – The same as is generally described in S8.2.4.1.

S8.5.5 Likely Adverse Effects**S8.5.5.1 Ocean Dump Ground**

Physical – Studies have shown that the superficial sands, particularly the coarser sizes, move gradually towards the beach. Turbidity and suspended solid levels rise temporarily over the dump ground but without long term-changes.

Chemical – There are no adverse chemical effects.

Ecological – The benthic community is effectively smothered but monitoring has shown that there are no adverse effects outside the dump area and recolonisation begins immediately.

S8.5.5.2 Ocean Dump Ground for Disturbed Silt

Physical – It is expected that turbidity levels remain high temporarily, and records show gradual dispersion of the dumped sandy material over time (Harms, 1989).

Ecological – The benthic community would be smothered, but reports by Blom/Cole show recolonisation between dumping episodes.

Chemical – There are no adverse chemical effects.

S8.5.5.3 Ocean Beach Renourishment

Physical – This surficial sand, dumped in depths of 6-8 m, will move onshore immediately and be complete within 6 months (Foster 1991). This is a positive, not adverse, effect as it maintains the beach resource.

Ecological – Dumping of nourishment material appears to have little effect on these areas which are ecologically sparse and recolonisation by mobile benthic organisms is fairly rapid.

Chemical – No chemical changes.

S8.5.6 Avoidance, Remediating and/or Mitigation

S8.5.6.1 Ocean Dump Ground

Physical – Dumping is maintained within the designated area. This material is believed to slowly migrate ashore to assist replenishment and maintenance of Mount Maunganui beach.

Ecological – Dumping of nourishment material appears to have little effect on these areas which are ecologically sparse and recolonisation by mobile benthic organisms is fairly rapid. Biological monitoring by way of replicate sampling is presently underway in and around the dump ground and on control sites to detect any changes through dumping.

Potential effects on adjacent rocky habitats are avoided by dumping at a sufficient distance. Monitoring has shown no adverse effects.

S8.5.6.2 Ocean Dump Ground – Silt

Physical – The silty material expected to be dredged in the upper Stella Passage will be dumped as “like-on-like” sediment to expedite recolonisation of the middle shelf communities.

The silty material at 50 m depth is not expected to migrate en masse, but it would be inappropriate to dump in the existing designated shallower dump site.

Ecological – Dumping “like-on-like” sediment facilitates early recolonisation of the mid-shelf communities.

S8.5.6.3 Nearshore Beach Renourishment

Physical – Beach renourishment will compensate the effects of short and medium term erosion cycles and the longer term anthropogenic sea level rises expected in the future. These and any other effects are being monitored in parallel to the monitoring within the Tauranga Harbour.

Ecological – Dumping of nourishment material appears to have little effect on these areas which are ecologically sparse and recolonisation by mobile benthic organisms is fairly rapid.

S8.5.6.4 Pilot Bay Temporary Storage Site

Physical – This site has been utilised previously for renourishment of Pilot Bay beach. The recreational amenity value of Pilot Bay beach is recreated and maintained.

Ecological – No lasting effect.

Chemical – No lasting effect.

S8.5.6.5 Extraction Dump Ground, Sulphur Point

Physical – The dumping activity is on a heavily modified area where no further impacts are possible. The availability of extracted sand for commercial sand supply reduces the need for sand extraction from more sensitive mining operations e.g. beach sand.

S8.6 Berth Deepening and Berth Reconstruction

As a means of extending the useful life of existing wharf structures, the sitting basin of older berths may be deepened to accommodate the increase draughts of modern ships. These projects normally require the existing wharf structure and its rock marginal embankment to be supported by some means, usually underwater sheetpiling. The existing sitting basin may then be dredged.

In future it may be necessary to reconstruct/modify existing wharfs to accommodate higher loadings from modern machines, noting that parts of the Mount Maunganui wharf are now over 48 years old. This reconstruction/modification will ensure new construction in new areas is kept to a minimum.

S8.6.1 Location and Dimensions

The various possible sites available for future improvements, together with their approximate dimensions, are shown on Drawing Number 270-25A and encompasses all wharfs on the Mount Maunganui side of the Port.

The sitting basins at Mount Maunganui are 50 metres wide from the face of the wharf tendering. Although a total length of over 2,300 m is shown, individual projects in the past have taken place in sections of 100-240 m in length, in response to the needs of port customers.

S8.6.2 Structural Design

The design modifications will meet the requirements of the Building Act 1991 and Building Regulations 1992 as they may apply to structural alterations to a marine structure, and the appropriate Building Consents will be obtained. The typical structural work used to date is illustrated in the inset to Drawing Number 270-25A and is all underwater with no visible changes above the surface.

However, future technology and requirements may mean more extensive rebuilding of existing structures. In this case design reconstruction would be in accordance with parameters stated in clause S8.2.2.1. and would resemble the newer Sulphur Point Wharf structure shown on drawing No 270-28, map 3.

S8.6.3 Amount of Material to be Dredged

The dredge volumes will depend on the location and, consequently, the existing depths alongside. Typically, to deepen a 240 m section from an existing 10.4 m reduced level (RL) to 12.5 m RL would entail approximately 76,000 m³ but in a worst case, a similar length deepened from 9.5 to 15.0 would entail approximately 200,000 m³.

S8.6.4 Characteristics of Material

These are as follows:

Physical – The top layer is recently deposited material, generally clean sand but immediately against the wharf face may include some spilt debris and contaminants. Material deeper than the surficial sediments at the Mount Wharf have been found to be clean sand.

Chemical – Previous work has shown that these sediments have generally had low chemical concentrations, except where possible contamination has occurred. Where possible contamination is suspected, chemical analysis will be undertaken or, alternatively, the material will be treated as though contaminated.

S8.6.5 Characteristics of the Areas

The ship sitting basins are areas that have already been subject to capital works dredging and, accordingly, are modified areas and the following apply:

Physical – The areas are remote from unmodified areas, the Centre Bank being some 250 m distant.

Chemical – Refer above.

Biological – As a modified, previously dredged area, benthic life is sparse. However, adjacent to the sitting basin under the wharf, the wharf piles and (to a lesser extent) the rock wall provide a habitat to a variety of marine life. This area will not be affected by dredging unless reconstruction of the wharf also takes place. If this happens, it has been shown that recolonisation on new structures takes place rapidly.

S8.6.6 Likely Adverse Effects

The following adverse effects are possible:

Physical – There are no adverse effects as any changes to the hydrodynamic and morphodynamic regimes would be negligible.

Chemical and Biological – The principal effects will be that of turbidity and suspended solids which would be present to a moderate extent through either trailer-suction or cutter-suction dredging methods, but will be much reduced for alongside grab dredging.

S8.6.7 Avoidance, Remedying and/or Mitigation

The following measures would be applicable:

Physical – Monitoring would be undertaken of turbidity levels to ensure that the rise in suspended solids would be kept below acceptable limits within the boundary of the shipping channel.

Chemical and Biological – Where contamination had occurred, material would be brought ashore by grab and disposed of at a landbased site.

S8.7 Secondary and Minor Structures

This section covers all structures not provided for in Sections S8.2 and S8.6 of this schedule.

S8.7.1 Intended Location of the New Structures

The principal area is generally shown on Drawing Number 270-33 and is the water frontage between the Sulphur Point wharf area and the Tauranga Harbour Bridge.

In the case of navigation aids, their areas are the margins and the centre of the shipping channels or areas already used for such structures.

S8.7.2 Activities the New Structures would be used for

S8.7.2.1 Sulphur Point

The activity presently carried out in this area is the servicing of commercial and recreational small craft with a draught of less than 5.5 m. The industries are generally the fishing industry and marine servicing and maintenance. The new structures will generally be jetties and wharfs, slipways or lifts, and mooring and beacon piles.

It is possible that coastal vessels or barges could be handled and serviced in this area requiring suitable structures and a greater depth of water.

S8.7.2.2 Navigation Aids

These structures are all intended to aid ship safety.

S8.7.3 Dimensions, Design, Construction and Materials of the New Structures

S8.7.3.1 Sulphur Point

Structures will generally be open piled supporting decks at a height of 3-5 m above low water spring tides – similar to the type of structure already in the area. Planned dimensions of these structures is usually up to 100 m in length perpendicular or parallel to the shoreline. Larger structures up to 150 m in length parallel to the shoreline could be constructed to service larger fishing or coastal vessels. Construction materials and standards would be similar to those proposed for major structures in clause S8.2.2.1.

These standards may also have small associated reclamations with similar construction standards and effects as discussed in clauses S8.2.4, S8.2.5 and S8.2.6.

Slipways may have underwater ways extending up to 100m perpendicular to the shoreline. Materials used will be generally timber, concrete or steel.

S8.7.3.2 Navigation Aids

Fixed structures will generally be timber piles but, in areas of high currents or waves, may be steel or concrete. Buoys are generally steel or fibreglass. In all cases the structures will be painted red, green, yellow, black and white to comply with the IALA Buoyage and Beaconage System as used in New Zealand.

S8.7.4 Characteristics of the Area

S8.7.4.1 Sulphur Point

This area borders the Sulphur Point reclamation on the western side shelving to the Stella Passage/Town Reach channel to the east. The activities described above are a continuation of the same activities which have taken place in this area since the mid-1960's when the reclamation was completed.

S8.7.5 Likely Adverse Effects

Any new structures being open structures will have negligible effect on the hydrodynamic currents in the area with, consequently, few results in either sedimentation or accretion. Similarly, few effects, other than very short term, will affect the ecology of the area.

S8.7.6 Avoidance, Remedying and/or Mitigation

Any long term effects will be avoided or mitigated by the compliance of the users with the relevant provisions of the District Plans and those of the Bay of Plenty Regional Coastal Environment Plan.

S8.8 Disturbance and Deposition – Sand Extraction

S8.8.1 Description of the Process

Sand from either harbour maintenance dredging or capital works dredging, would be placed in the temporary seabed storage area at the southern end of the Sulphur Point wharfs as already described in Section S8.5.1.5, Drawing Number 324-75A. From there the sand is pumped ashore where it is again stored and processed for sale. Coastal consents are already granted for this activity.

The quantity of material placed on the seabed, pumped ashore, processed and sold currently averages approximately 40,000 m³ per annum, but has the potential to expand to 100,000 m³ per annum in ten years.

S8.8.2 Characteristics of the Areas

The report *Sand Recovery Effluent Treatment, Investigation and Design Report* McCabe, 1991, observed the plume dispersal pattern of the untreated effluent extending some 200-300 m during the run of the tide and some 50 m offshore. The area affected during flood tides has been described in Section S8.2 for the Sulphur Point extension south of the existing wharfs. The area affected during ebb tide by the potential plume would be in front of the presently existing 600 m of Sulphur Point wharf structure.

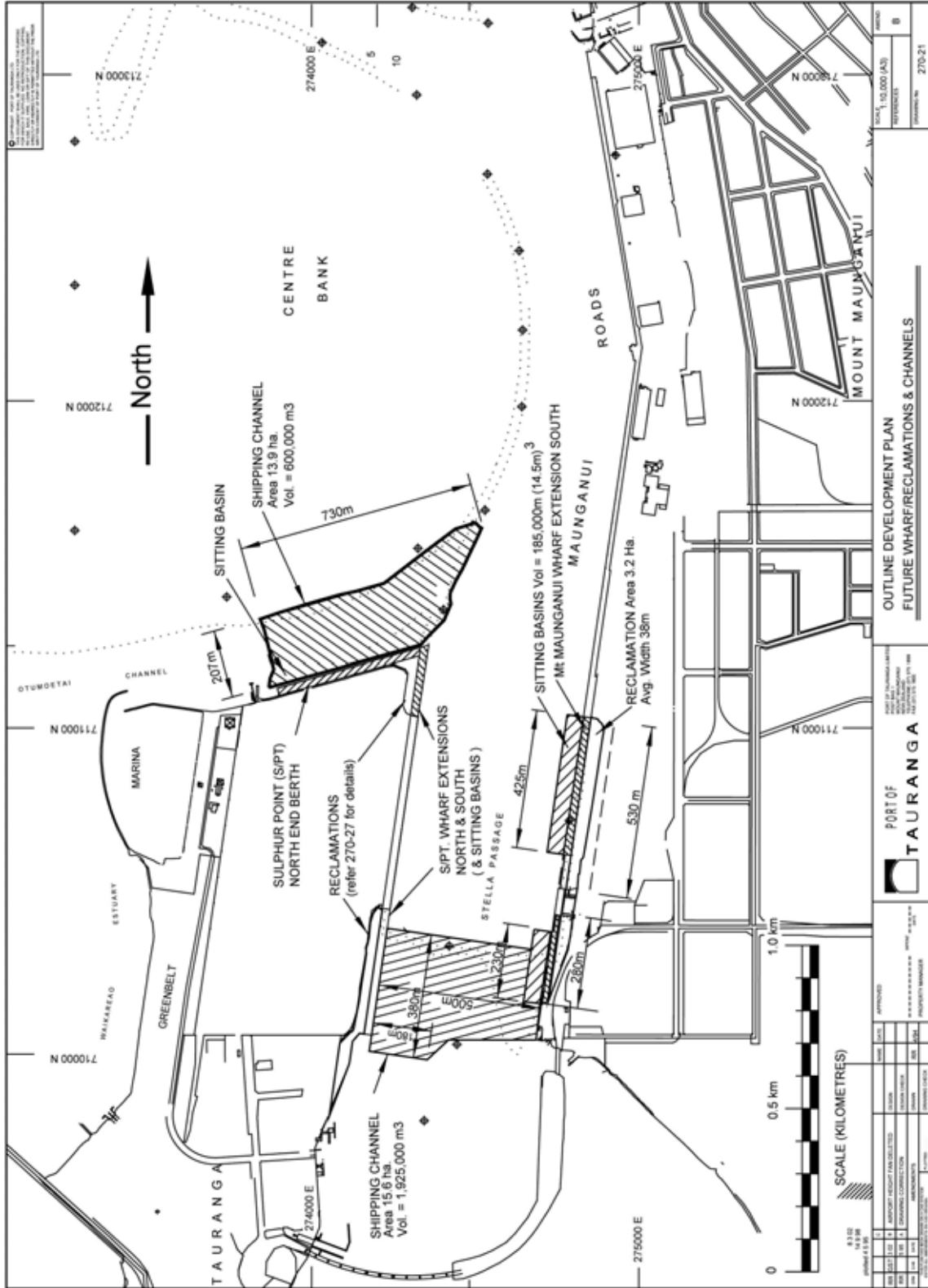
S8.8.3 Likely Adverse Effects

The physical, chemical and biological effects of the effluent were tested at different turbidity and suspended solid concentration levels. The chemistry showed the relevant levels were below the safe USEPA criteria for concentrations up to suspended solid level 1,300 gm/m³ where the limits for copper were approached.

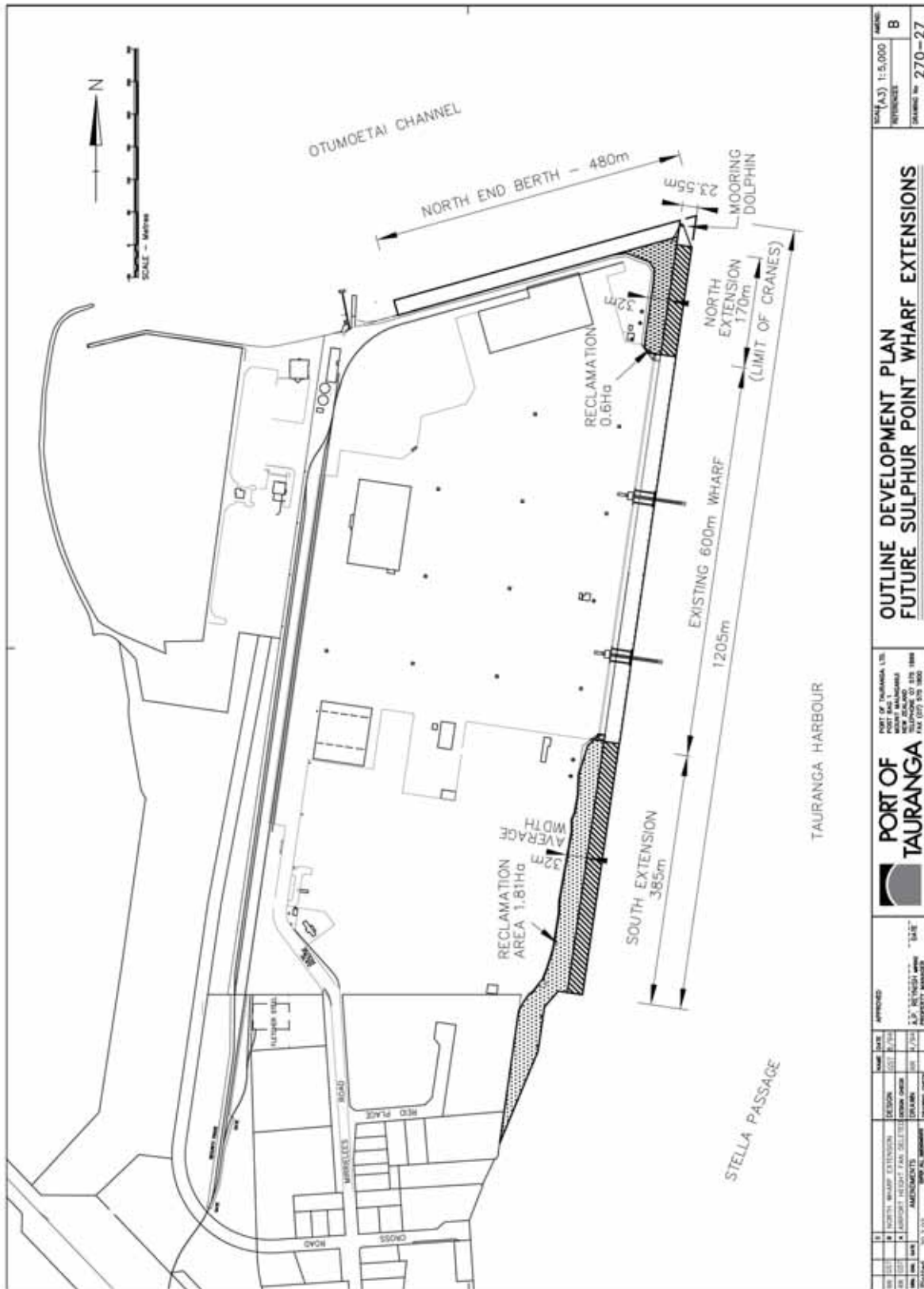
S8.8.4 Avoidance, Remedying and/or Mitigation

The design was based on the result for a discharge of up to 36 m³ per minute and a suspended solids concentration level of 300 gm/m³ which in turn would attenuate to 30 gm/m³ within a distance of 250 m downstream. This was achieved by a settling pond with a retention time of 100 minutes over a settling depth of 1.5 m.

The benefits of sand extraction from the harbour partially mitigate and may obviate the need to extract sand from beaches of the Bay of Plenty littoral system, and thus allow open coastal sand extraction areas, e.g. Otamarakau, Matata, to recover their natural characteristics. The Bay of Plenty coastal beaches lack the strong littoral sedimentary drift processes which means the replenishment of mined sites is slow or non-existent.

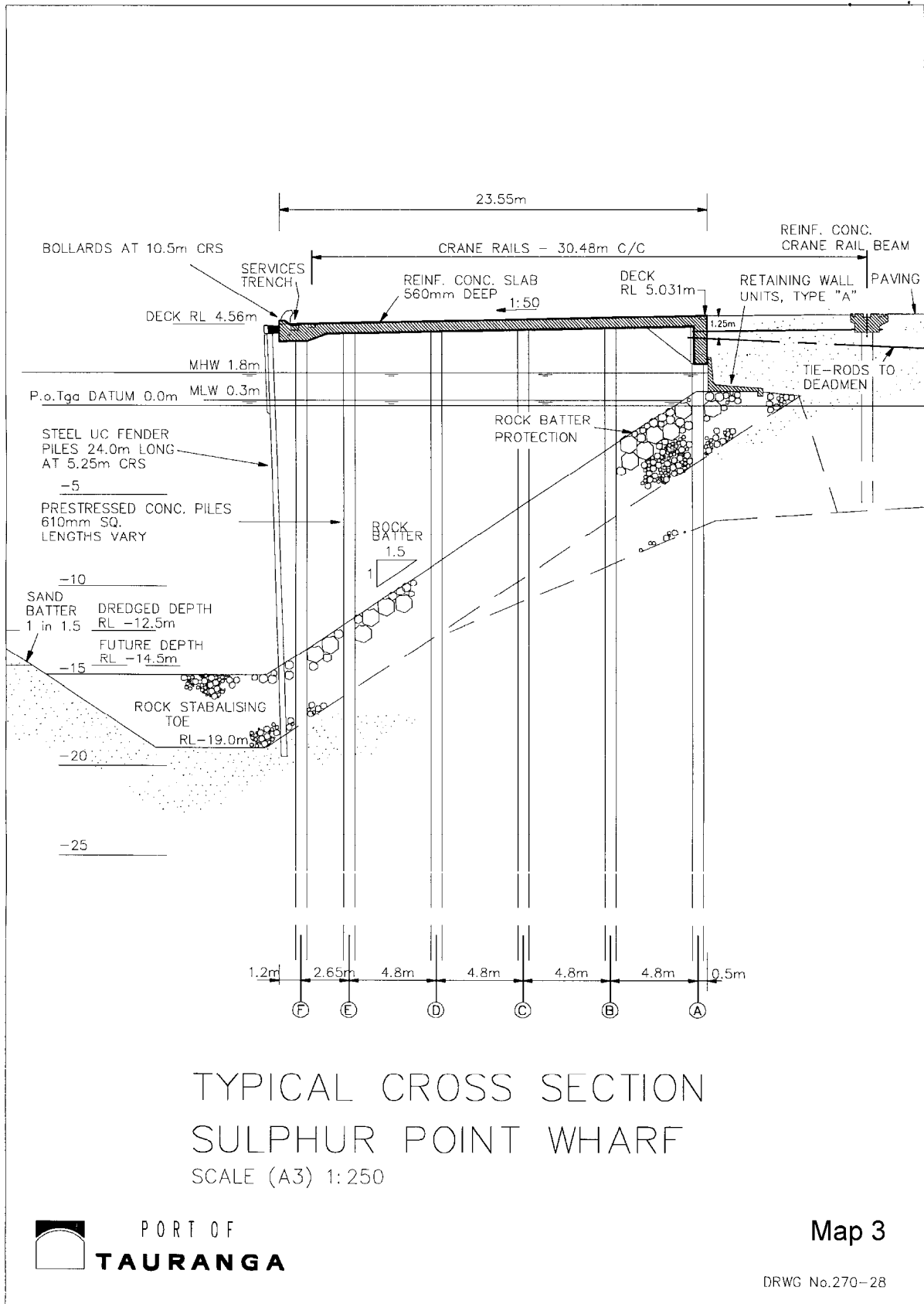


Map 1

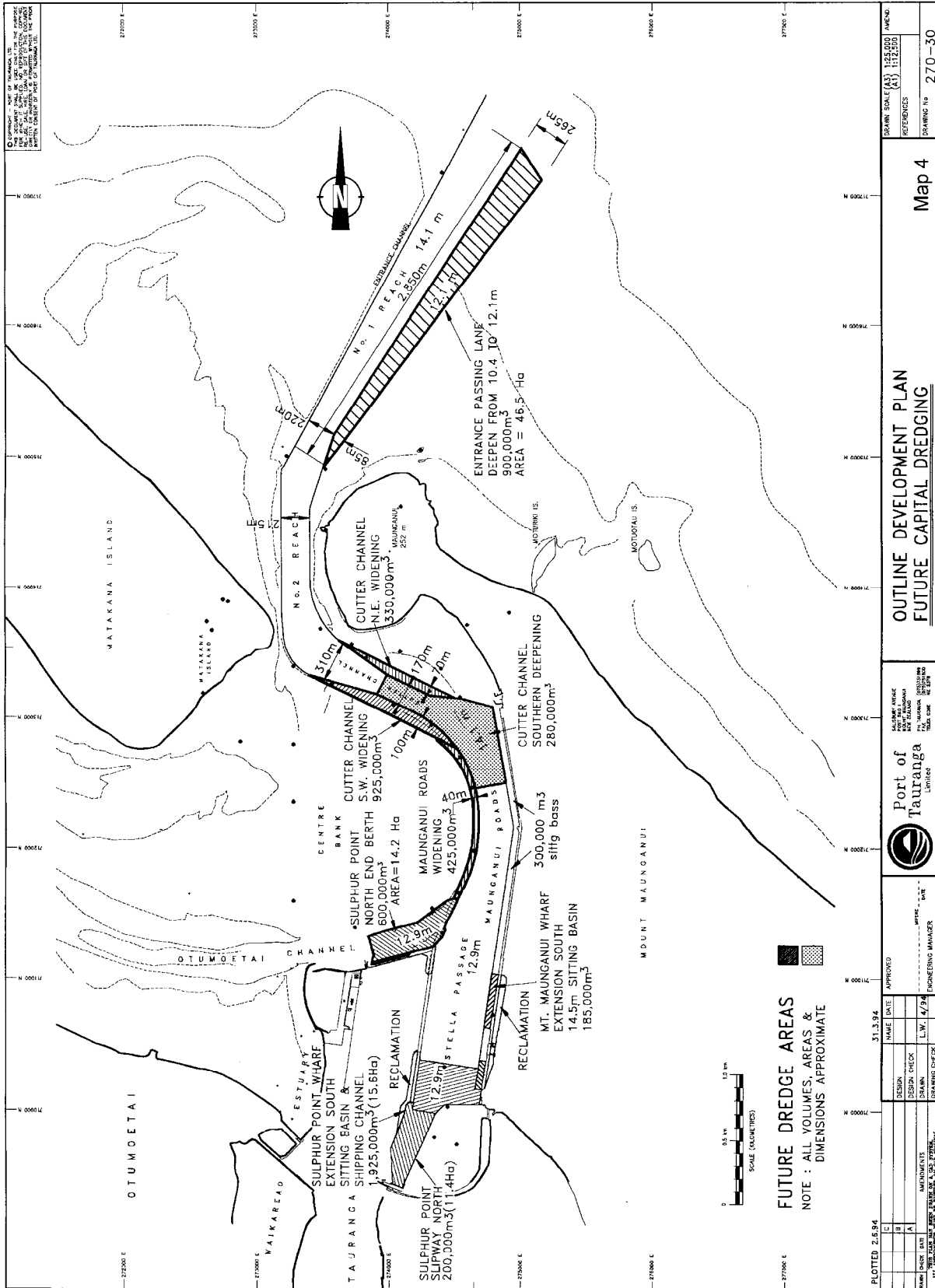


Map 2

<p>PORT OF TAURANGA PORT OF TAURANGA LTD 1001 WAIKAREMOA NEW ZEALAND TEL: 07 578 0000 FAX: 07 578 0000</p>		<p>OUTLINE DEVELOPMENT PLAN FUTURE SULPHUR POINT WHARF EXTENSIONS</p>	
<p>DATE: 20.7.03</p>	<p>SCALE: 1:5,000</p>	<p>APPROVED: J.S. BIRNIE PROJECT MANAGER</p>	<p>REVISED: 270-27</p>
<p>NO. 1001</p>	<p>NO. 1002</p>	<p>NO. 1003</p>	<p>NO. 1004</p>
<p>NO. 1005</p>	<p>NO. 1006</p>	<p>NO. 1007</p>	<p>NO. 1008</p>
<p>NO. 1009</p>	<p>NO. 1010</p>	<p>NO. 1011</p>	<p>NO. 1012</p>
<p>NO. 1013</p>	<p>NO. 1014</p>	<p>NO. 1015</p>	<p>NO. 1016</p>
<p>NO. 1017</p>	<p>NO. 1018</p>	<p>NO. 1019</p>	<p>NO. 1020</p>
<p>NO. 1021</p>	<p>NO. 1022</p>	<p>NO. 1023</p>	<p>NO. 1024</p>
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<p>NO. 1197</p>	<p>NO. 1198</p>	<p>NO. 1199</p>	<p>NO. 1200</p>



Map 3



Map 4

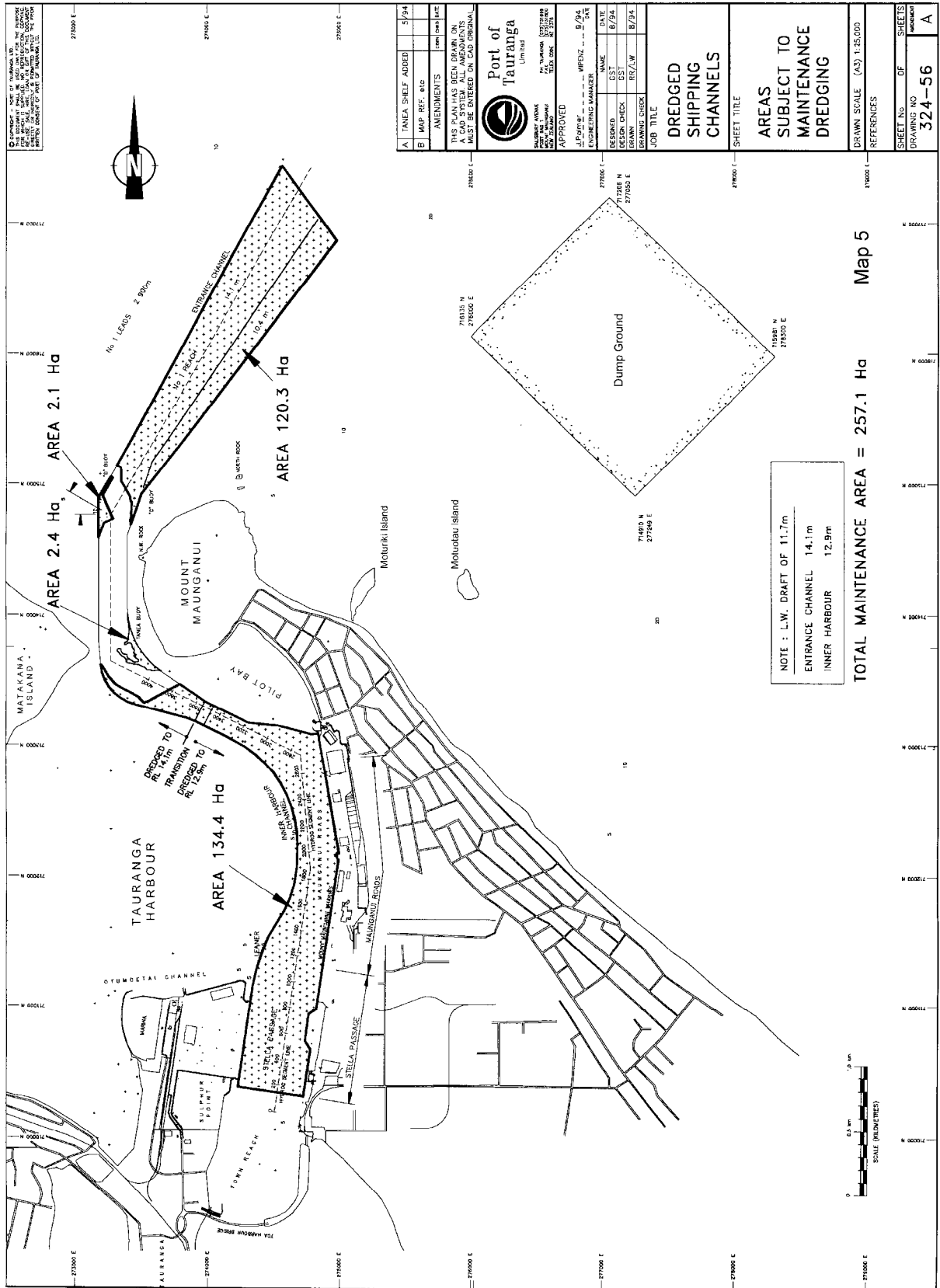
DRAWN SCALE (A3) 1:25,000 (MKG.)
 REFERENCES (A1) 1:12,500
 DRAWING No 270-30

OUTLINE DEVELOPMENT PLAN
FUTURE CAPITAL DREDGING

PLOTTER 2.5.94
 NAME DATE
 DESIGN CHECK
 DRAWN L.W. 4/94
 APPROVED
 CHECKING MANAGER

Port of Tauranga Limited
 Sulphur Point Wharf Extension North
 Sulphur Point Wharf Extension South
 Maunganui Roads Widening
 Mt. Maunganui Wharf Extension South
 Cutter Channel N.E. Widening
 Cutter Channel S. Deepening
 Entrance Passing Lane Deepening

Map 4



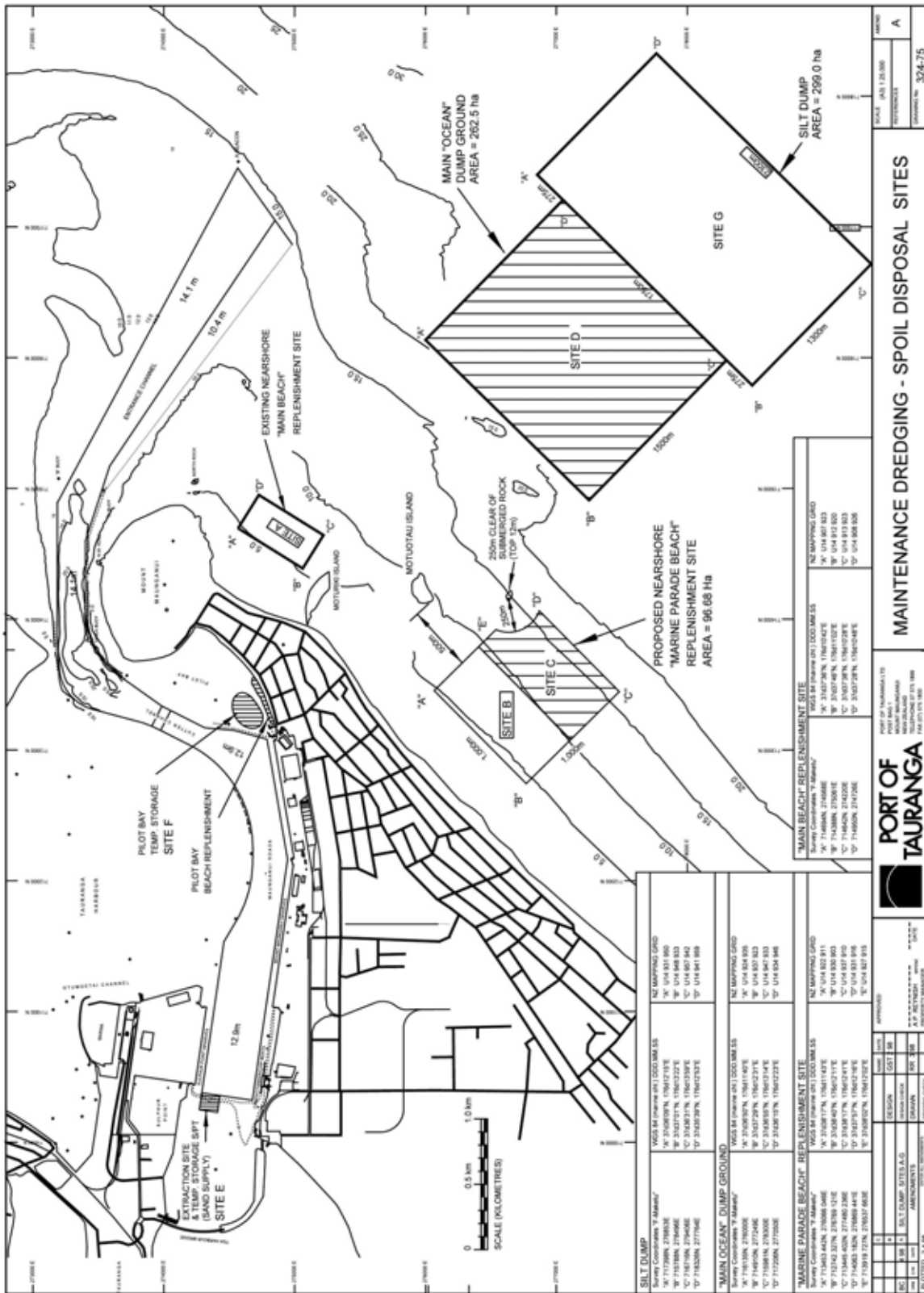
NOTE : L.W. DRAFT OF 11.7m
 ENTRANCE CHANNEL 14.1m
 INNER HARBOUR 12.8m

TOTAL MAINTENANCE AREA = 257.1 Ha

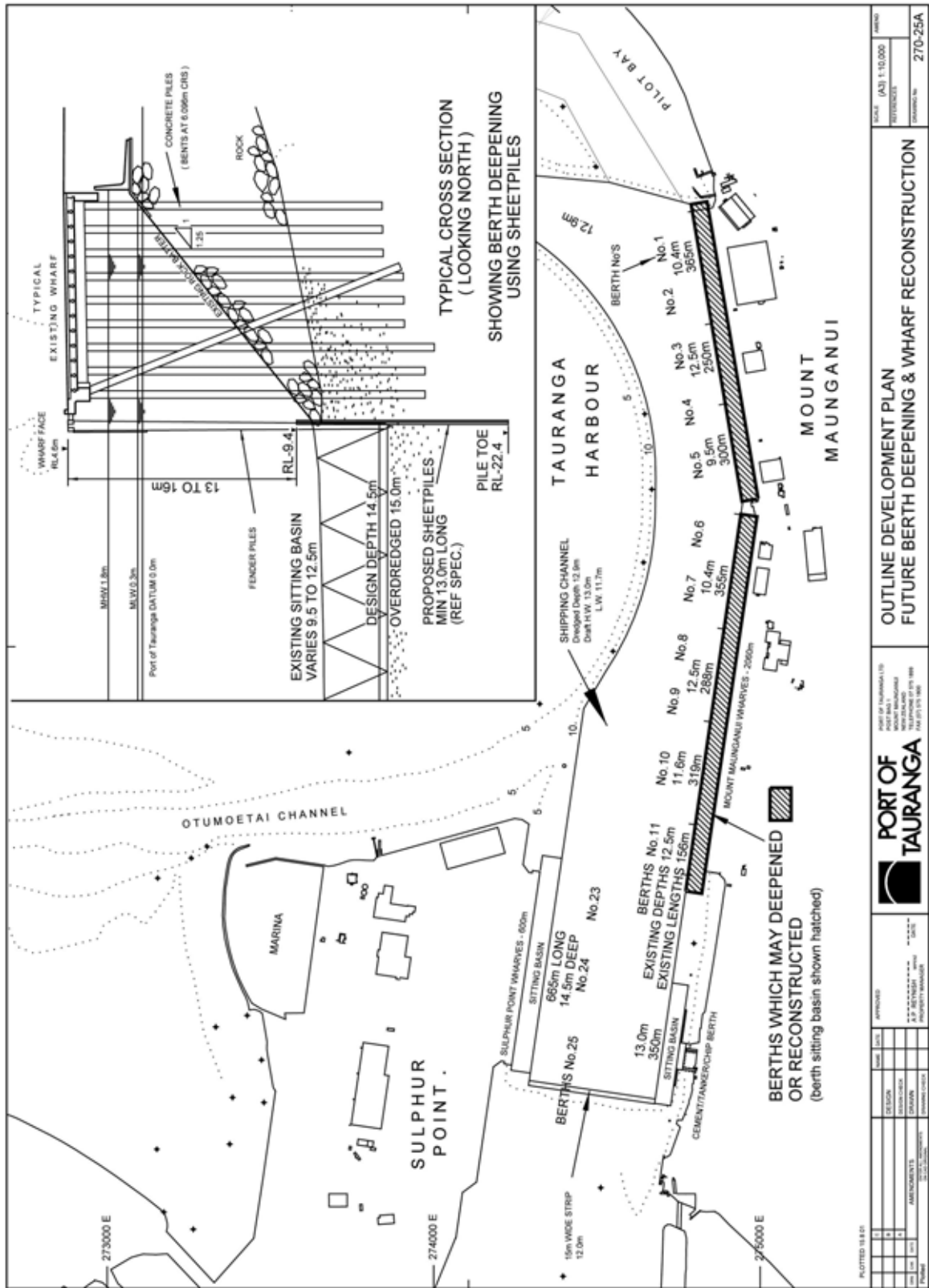
Map 5

A	DATE SHEET ADDED	5/94
B	MAP REF. ETC	
AMENDMENTS		
THIS DRAWING HAS BEEN DRAWN ON A CAD SYSTEM. ALL AMENDMENTS MUST BE ENTERED ON CAD ORIGINAL.		
Port of Tauranga Limited		
SAUNDERS WORKS CIVIL ENGINEERING 77, HANOVER STREET, TAURANGA TEL: 07 574 2222 FAX: 07 574 2223		
APPROVED		
J. Purdie - WFEW - 8/94 ENGINEERING MANAGER DATE: 8/94 DESIGNED: GSI DESIGNED: GSI DRAWN: R.R./A.W. 8/94 CHECKED: R.R./A.W. 8/94		
JOB TITLE		
DREDGED SHIPPING CHANNELS		
SHEET TITLE		
AREAS SUBJECT TO MAINTENANCE DREDGING		
DRAWN SCALE (AS) 1:25,000		
REFERENCES		
SHEET No	OF	SHEETS
324-56		A

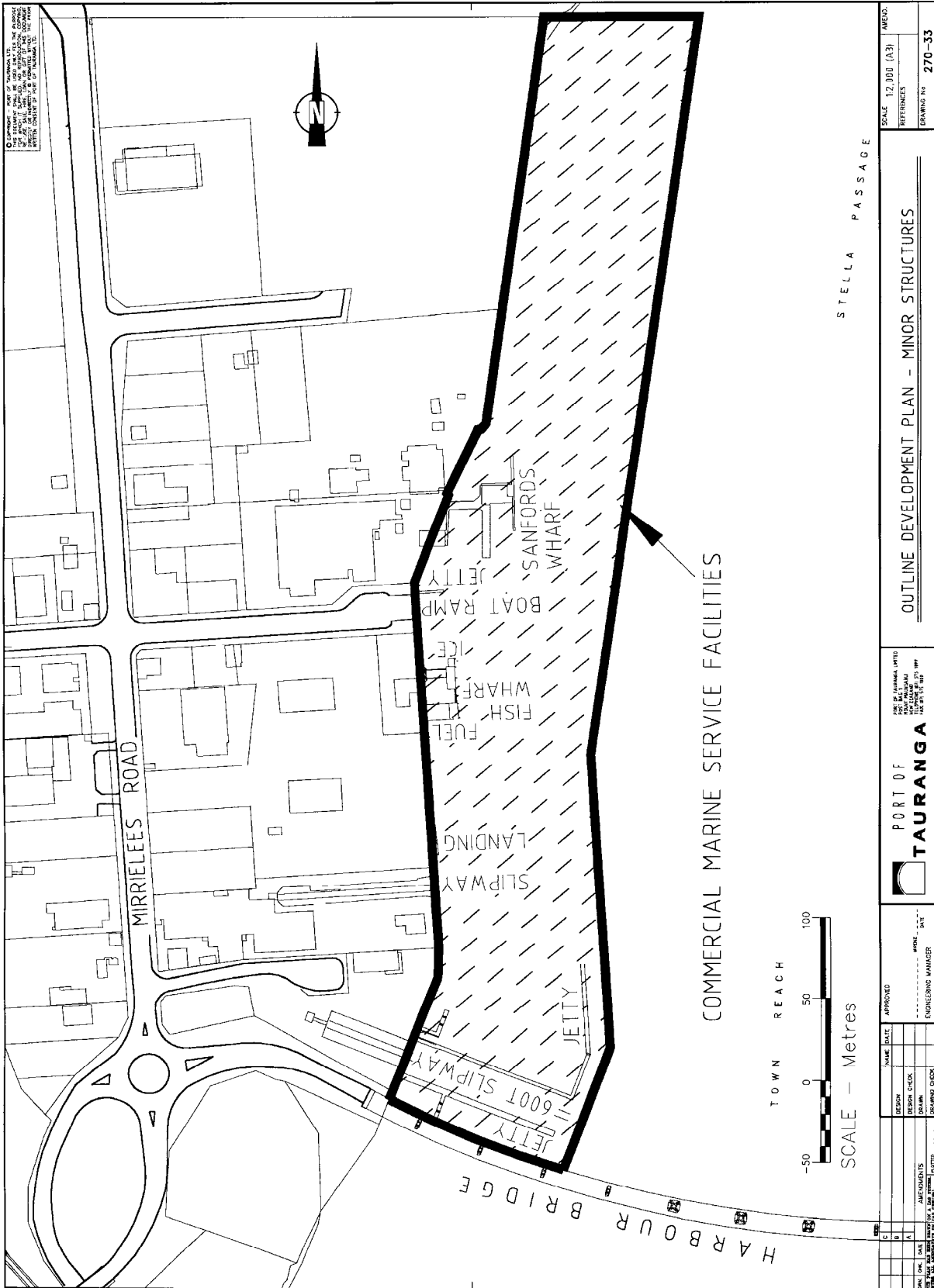
Map 5



Map 6



Map 7



Map 8

NINTH SCHEDULE

INFORMATION REQUIREMENTS FOR

COASTAL PERMIT APPLICANTS

S9.1 Explanation

The Act stipulates a number of requirements regarding information which must accompany applications for a resource consent. These are set out in section 88 of the Act.

The information that is required includes a description of the proposed activity, its intended location, and an assessment of the anticipated environmental effects of the proposed activity, together with ways in which it is intended to avoid, remedy or mitigate these effects.

In addition, section 88 of the Act stipulates that an application for a resource consent must include any other information required by provisions of regional or district plans. Consent authorities are also able to require further information regarding a proposed activity before actioning the application, under section 92 of the Act.

Further, when the consent authority is of the opinion that any significant adverse effects on the environment could result from a proposed activity, then that authority may require an explanation of any possible alternative locations or methods that were considered, as well as an explanation of the applicant's reasons for choosing the selected option.

The consent authority may also commission a report on any matters raised in relation to the application, which may include a review of any information provided.

All of this is intended to ensure that applicants provide adequate information in order that the consent authority is in a position to make informed decisions with regard to the proposed activities. However, it should be noted that section 92 of the Act stipulates that further information may be required only if it is necessary to enable the consent authority to better understand the nature of the proposed activity, the effects it will or is likely to have on the environment and the ways in which the anticipated effects may be mitigated.

The type and detail of information that is required to accompany an application for a coastal permit will vary according to the location and magnitude of the anticipated environmental effects of the proposed activity. It is, therefore, appropriate that prospective applicants discuss with Environment Bay of Plenty staff the level of information which will be needed before a formal application is lodged. However, applicants need to provide a minimum of information, as indicated below.

S9.2 Without limiting the power of Environment Bay of Plenty to require any further information, and without limiting sections 88, 92 and the Fourth Schedule to the Act, applications for coastal permits could be required to provide the following information:

S9.2.1 A description of the proposal, including:

- an outline of the activity (narrative and/or diagrams);
- a narrative description of the proposed location, including its natural character, flora and fauna, heritage values, sediment hydrological regime and the location of the activities in relation to these features; and
- a topographical map of the proposed location (at a minimum on the NZMS 260 series 1:50,000 map series);
- a planning map of the proposed location taken from the relevant district plan if the application involves land-based activities as well as activities based within the coastal marine area;

- the alternatives (both location and specific activity type, scale and effects) that have been considered and the applicant's reasons for making the proposed choice of location for the activity;
- plans of all structures associated with the proposed activity or proposal (including materials to be used), in both a detail and a scale adequate to the circumstances and approved by a registered engineer except in the case of minor structures such as fences (not including seawalls);
- how the proposed activity will be undertaken (construction, operational and maintenance schedules);
- construction materials;
- the scheduling of each part of the construction and operation;
- any other consents required by virtue of the nature of the proposed activity.

S9.2.2 An assessment of the potential or actual effects of the proposed activity in accordance with the Fourth Schedule of the Act, as appropriate to the scale of proposed activity and the likely magnitude of adverse effects.

S9.2.3 An assessment of alternatives to reclamation.

S9.2.4 An assessment of alternative locations for aquaculture including locations on land outside the coastal marine area.

S9.2.5 An assessment (as appropriate) of environmental risk associated with the proposed activity (such as the storage of hazardous substances on site).

S9.2.6 An assessment (as appropriate) of the likely effects of coastal hazards (including sea level rise) on the proposed activity.

S9.2.7 A description of the measures which will be used to avoid, remedy or mitigate any likely, actual or potential adverse effects on the environment.

S9.2.8 An assessment of effects on any known site that is of significance for any of the following reasons:

- cultural value to tangata whenua including but not limited to those in the Fourteenth Schedule;
- indigenous vegetation;
- habitat of indigenous fauna;
- landscape or amenity values; or
- historical value.

S9.2.9 An explanation of the consultation undertaken by the applicant, including:

- the individuals or groups that have been consulted (including tangata whenua); and
- the consultation undertaken; and

- the views of these groups with regard to the proposed activity; and
- any response to the views of those consulted.

S9.2.10

With regard to applications which include direct discharges to the coastal marine area, an explanation of:

- the manner in which the discharge meets the requirements of chapter 9 of this plan; and
- the quantity, quality, rate and method of discharge; and
- the potential for waste minimisation, reuse or recycling which reduces the quantity of contaminants; and
- the existing quality of the receiving coastal waters; and
- the manner in which all alternative methods have been considered; and
- the duration of the discharge; and
- where there are any other or similar discharges nearby which could have the potential to result in adverse cumulative effects.

S9.2.11

Any other information necessary to demonstrate that the proposed activity will comply with all relevant objectives, policies, rules and other methods of implementation contained within this plan.

S9.2.12

Applicants for resource consents may be required to provide information on the effects of the proposed activity on historical or cultural resources.

S9.2.13

It is recommended that consent applicants have regard to planning documents prepared by iwi authorities when preparing assessments of effects of the environment.

S9.2.14

Environment Bay of Plenty may, at its discretion and at any reasonable time before the hearing of a coastal permit application, use the powers under section 92 of the Act to either:

- require the applicant to provide further information relating to the application; or
- commission a report on any matters raised in relation to the application.

TENTH SCHEDULE

FINANCIAL CONTRIBUTIONS

S10.1 Explanation/Principal Reasons

The Act provides for consent authorities to make the grant of a consent subject to conditions. These conditions may include a financial contribution (section 108 of the Act). This schedule specifies the purposes for which financial contributions may be made, and the method for determining the value of the contribution.

S10.2 Financial Contributions

S10.2.1 A financial contribution may be required as a condition of grant of consent to a coastal permit.

S10.2.2 Financial contributions shall be for the purpose of avoiding, remedying or mitigating adverse effects on the environment.

S10.2.3 Financial contributions must be used to avoid, remedy or mitigate adverse effects of the same type as those caused or potentially caused by the activity for which consent is sought.

S10.2.4 Preference shall be given to the use of financial contributions at, or close to, the site of the activity for which consent is sought. This shall not prevent the use of financial contributions at other locations in the coastal environment when appropriate.

S10.2.5 Financial contributions will only be required when:

- Avoidance, remedy or mitigation of adverse effects could not be achieved by another condition of consent, or
- A financial contribution would be more efficient than another condition of consent in achieving the avoidance, remedy or mitigation of adverse effects.

S10.2.6 Financial contributions shall be in the form of money or land. The value of the contribution will be the actual and reasonable cost of achieving the avoidance, remedy or mitigation of the adverse effects.

S10.2.7 When a financial contribution is to be paid to a person or agency other than a local authority, there must be an enforceable contract which provides for the purpose of the contribution to be achieved.

ELEVENTH SCHEDULE

CROSS-BOUNDARY ISSUES

S11.1 Explanation

For administrative purposes local government and resource management within New Zealand is undertaken by a combination of regional councils and district councils. Within the Bay of Plenty region there are six district councils, four of which have coastal boundaries (i.e. Western Bay of Plenty, Tauranga, Whakatane and Opotiki). Along the coast of the Bay of Plenty the region is adjoined to the north by Waikato region and to the east by Gisborne district.

Activities conducted within one region may result in adverse effects that are felt within a neighbouring region. These activities may be related to the direct use of resources within the coastal marine area (such as sand extraction) or to land use practices which pollute waterways and ultimately coastal waters. For this reason, processes need to be developed to manage issues which cross regional boundaries.

Further to these inter-regional cross-boundary issues there are those that are intra-regional (i.e. involving Environment Bay of Plenty and the district councils of the Bay of Plenty region). These issues relate to activities conducted within one district which have adverse effects felt within others.

They also relate to the shared responsibility between regional and district councils with regard to the general control of land use practices. The Act requires that both regional and district councils have a role in this (excluding subdivision, which is a function of district councils), but leaves it up to the councils themselves to negotiate the terms of reference and topic/spatial coverage. Processes therefore need to be developed to manage cross-boundary issues within the region.

S11.2 Processes for Cross-boundary Issues**Environment Bay of Plenty will:**

- S11.2.1** Promote the use of joint hearings for making decisions on applications for coastal permits which have directly associated land use consent requirements.
- S11.2.2** Liaise with neighbouring regional and district councils and other appropriate agencies on issues that cross territorial boundaries.
- S11.2.3** Participate in inter-agency groups or forums in order to coordinate the development of plans, strategies or other policy documents which deal with issues that cross territorial boundaries.
- S11.2.4** Promote and encourage consultation with all affected parties to resolve issues which cross territorial boundaries.
- S11.2.5** Facilitate the development and maintenance of information sharing between councils with regard to issues which cross territorial boundaries.
- S11.2.6** Promote and facilitate a joint approach to the management of consent applications which have effects crossing territorial boundaries.
- S11.2.7** Promote and facilitate pre-hearing meetings between parties in order to resolve any issues associated with consent applications which have the potential for effects to cross territorial boundaries.
- S11.2.8** Make and receive submissions on statutory plans and resource consents.

TWELFTH SCHEDULE
PLAN MONITORING AND REVIEW

S12.1 Explanation

Once the coastal plan is in place, it is necessary to monitor and review its effectiveness. This refers to periodic assessment of the performance of the methods used to achieve the objectives. If they are not adequate to achieve these objectives, then the provisions of the plan will need to be amended accordingly.

Environment Bay of Plenty will use the Natural Environmental Regional Monitoring Network (NERMN) as the basis for these reviews, in conjunction with the results of monitoring activities undertaken by applicants and by other agencies involved in coastal management. In addition to this, it will be necessary to review the methods contained within the plan in terms of their efficiency. This refers to assessing whether or not they are achieving the desired results in a cost-effective manner.

The Act requires that coastal plans be reviewed no later than ten years following the date that they become operative. The review must be carried out in accordance with the procedures outlined in Part I of the First Schedule to the Act. Environment Bay of Plenty recognises the importance of this coastal plan and its impact on use, development and protection within the Bay of Plenty coastal marine area. Consequently, the first review of this plan will be determined according to the success or otherwise of plan implementation (to be evaluated as a consequence of on-going plan monitoring), and may eventuate earlier than ten years following the date of approval. The Act also provides a process for plans to be changed before the review date.

The review process needs to focus on issues, and on whether the policies and methods are effective (or still appropriate) in addressing these issues. In some instances, issues may have been resolved, while new ones may have been identified. In addition, the aspirations of the community may have changed with regard to particular issues. It is appropriate, therefore, that each review be undertaken in full consultation with all relevant agencies and interest groups.

S12.2 Monitoring and Review

Environment Bay of Plenty will review this plan no later than ten years following the date of its approval, and will use on-going plan monitoring as the primary means of determining the timing of all subsequent reviews.

S12.2.1 Information for plan monitoring will be drawn from:

- consultation with tangata whenua;
- consultation with other interested parties;
- surveys of public views on management of the coastal environment;
- reviews of the effectiveness of methods;
- monitoring undertaken by other agencies involved in coastal management;
- records of investigations of environmental damage, and enforcement action;
- compliance monitoring of consent conditions;
- state of the environment monitoring including NERMN aspects listed in the table below:

Aspect of the Environment to be Monitored	Resource Management Issues and Chapters
Suitability (bacteriological) of coastal water for contact recreation.	Coastal Discharges (ch 9), Tangata Whenua Interests (ch 8), Recreation (ch 19).
Suitability (bacteriological) of shellfish for human consumption.	Coastal Discharges (ch 9), Tangata Whenua Interests (ch 8), Recreation (ch 19), Fishing (ch 21).
Rate of contaminant accumulation in Tauranga Harbour sediments and marine organisms.	Coastal Discharges (ch 9), Tangata Whenua Interests (ch 8), Natural Character (ch 4).
Quantity of human sewage being discharged to the sea, without first passing through land (and other treatment).	Coastal Discharges (ch 9), Tangata Whenua Interests (ch 8), Natural Character (ch 4).
Sediment accumulation rates in Tauranga and Ohiwa Harbours.	Coastal Discharges (ch 9), Tangata Whenua Interests (ch 8), Natural Character (ch 4).
Change in area of harbour and estuary reclaimed.	Reclamation (ch 15), Natural Character (ch 4), Outstanding Landscapes (ch 5), Tangata Whenua Interests (ch 8), Public Access (ch 7), Recreation (ch 11).
Change in the extent of riparian vegetation on estuarine margins and dune systems.	Coastal Discharges (ch 9), Natural Character (ch 4), Outstanding Landscapes (ch 5), Coastal Hazards (ch 11).
Change in quality of the ecologically significant sites identified.	Significant Flora and Fauna (ch 6).
Change of subdivision intensity, structural development and vegetation cover; in and adjacent to the outstanding and regionally significant landscape features.	Natural Character (ch 4), Outstanding Landscapes (ch 5), Structures (ch 13).
Change in the active beach system including short and long term trends	Coastal Hazards (ch 11).
Storm surge events	Coastal Hazards (ch 11).
Change in intensity of subdivision and structural development in known coastal hazard areas.	Coastal Hazards (ch 11).
Change in extent of coastal reserves, and area subject to occupation permits.	Public Access (ch 7), Recreation (ch 19).
Change in indicators of values of significance to tangata whenua (to be developed through consultation).	Tangata Whenua Interests (ch 8).

S12.2.2

In reviewing this plan, Environment Bay of Plenty will determine:

- whether or not the policies and methods are achieving the objectives; and
- whether or not the policies and methods are achieving the anticipated environmental outcomes; and
- whether or not the methods are achieving an acceptable level of efficiency; and
- whether or not issues addressed in the plan are still relevant; and
- whether additional issues have arisen which require attention within the plan.

S12.2.3

In reviewing this plan, Environment Bay of Plenty will consult with neighbouring regional councils, constituent district councils, local tangata whenua, key user groups and the regional community in general.

THIRTEENTH SCHEDULE
WATER QUALITY STANDARDS

S13.1 Explanation

This schedule provides receiving water quality standards for those waters classified in chapter 9 – Coastal Discharges. Quantitative standards are specified for some of the qualitative standards. They apply after reasonable mixing of any contaminant or water with the receiving water and disregarding the effect of any natural perturbations that may affect the water body. The effect of more than one discharge may be assessed cumulatively and the standards apply whether or not the point of discharge is in the coastal marine area. This schedule is not an exclusive list of standards. When necessary, additional standards may be referred to for contaminants not included in this schedule and reference texts.

For the purpose of assessing discharges of human sewage to the coastal marine area, the matters listed in 13.3 of this schedule will be considered in addition to the standards listed in 13.2.

S13.2 Coastal Water Quality Classifications**S13.2.1** No discharge shall cause:

- the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials; and
- any conspicuous change in the colour or visual clarity; and
- any emission of objectionable odour; and
- any significant adverse effects on aquatic life;

in coastal waters, foreshore and seabed within the coastal marine area.

S13.2.2 Within all harbours and estuaries, and into the open coast out to a distance of 400 m from the line of mean high water springs:

- the visual clarity of the water shall not be so low as to be unsuitable for bathing; and
- the water shall not be rendered unsuitable for bathing by the presence of contaminants; and
- there shall be no undesirable biological growths as a result of any discharge of a contaminant into the water; and
- the natural temperature of the water shall not be changed by more than 3 degrees C; and
- the concentration of dissolved oxygen shall exceed 80% of saturation concentration; and
- aquatic organisms shall not be rendered unsuitable for human consumption by the presence of contaminants.

S13.2.3 Equivalent Qualitative and Quantitative Standards

Qualitative Standard	Quantitative Standard
There shall be no conspicuous change in the colour or visual clarity.	The decrease in secchi disc depth or black disc range shall not be greater than 20%.
There shall be no significant adverse effects on aquatic life.	Refer to: <i>Australian Water Quality Guidelines for Fresh and Marine Waters</i> , Chapter 2 Protection of Aquatic Ecosystems, Australian and New Zealand Environment and Conservation Council, November 1992.
The visual clarity of the water shall not be so low as to be unsuitable for bathing.	The horizontal sighting distance of a 200 mm black disc should exceed 1.6 m (in the active surf zone it is not possible to use this method). <i>Water Quality Guidelines Number 2</i> , Ministry for the Environment, June 1994.
The water shall not be rendered unsuitable for bathing by the presence of contaminants.	The median of samples taken over the bathing season shall not exceed 35 enterococci/100 ml. No single sample shall exceed 104 enterococci/100 ml. <i>Provisional Water Quality Guidelines for Recreational and Shellfish Growing Water in New Zealand</i> , Department of Health, January 1992.
Aquatic organisms shall not be rendered unsuitable for human consumption by the presence of contaminant.	<p>1. Microbial Contaminants Aerobic plate count at 35°C (/g) n=5 c=2 m=500,000 M=1,500,000 Faecal coliform (/100g) n=5 c=2 m=230 M=330 Salmonella (/25g) n=5 c=0 m=0 n= number of samples, c= maximum number of defective units, m= acceptable level and levels above it are marginally acceptable or unacceptable, M= values above M are unacceptable. Section 5.26(g) <i>Microbiological Reference Criteria for Food</i>, Ministry of Health, October 1995.</p> <p>2. Non Microbial Contaminants Refer to: <i>Australian Water Quality Guidelines for Fresh and Marine Waters</i>, Chapter 2 Protection of Aquatic Ecosystems, Australian and New Zealand Environment and Conservation Council, November 1992.</p>

S13.3 Matters to be considered for the assessment of applications to discharge human sewage (including treated sewage).

- Early and ongoing consultation with tangata whenua:
 - during the consideration of wastewater treatment options, and receiving environments, and
 - regarding subsequent design concepts included in consent applications.
- Taking steps to promote better use of fresh water by: efficient use of fresh water, reuse and recycling of wastewater, and discouraging disposal of toxic materials via wastewater systems.
- Disposal of sewage by passage through land, soil or wetland.

- Avoiding highly sensitive discharge locations such as gazetted taiapure, traditional seafood gathering areas or recreational beaches.
- Avoiding physical degradation of the life-supporting capacity of receiving waters (refer standards in 13.2 of this schedule).

FOURTEENTH SCHEDULE

AREAS OF SIGNIFICANT

CULTURAL VALUE

These are referred to in chapter 8 – Tangata Whenua Interests and are shown in the maps.

SITE NAME: TUHUA (MAYOR ISLAND)

SITE NUMBER: ASCV-2

MAP SHEET: 40b, 41b

Tuhua is a Maori-owned wildlife refuge administered by the Mayor Island Trust Board on which the Department of Conservation is represented.

Tuhua is of national archaeological and historic significance as it was one of the most important sources of obsidian stone tool material from the time of the earliest Polynesian arrivals.

SITE NAME: KAREWA ISLAND

SITE NUMBER: ASCV-3

MAP SHEET: 43a

Karewa Island is of particular cultural significance to Ngaiterangi and Ngati Pukenga Iwi.

SITE NAME: TAURANGA HARBOUR (TAURANGA MOANA)

SITE NUMBER: ASCV-4

**MAP SHEET: 2b, 3b, 5b, 6b, 7b,
8b, 9b, 10b, 11b, 12b, 13b, 14b**

Tauranga Harbour and surrounding lands form the traditional rohe of Ngaiterangi Iwi known as "Mai i nga Kuri a Whareki ki Wairakei." Hapu of Ngaiterangi maintain strong local communities which are dependent on maintenance of the life-supporting capacity of the harbour and surrounding land. Maintenance of kaimoana and coastal water quality is particularly important.

Tauranga Moana is rich in cultural heritage sites for Ngaiterangi and other iwi. Many of the sites are of significance to Ngaiterangi te Iwi, while others are significant to specific hapu. In addition to the harbour itself the following places have particular significance for Ngaiterangi:

Hopukioire (Mount Drury)	Waahi tapu
Otamataha	Waahi tapu
Te Awa o Tukorako	
Maungamana (Maungatawa)	
Hikurangi	
Te Waiu o te Tohora	
Kopukairoa	
Te Tahuna o Waikorire (Pilot Bay)	
Te Tahuna o Waipu (Waipu Bay)	
Te Tahuna o Rangataua (Rangataua Bay)	
Te Tahuna o Waimapu (Waimapu Estuary)	
Te Tehe (Welcome Bay)	
Te Hu o Te Tuhi	
Oruamatua	
Puwhariki	
Otumoetai	
Urupa:	Omanu
	Otumoko
	Te Tii
	Okahu
	Karikari
	Tahuwhakatiki
	Tamapahore
	Waitaia
	Urumingi
	Hairini
	Papamoa burial reserve

Nga marae o Ngaiterangi: Opureora
Rangiwaea
Otawhiwhi
Waikari
Whareroa
Hungahungatoroa
Tamapahore
Tahuwhakatiki
Maungatapu (Opopoti)
Rereatukahia
Rangihouhiri

Kowhararahi
Pukekohatu
Te Korokoro
Orea
Waimahuru
Otaimatua
Te Awa o Kaitimako
Te Awa o Waitao
Te Awaiti o Maungatawa

The eastern area of the harbour forms the rohe of Ngati Pukenga (and other iwi). Ngati Pukenga are based in Waitao where Te Whetu o te Rangi marae is located, adjacent to Rangataua Bay. The following places are of particular significance to Ngati Pukenga:

Te Whetu o te Rangi Marae
Wharo pa
Rangataua Harbour (with Ngapotiki and Ngati He)
Te Rerekawau (with Ngati He)
Waitao River (with Ngati He and Ngapotiki)
Te Urupa o Otukopiri
Te Urupa ki Ngapeke (Ashers Road)
Otaua/Waitaha Indigenous Forest Block
Kopukairoa
Oruamatua (with Ngai Tukairangi)

Ngai Tamarawaho holds parts of the western Tauranga Harbour, especially the Waikareao estuary, in high spiritual regard as it contains the last remnants of their ancestral lands and is a source of kaimoana. Motuopae Island in the Waikareao estuary is a sacred burial ground. Urupa also exist on Tutaitaka Island.

Traditionally, Tauranga Moana (harbour) was as significant, if not more so, than the land to tangata whenua. It was the source of kaimoana and the means of access and communication among the various iwi, hapu and whanau around its shores. Today there are 24 marae in the Tauranga Moana district.

SITE NAME: MAUAO (MOUNT MAUNGANUI) INCLUDING MOTURIKI ISLAND AND MOTUOTAU ISLAND

SITE NUMBER: ASCV-6 **MAP SHEET: 9b, 11b**

Mauao (Mount Maunganui), Moturiki and Motuotau are of particular cultural significance to Ngaiterangi Iwi. Mauao (Mount Maunganui) and Moturiki Island are both sites of pa, with numerous shell middens on the flanks of Mount Maunganui.

SITE NAME: MAKETU/WAIHI ESTUARIES AND OKUREI POINT

SITE NUMBER: ASCV-7 **MAP SHEET: 15, 16b, 17b**

The Maketu Estuary is a regionally important tauranga waka (Arawa canoe final landing) and mahinga kai. The Maketu Estuary is of immense cultural and historical importance to Te Arawa ("mai Maketu ki Tongariro" – from Maketu to Tongariro). Numerous pa and 67 middens have been located on the land adjacent to the estuary. Okurei is also of very high spiritual significance to local Te Arawa.

SITE NAME: MOTITI ISLAND

SITE NUMBER: ASCV-25 **MAP SHEET: 45a**

Motiti Island has particular cultural significance to the Patuwai hapu of Ngati Awa and the Ngai Tauwhao hapu of Ngaiterangi.

SITE NAME: MOTUNAU (PLATE) ISLAND

SITE NUMBER: ASCV-9 **MAP SHEET: 46**

Motunau Island is a Maori-owned wildlife sanctuary protected under the Wildlife Act 1953. It is rated as a site of Special Wildlife Interest.

SITE NAME: MOUTOHORA (WHALE ISLAND) AND RURIMA ISLETS (TOKATA, RURIMA & MOUTOKI ISLANDS)

SITE NUMBER: ASCV-10 **MAP SHEET: 20, 21a, 22, 23, 24b**

Rurima Rocks and Moutohora (Whale Island) are important mahinga kai areas for Ngati Awa. The Rurima Rocks are of spiritual significance. Moutohora has several coastal urupa and other waahi tapu sites. Moutoki and Rurima Islands are Wildlife Refuges in Maori ownership.

The area has been under investigation by the Department of Conservation since 1988 as a potential Protected Marine Area, including part Marine Reserve and part Taiapure.

SITE NAME: KOHI POINT (INCLUDING PIRIPAI TO OTARAWAIRERE)

SITE NUMBER: ASCV-12 **MAP SHEET: 24b**

This area is of major spiritual significance to the people of Ngati Awa for its wairua and mauri. After a tangi at Wairaka Marae the body was formerly taken across the estuary to be buried in the urupa on the Whakatane Spit. This urupa is recognised as a Maori Burial Reserve. Integrally linked to this urupa by Maori legend is the largest rock off the entrance of Whakatane Estuary mouth, Turuturu Roimata, and Paepae o Aotea (Volkner Rocks) – The Departing Place of the Spirits of Ngati Awa. After the burial of a person of importance, the spirit leaves the body to commence its journey to Hawaiiiki. The spirit, sad at leaving behind its friends at Whakatane, weeps. This is manifested by the rock that weeps, Turuturu Roimata. From there the spirit travels across the water to Paepae o Aotea before finally departing for Hawaiiiki.

The area is also of significance to Ngati Awa as a source of mahinga mataitai. Rocks at the entrance to Whakatane Estuary and the reefs on Kohi Point and the rocky shore and reefs at Otawairere and West End of Ohope Beach are a significant source of seafood. This is recognised by the names of rocks and points. An example is Te Puku o te Wheke ("The Stomach of the Octopus").

The adjacent headland is also very significant. It contains thirteen pa, several pit and hui sites, a cave and midden, including Toi's pa, a site of great importance to Ngati Awa.

The Kohi Point Scenic Reserve is adjacent to this area. It contains a number of archaeological sites including 13 pa.

SITE NAME: OHIWA HARBOUR/OHOPE BEACH

SITE NUMBER: ASCV-13

MAP SHEET: 24b, 25b, 26b, 27b

Ohiwa Harbour is of significant cultural importance to Te Whakatohea, Te Upokorehe, Ngati Awa and Tuhoë who are the kaitiaki of the harbour. Ohiwa Harbour is an important mahinga kai. A Tauranga waka is located near the harbour entrance. Several urupa and waahi tapu sites are located on the harbour margins. Ohope Beach and nearshore subtidal shellfish zone has been identified by Te Komiti Taiao o te Runanga of Ngati Awa (Ngati Awa Environmental and Cultural Resources Committee) as a mahinga mataitai of regional significance. Hokianga Island has great wairua (spiritual significance) as the place where the chief Te Kooti died.

The Ohiwa Harbour area has a long history of Maori occupation. The Historic Places Inventory identifies more than ten historic sites of Maori origin on the margins of the harbour. The Department of Conservation undertook a major archaeological survey of Ohiwa Harbour in 1994. Evidence of Maori occupation has survived in the form of numerous archaeological sites, including pa, urupa, shell middens and cultivation sites. Four pa exist in the Wainui Inlet, two on Hokianga Island, one in the Kutarere Inlet, two on Uretara Island, three in Nukuhou River Inlet, and six pa and numerous pits and terraces on Ohakana Island. Pataua Island was a battle site and canoe landing area, and Ohakana Island is the site of a battle between Ngati Awa and Whakatohea.

There are historic wharf sites at Kutarere, Ohiwa and Ohope which are remnants of the coastal shipping era.

Part of the estuarine margins and several islands in the harbour are protected under different pieces of legislation: Tern Island is a wildlife refuge reserve, Pataua Island is a scientific reserve, Uretara Island and Tauwhare Pa are scenic reserves. Motuotou Island is a nature reserve. Hokianga Island is a Maori Reserve.

SITE NAME: WHAKAARI (WHITE ISLAND)/PAEPAE O AOTEA (VOLKNER ROCKS)

SITE NUMBER: ASCV-14

MAP SHEET: 47, 48a

Whakaari is an important mahinga kai and historical repository for the Mataatua tribes. It is a waahi tuku mauri which is the place where voyagers arriving in the Bay of Plenty (Te Moana a Toi Te Huatahi) performed important rituals.

Paepae o Aotea is a highly significant waahi tapu. It is the departing place of spirits on their final journey back to the spiritual homeland of Hawaiiki.

SITE NAME: WAIOTAHU ESTUARY

SITE NUMBER: ASCV-15

MAP SHEET: 27b

The site is located immediately adjacent to the Waiotahi Spit Historic and Scenic Reserve. The historical value of the spit relates to early Maori habitation which inextricably links the spit and estuary.

SITE NAME: WAIOEKA/OTARA ESTUARY

SITE NUMBER: ASCV-16

MAP SHEET: 27b, 28

The Opotiki Estuary provides a sheltered anchorage and has a long history of Maori occupation. It was an important early European coastal shipping port when settlement of Opotiki began in 1839. It is also the site of the grounding of the troop transport steamer "Huntress" on the river bar during the Volkner affair in 1865.

FIFTEENTH SCHEDULE
WHAKATANE HARBOUR
DEVELOPMENT ZONE
OUTLINE PLAN
1994-2004

S15.1 Introduction

This plan has been prepared by Whakatane District Council to be incorporated in the Environment Bay of Plenty, Bay of Plenty Regional Coastal Environment Plan (BOPRCEP). The Whakatane Harbour Development Zone Outline Plan 1994-2004 is intended to scope all currently anticipated future port developments.

S15.1.1 Future Development Considered

This harbour development zone outline plan considers possible new developments during the 10-year term of the Bay of Plenty Regional Coastal Environment Plan.

S15.1.1.1 Included in This Plan are the Following:

- Western Seawall
- Eastern Seawall
- New Boat Ramps
- Slipway
- Main Wharf Upgrade
- Jetties
- Capital Dredging
- Maintenance Dredging
- Spoil Disposal

Dimensions, areas and volumes are approximate.

Inclusion in the plan does not mean that works will be in the ten-year period. Any works proposed in this harbour development plan are subject to the coastal permit process under the Resource Management Act.

S15.2 Structures and Associated Reclamation

S15.2.1 Western Seawall

Providing an all-tide entrance to the Whakatane Harbour has for the past decade been a well researched and debated project.

S15.2.1.1 Location

From the Whakatane spit seaward in a northerly direction for up to 500 metres. The location is subject to engineering design, public consultation by Whakatane District Council prior to lodging an application for a coastal permit, and measures to avoid, remedy or mitigate adverse effects on the environment. Refer Maps 6, 7 and 8 of this schedule.

S15.2.1.2 Dimensions

A maximum width of three metres at the top of the structure and up to 30 metres in width on the ocean floor. The dimensions of a structure are dependent on the same factors itemised in section (S15.2.1.1) above. The height of the wall is subject to final design but will not be higher than 1 metre above mean high water springs.

S15.2.1.3 Materials of Construction

Reinforced concrete, caissons, rock, timber or combinations of these. The construction materials are determined by the strength requirements of the river and ocean environment, and the desired visual appearance. It should be noted that there would be localised "disturbance and deposition" of material as part of the bedding in of a seawall structure. The locations and quantities of such activities can be determined when the design is finalised. Disturbance and deposition will be minimised to protect the environment as much as is practical.

S15.2.1.4 Resultant Activities

An all-tide entrance to the Whakatane Harbour.

S15.2.1.5 Physical and Ecological Characteristics Affected

The location is at the harbour entrance which features a spit landform thought to have been formed prior to the Tarawera eruption (1886) but after the Kaharoa eruption of 1020 AD (Healy 1983). The spit is approximately 800 metres long and consists of a western end of two ridges (5-6 m high) and swales which are remnant transgressive parabolic dunes. Healy states that the tip and central ridge dune seem to be accreting and getting higher. Reclamation and more recently small river freshes, major floods and storms have had a major effect on the shape of the sandspit and channel. Modifications to the Whakatane Harbour have been undertaken since the early 1900's. Over the intervening years 72 acres of land has been reclaimed and harbour works have been completed including the eastern training wall and the closure of Orini Channel from the Rangitaiki River in 1903. Harbour works in the early years also included the partial removal of a reef, river training devices, blasting rocks and flood protection works in conjunction with the then Bay of Plenty Catchment Commission.

Flow records are available for the lower Whakatane River from 1957 to the present. These show that the mean river flow is approximately 55 cubic metres per second. River flows drop to 4 m³/s during severe "low flow" periods and reach 2,300 m³/s during 1 in 50 year floods (maximum recorded flood, 1970, 2,380 m³/s). The vegetation, geological, geomorphological and climatic characteristics of the catchment can create high flows and large loads of sediment. A key factor in the river's hydrology is the relatively high specific discharge (run-off expressed as litres/s per km²) and extreme flows that occur during periods of intense and prolonged rainfall in the upper catchment.

Tidal gaugings for Whakatane Harbour show that the peak tidal outflow occurs between 2½-3 hours after full tide and reaches a maximum flow of 155 m³/s (under moderate river flow conditions of 18 m³/s). For this flow, a maximum velocity of approximately 3.6 km/hour (1 metre per second) is produced over a period of two hours and velocities of 2.4 km/hour are produced over a 4 hour period. Accordingly, the tidal compartment of the Whakatane River is an important factor in maintaining the navigability of the harbour entrance during low and moderate river flow periods. Healy (1983) calculated that there had been a 35% reduction in the tidal prism since the 1940's due to reclamation and sedimentation. This loss of tidal prism has had a direct impact on the volumes and velocities of tidal flows and has affected the harbour entrance.

The level and contour of sand at the river mouth varies considerably under the influence of the river flows, tidal flows and sea action. Under normal river flows, a bar system forms at the entrance to the harbour. This bar increases under low river flows, reducing the water depth at the harbour entrance. During floods, the river breaks out between the sandspit and Turuturu Roimata. It substantially erodes the end of the sandspit and the bar system which generally reform within a few weeks of the flood. At times, particularly when river flow is low, the bar system prevents safe passage of boats to and from the harbour. Under these conditions the entrance is considered "unworkable". The average number of workable days (i.e. when the harbour was open) in the calendar months for 1980-1985 ranged from 20-25.

The marine habitat that would be covered by the training wall is largely sand which is very mobile and with the result of the vigorous wave climate and strong currents generated in the river entrance area. Bed levels vary from low intertidal to shallow sublittoral. Considerable sediment movements occurs and major changes in bed level occur in the proposed wall area and in the surrounding areas as a result of storm conditions or river floods. There are also small areas of bedrock exposed in the proposed wall area. More extensive rock is exposed in several places immediately west of the proposed training wall and at Turuturu Roimata and Central Rock.

The extreme mobility of the sandy sediment in the vicinity of the proposed wall results in their being little possibility of long-term populations of benthic fauna becoming established. Although it is possible that populations of mobile crustacean fauna such as amphipods and isopods could become established during time periods, such populations would not be permanent.

The biota on intertidal rock surface in the vicinity of the proposed training wall is dominated by barnacles, small black mussels and algae. The lower intertidal and shallow subtidal rock surfaces are subject to considerable sand scour and burial and populations of organisms in such areas are usually transient. It is possible that small numbers of green lipped mussels appear on the rocks near the proposed training wall at times.

In areas unaffected by sand scour or sand burial the rocky habitats in the vicinity of the proposed wall support high densities of common attached organisms. The habitat of the rock on the western side of the harbour entrance are of lower biological value than the rocky habitats to the east of the harbour entrance towards Kohi Point.

The open sandy area at the end of the sandspit is used as a high tide bird roosting area. Species which regularly roost in the area include black-backed gulls, red-billed gulls, pied stilt, variable oystercatcher, south island pied oyster catcher and white-fronted tern. The tidal flats are used by gulls, oyster catchers, shags and ducks.

Source

Whakatane Harbour Western Training Wall Environmental Impact Assessment, May 1986.

Whakatane Harbour Management Development Plan, 1988.

S15.2.1.6 Physical and Ecological Effects

- If birds are disturbed during construction phase they will roost further to the west.
- A seawall structure will interrupt the littoral drift along the coastline and result in a build up of sand on the ocean western side of a structure. This will reduce the visual impact of a structure as seen from Piripai Beach.
- In the short-term the localised marine organisms on rock outcrops may be covered.
- Rock surfaces of a wall increase the area of rocky intertidal and shallow sublittoral habitat available for colonisation. The rock wall organisms will probably be food resources and shelter for a variety of fish species.
- Increase in commercial and recreational boating, activity across the bar. The structure may be used as a roosting area.
- Possible erosion of intertidal sands immediately south to the end of the spit but it is noted that existing habitats in this area are highly mobile sand with no permanent biota.
- A change to the visual character of the harbour entrance is anticipated. The significance of this change can only be determined following the analysis of the final decision of the structure.

S15.2.1.7 Means to be Used to Avoid, Remedy and/or Mitigate these Likely Effects

- To limit the construction period to avoid the nesting time of protected birds. If construction access is via the spit then during construction the provision of warning signs for heavy traffic on Bunyan Road.
- Establishment and maintenance of a flood relief channel over the spit to accommodate extreme flood flows.
- If the wreck "Welcome" is uncovered during construction then the NZ Historic Place Trust would be notified to allow a survey and photographs to be taken.
- Whakatane District Council will undertake consultation with parties who have an interest in the proposal.
- As an off-site mitigation measure Whakatane District Council may if appropriate improve the appearance of the existing eastern training wall.
- Conditions can be placed in the construction contract documents to ensure that environmental damage is minimised.

S15.2.2 Eastern Seawall

S15.2.2.1 Location

On the town side of the Whakatane River from the existing eastern training wall in a seaward direction to Koakaroa rock. Refer Map 7 of this schedule. The location is subject to engineering design, public consultation by Whakatane District Council prior to lodging an application for a coastal permit, and measures to avoid, remedy or mitigate adverse effects on the environment.

S15.2.2.2 Dimensions

The eastern seawall could occupy the full length of the shorelines as described above or be part or parts of the area. The structure could be a maximum of three metres wide at the top of the structure and up to 30 metres in width on the ocean floor.

S15.2.2.3 Materials of Construction

Reinforced concrete, caissons, rock, timber or combinations of these. The construction materials are determined by the strength requirements of the river and ocean environment and the desired visual appearance.

It should be noted that the construction materials are determined by the design strength desired relative to the river and ocean flows, and the desired visual appearance. There would be localised "disturbance and deposition" of material as part of the bedding in of a seawall structure. The locations and quantities of such activities can be determined when the design is finalised. Disturbance and deposition will be minimised to protect the environment as much as is practical.

S15.2.2.4 Resultant Activities

All tide entrance to the Whakatane Harbour.

S15.2.2.5 Physical and Ecological Characteristics Affected

The habitat is thought to be typical rocky shore intertidal area which in its most northern points is affected by the ocean currents and eastward littoral draft of sand. Rock habitats towards Kohi Point extend to greater depth and there is more habitat that is not subject to sand scour and sand burial to the same degree as it is on the western side of the entrance. Near the harbour entrance barnacles, small black mussels and algae can be found. A number of species of fish inhabit the harbour at various stages of the year including snapper, kahawai, eel, whitebait, spottys and flounder.

The site is influenced by the river freshes, major floods and storms that have been described in section S15.2.1.5.

S15.2.2.6 Physical and Ecological Effects

- Construction phase will destroy the local intertidal habitat and roosting birds may move to adjacent areas.
- The construction phase would increase heavy traffic in Muriwai Drive and impact on the public carpark turnaround area and foreshore recreation activities.
- Increase in commercial and recreational boating activity across the bar because of a deeper entrance.

- A change in the visual character of the harbour entrance would occur. The significance of this change can only be determined following the analysis of the final design of the structure.
- There may be a marginal increase in flood levels.

S15.2.2.7 Means to be Used to Avoid, Remedy and/or Mitigate these Likely Effects

- Whakatane District Council will undertake consultation with parties who have an interest in the proposal.
- Take particular care with the visual appearance and maintenance of the seawall where it is adjacent to the public road and carpark areas.
- Conditions can be placed in construction contract documents that ensure that the damage to the intertidal habitat is minimised.

S15.2.3 New Boat Ramps

S15.2.3.1 Location

New boat ramps may be constructed and operated as required by public demand on the town side of the Whakatane River within the Harbour Development Zone.

S15.2.3.2 Dimensions

At this stage the width of boat ramps will allow as a maximum, dual launching of craft.

S15.2.3.3 Materials of Construction

Construction is most likely to be of reinforced concrete, rock, or combinations of these materials.

It should be noted that there would be localised “disturbance and deposition” of material as part of the construction process placing the ramp into the seabed. Any disturbance and deposition will be minimised to protect the environment as much as is practical.

S15.2.3.4 Resultant Activities

Boat ramps will provide the public with additional locations to safely launch small craft into the harbour.

S15.2.3.5 Physical and Ecological Characteristics of the Area to be Affected

The physical and ecological characteristics of this area are considered to be similar to those described in S15.2.2.5.

S15.2.3.6 Physical and Ecological Effects

Localised loss of intertidal habitat which will recolonise around the structure on completion.

S15.2.3.7 Means to be Used to Avoid, Remedy and/or Mitigate these Likely Effects

- Conditions can be placed in construction contract documents that ensure that the damage to the intertidal habitat is minimised.
- Whakatane District Council will undertake consultation with parties who have an interest, prior to lodging an application for a coastal permit.

S15.2.4 Slipway

S15.2.4.1 Location

The slipway would be built in association with a dry boat storage facility. Council's preferred site is to the west of the existing Sports Fishing Club rooms and wharf storage area. See Map 2 of this schedule.

S15.2.4.2 Dimensions

The dimensions of the structure will depend on the type of boat lifting, devices selected. This is unlikely to exceed an area of 20 metres by 6 metres for the boat lifter and a similar area for the slipway.

S15.2.4.3 Materials of Construction

These are yet to be determined but are likely to include concrete foundations and/or piles, steel work and rock.

As with the boat ramps there would be localised disturbance and deposition of material during construction and this will be minimised to ensure protection of the environment.

S15.2.4.4 Resultant Activities

The associated dry boat storage area is considered a long term plan given the limited availability of moorings in the river and the finite length of wharfage.

The advantages of dry boat storage include – charges are generally lower than wet berth charges, there is a reduction in the need for regular anti-fouling painting, of the underwater section of hulls, and owners do not need boat trailers or cars capable of towing.

The type of dry boat storage system is generally governed by the type and size of boat and the type and capacity of the boat launching/recovery system e.g. ramps and straddle carriers, forklifts, jib cranes or boat lifts.

The slipway would be available for boat repair work and this would be a new service to the public.

S15.2.4.5 Physical and Ecological Characteristics Affected

The physical and ecological characteristics of this area are considered to be similar to those described in section S15.2.2.5.

S15.2.4.6 Physical and Ecological Effects

- There may be adverse noise, smell and perhaps visual effects.
- Contaminants from repair work could seep into the harbour.

S15.2.4.7 Means to be Used to Avoid, Remedy and/or Mitigate These Likely Effects

The slipway would be constructed with measures to contain and treat waste materials prior to disposal, prior to lodging an application for a coastal permit.

- Whakatane District Council will undertake consultation with parties who have an interest in the proposal.
- Conditions can be placed in construction contract documents that ensure environmental damage is minimised.
- The operation of the facilities will be controlled so that washdown water is screened before discharge to the harbour waters.
- Noise will be controlled in accordance with the District Plan provisions.

S15.2.5 Main Wharf Upgrade (Commercial) (Map 2)**S15.2.5.1 Location**

Main Whakatane Wharf.

S15.2.5.2 Dimensions and Scope of Work

Maximum 200 metre x 10 metre reinforced concrete wharf platform, as replacement of existing timber piled jetty and landing structure.

S15.2.5.3 Materials of Construction

Reinforced concrete, steel sheet piling, rock fill and timber fendering.

S15.2.5.4 Resultant Activities

The proposal will consolidate commercial wharf activity and provide additional loading/off loading facility. Vehicle access will be improved with additional parking and manoeuvring space. Hardstand will be created for related purposes.

S15.2.5.5 Physical and Ecological Characteristics of the Area to be Affected

The location is highly modified foreshore/seabed. The hydrological conditions in this area are considered to be similar to those described in section S15.2.2.5.

The modified foreshore and seabed has been recolonised by the intertidal and marine species described in the previous subsections.

S15.2.5.6 Physical and Ecological Effects

- Higher level of wharf activity – noise, vehicle numbers, and general industrial activity.
- Minor loss of access to seabed/foreshore.

S15.2.5.7 Means to be Used to Avoid, Remedy and/or Mitigate Those Likely Effects

- Fencing, planting buffer areas.
- Enhancement of adjacent waterfront by landscape development.

- Conditions can be placed on construction contract documents that ensure environmental damage is minimised.
- Whakatane District Council will undertake consultation with parties who have an interest in the proposal, prior to lodging an application for a coastal permit.

S15.2.6 Launching Ramp Jetty Extension

S15.2.6.1 Location

Immediately downstream of launching ramps at Big Game Wharf. Refer Map 1 of this schedule.

S15.2.6.2 Dimensions

40 metres x 10 metres (surface area) timber piled jetty with timber deck.

S15.2.6.3 Materials of Construction

Timber piles, decking and fendering.

S15.2.6.4 Resultant Activities

Additional berthage, improved waterfront access.

S15.2.6.5 Physical and Ecological Characteristics of the Area to be Affected

The location is modified (rock protection) foreshore/seabed. The hydrological conditions in this area are considered to be similar to those described in section S15.2.2.5. The proposal offers recreational opportunity and emergency berthage.

S15.2.6.6 Physical and Ecological Effects

Reduced seascape vista – when vessels berthed at jetty.

S15.2.6.7 Means to be Used to Avoid, Remedy and/or Mitigate Those Likely Effects

- Used as emergency berthage only.
- Increased recreational opportunity.
- Conditions can be placed on construction contract documents that ensure environmental damage is minimised.
- Whakatane District Council will undertake consultation with parties who have an interest in the proposal, prior to lodging an application for a coastal permit.

S15.2.7 Landing Jetty

S15.2.7.1 Location

Approximately 200 metres upstream of the Wairere Stream on the town side of the river. Refer Map 3 of this schedule.

S15.2.7.2 Dimensions

It is anticipated that the jetty would be 30 metres long and 10 metres wide to enable two craft to berth at any one time.

S15.2.7.3 Materials of Construction

Reinforced concrete construction.

S15.2.7.4 Resultant Activities

The landing jetty would provide for the off loading and loading of provisions and passengers in a location that is closer to the Whakatane commercial area.

S15.2.7.5 Physical and Ecological Characteristics of the Area to be Affected

The location is highly modified foreshore/seabed. The hydrological conditions in this area are considered to be similar to those described in S15.2.2.5.

S15.2.7.6 Physical and Ecological Effects

- Minor loss of access to seabed/foreshore.
- Alleviates congestion at main wharf.

S15.2.7.7 Means to be Used to Avoid, Remedy and/or Mitigate Those Likely Effects

- Whakatane District Council will undertake consultation with parties who have an interest in the proposal, prior to lodging an application for a coastal permit.
- Conditions can be placed on construction contract documents that ensure environmental damage is minimised.

S15.3 Dredging

S15.3.1 Capital Works Dredging

Capital works dredging is proposed by the Whakatane District Council in the role as the Port Authority for Whakatane. This capital works dredging will comprise deepening of the areas adjacent to the wharf and establishment of a deep water channel out to the Heads.

S15.3.1.1 Location and Quantities

The location of the areas to be dredged is shown on Maps 4 and 5 of this schedule, attached. The figure shows the approximate areas and quantities.

The total volume of the capital dredging is not expected to exceed 100,000 cubic metres.

S15.3.1.2 Characteristics of Material to be Dredged

Site investigation work would be carried out in preparation for any capital dredging campaign. Investigations would seek to determine:

- the grading and material identification of the materials to be dredged,
- the chemical characteristics of the materials,
- the biological characteristics of the materials,
- the disposition of the various materials within the areas to be dredged.

S15.3.1.3 Characteristics of the Areas to be Dredged

The investigation of the areas to be dredged would also seek to obtain information relating to the areas, namely:

- biological survey of the sites and immediate surroundings,
- tide and current systems in operation in the areas,
- proximity of the sites to other sensitive areas.

Refer to Section 2 *Whakatane Harbour Management Development Plan* 1988.

S15.3.1.4 Identification of Likely Adverse Effects

Adverse effects which could arise from the dredging activities would be assessed. The likely effects that could be expected would be interference to benthic communities near the dredging areas, removal of the benthic communities at the dredge site, noise, turbidity, sedimentation and possibly hydraulic changes within the harbour system.

S15.3.1.5 Mitigation of Adverse Effects

Mitigation of adverse effects could be considered such as:

- selection of dredging procedures that will minimise the disturbance to the environment,
- control of machinery noise,

- nourishment of local beach systems where the dredged material is suitable for this,
- use of silt retention structures to limit transport of sediment raised by the dredging activities,
- Whakatane District Council undertaking consultation with parties who have an interest in the proposal, prior to lodging an application for a coastal permit.

S15.3.1.6 Maintenance Dredging

Maintenance dredging is proposed by the Whakatane District Council in the role as the Port Authority for Whakatane. Maintenance dredging works will involve periodic removal of sediments from the area adjacent to the wharf and the deep water channel out to the Heads.

S15.3.1.7 Location and Quantities

The location of the areas to be dredged is shown on Map 4 of this schedule, attached. The figure shows the approximate areas and quantities.

The total volume of maintenance dredging is expected to be in the range of 25,000 to 50,000 cubic metres per year once the capital dredging programme is complete.

S15.3.1.8 Characteristics of Material to be Dredged

Site investigation work would be carried out in preparation for the maintenance dredging campaigns. It is expected that the material to be dredged would be substantially river bed load material, deposited during the natural operation of the estuary. The material is expected to be more consistently finely grained than the existing materials, which are a mixture of clean sand and silt sediments. Investigations of the material would seek to determine:

- the grading and material identification of the materials to be dredged,
- the chemical characteristics of the materials,
- the biological characteristics of the materials,
- the disposition of the various materials within the areas to be dredged.

S15.3.1.9 Characteristics of the Areas to be Dredged

The characteristics of the areas to be maintained will have already been established during the capital dredging phase. Some monitoring of the areas will be carried out to ensure that any changes to these characteristics are occurring as expected. The investigation of the areas to be dredged could include re-valuation of:

- biological survey of the sites and immediate surroundings,
- tide and current systems in operation in the area.

Refer to Section 2 *Whakatane Harbour Management Development Plan 1988*.

S15.3.1.10 Identification of Likely Adverse Effects

The sites, having been modified as part of the capital campaign are not expected to be sensitive to maintenance dredging.

Adverse effects could arise from re-suspension of finer sediments and increase, in general turbidity levels. Again construction noise could become an issue.

S15.3.1.11 Mitigation of Adverse Effects

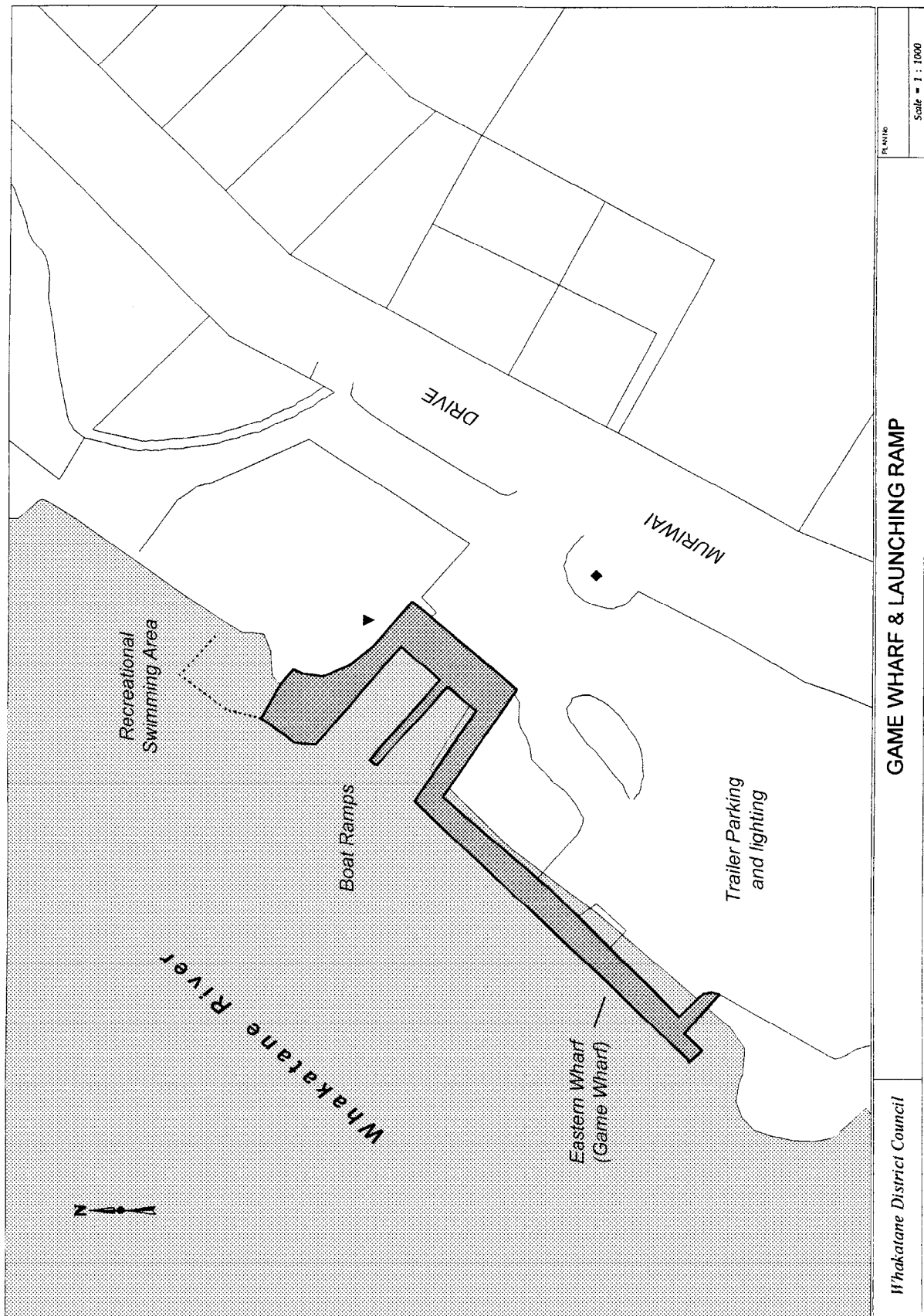
Mitigation of adverse effects could be considered such as:

- selection of dredging procedures that will minimise the disturbance to the environment,
- control of machinery noise,
- use of silt retention structure to limit transport of sediment raised by the dredging activities.

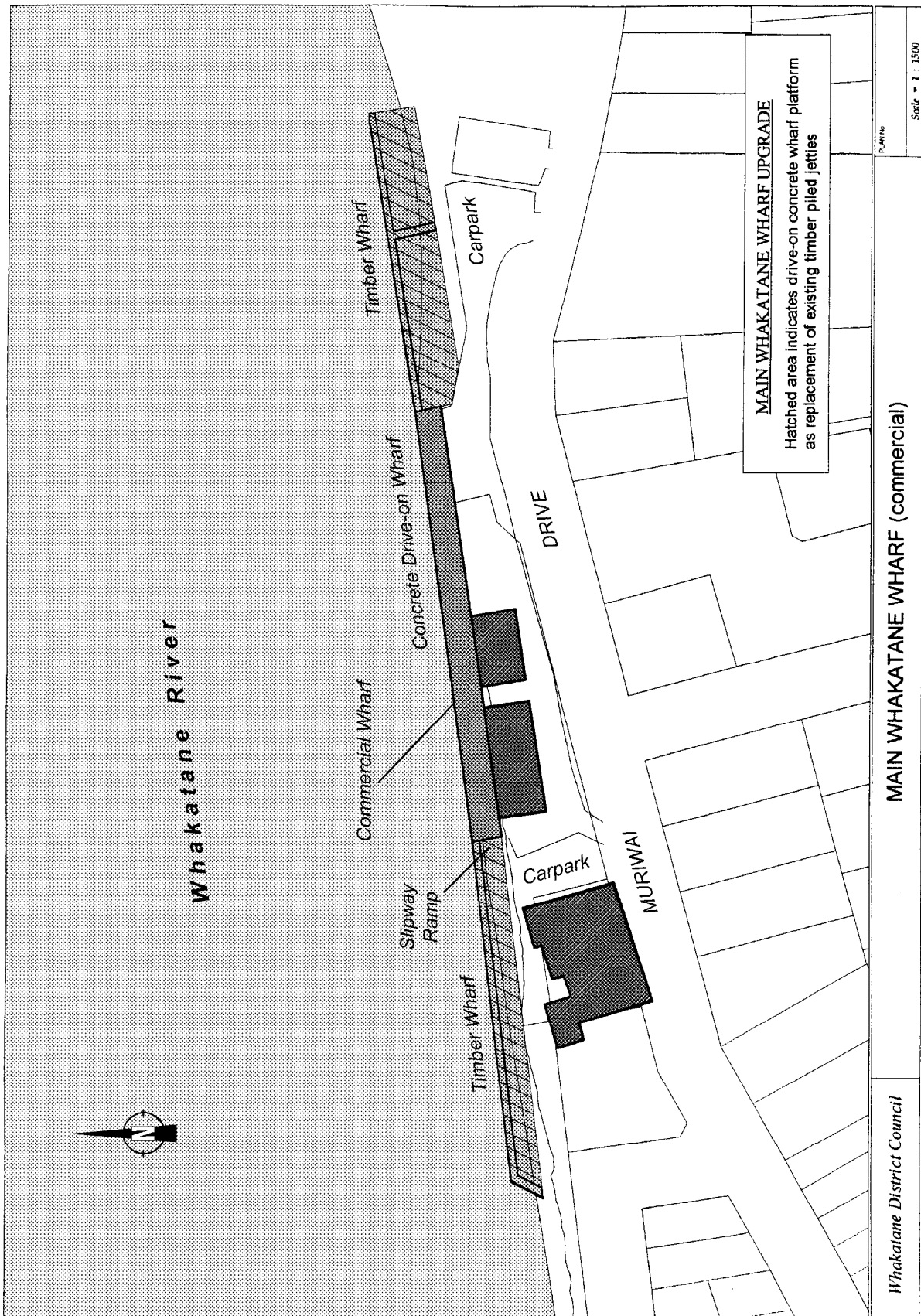
S15.3.2 Disposal of Dredged Material

Sites for the disposal of the dredged material will be considered. These will include onshore and offshore sites. As it is likely that a substantial volume of the material will be clean sand, beach replenishment should be considered to minimise effects on the overall littoral drift. Offshore disposal will only be considered where the material to be dredged is sand.

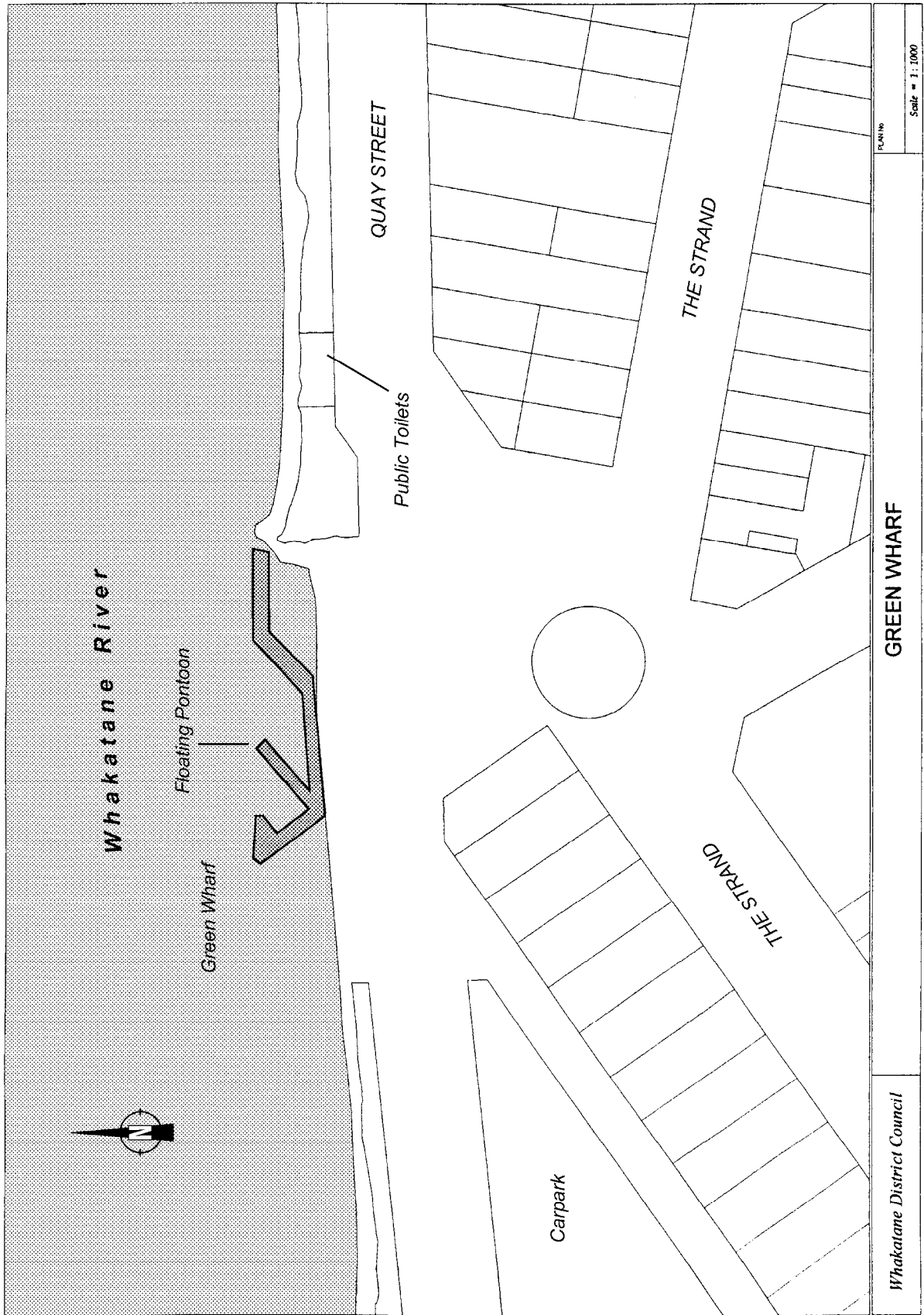
Onshore disposal will include consideration of upland and near shore or coastal fringe options. While studies of the disposal of dredged material have not been carried out, there is one site at the Bennett Rock, Bunyan Road which has been identified which can accept large quantities of material, is close to the harbour fringe and will benefit from the additional material.



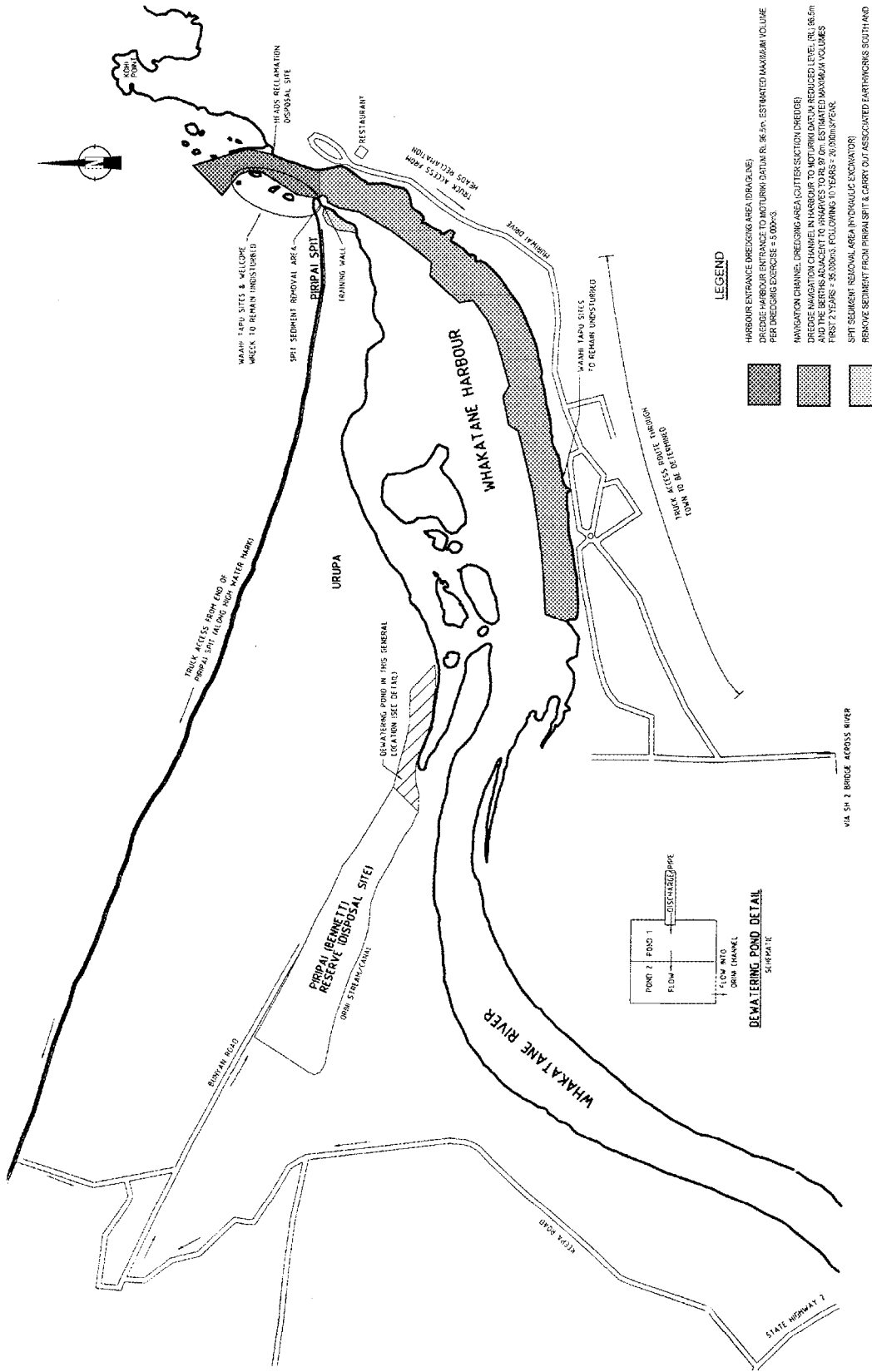
Map 1



Map 2



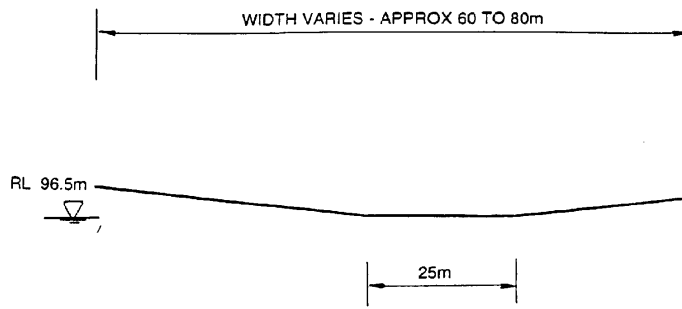
Map 3



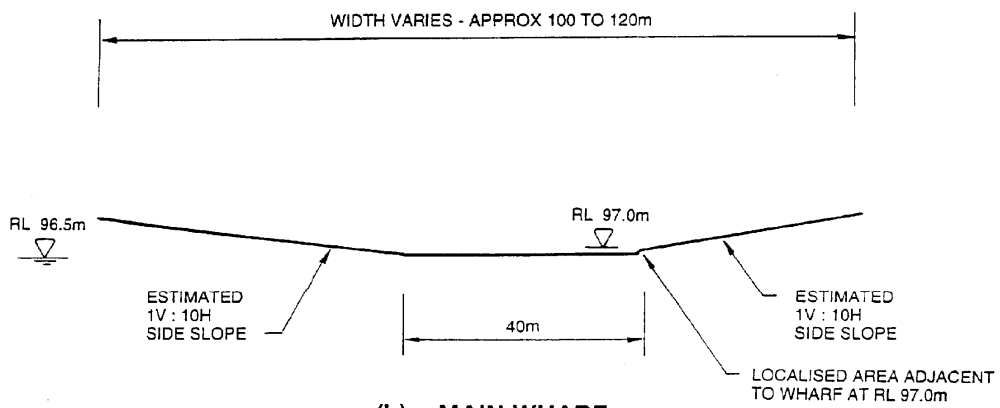
Map 4

Dredging and Deposition Areas - Whakatane Harbour
Figure 5.1

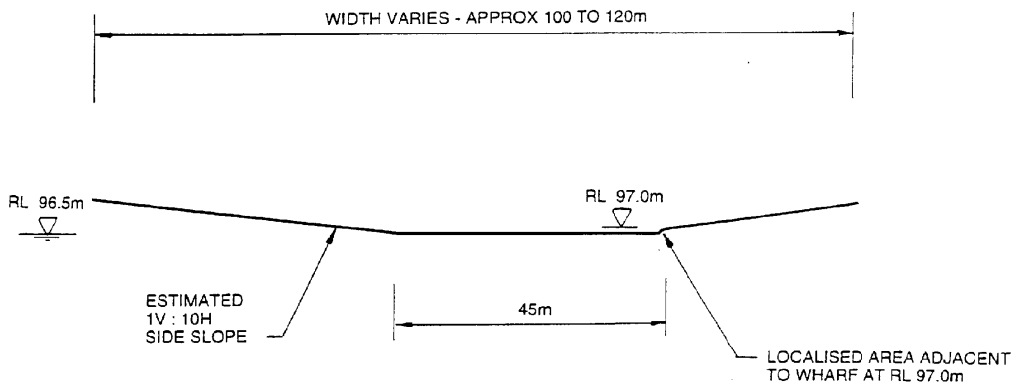




(a) HARBOUR CHANNEL



(b) MAIN WHARF



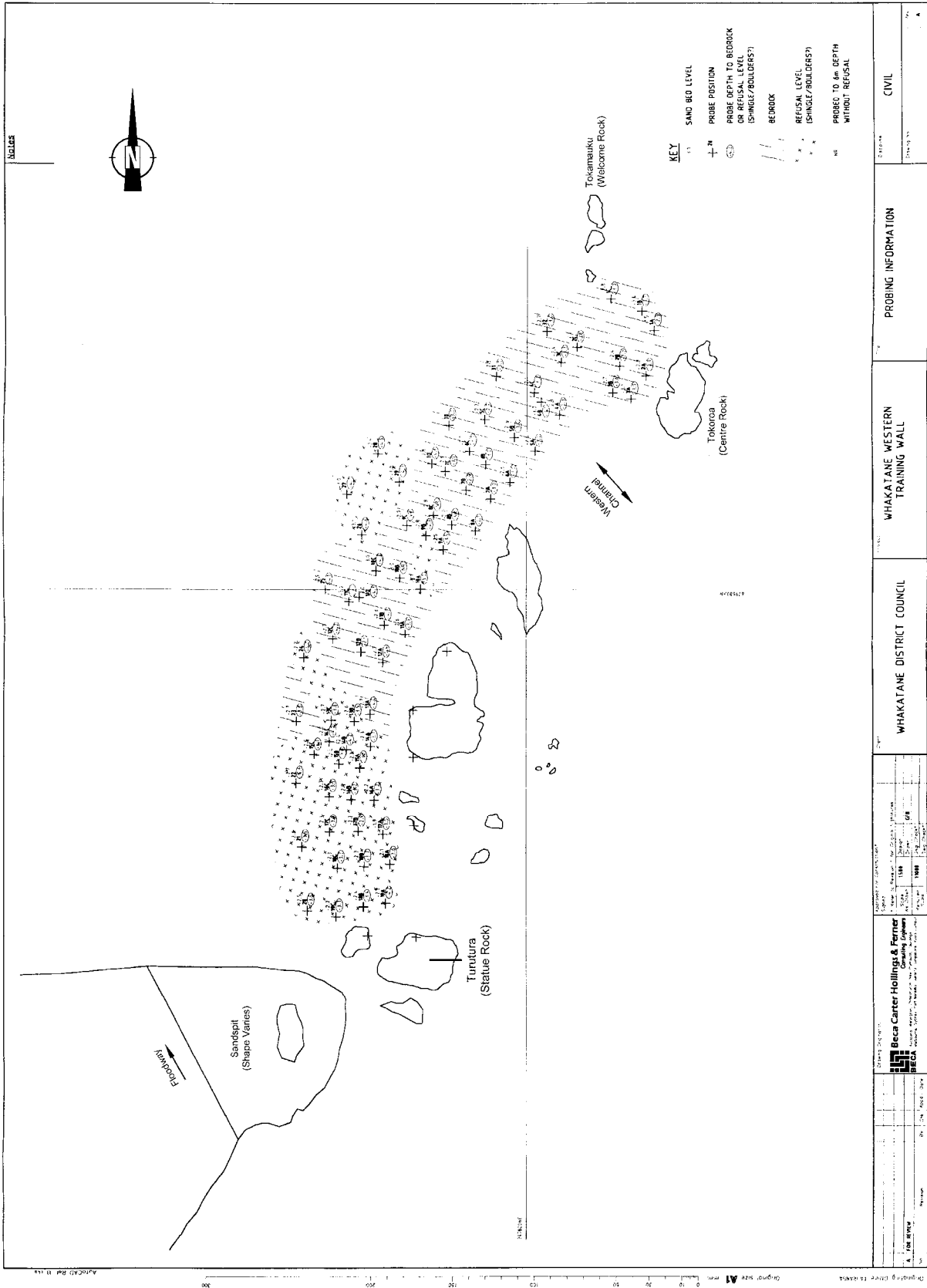
(c) GAME WHARF



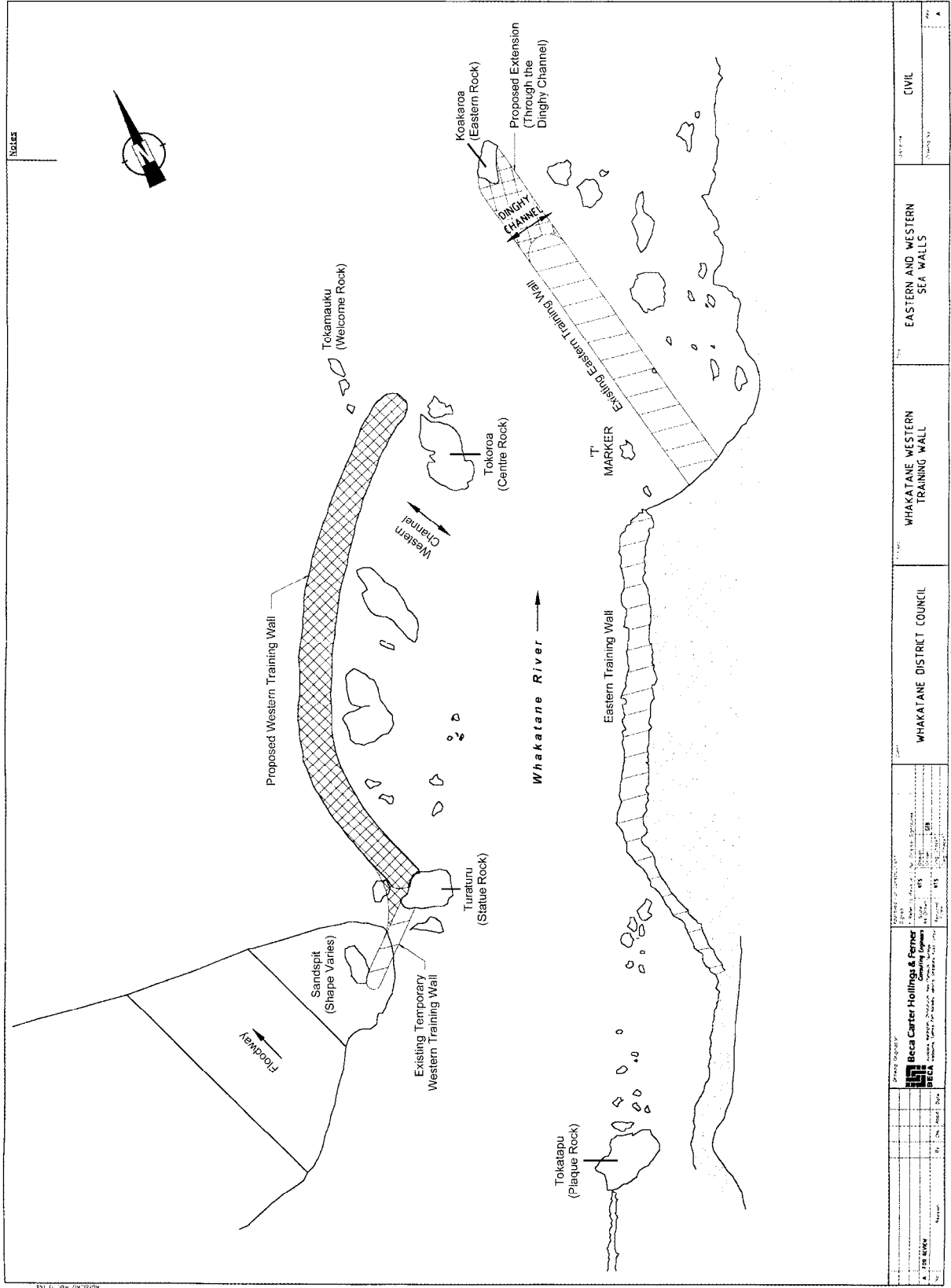
Not to Scale

Navigation Channel Cross Sections

Map 5

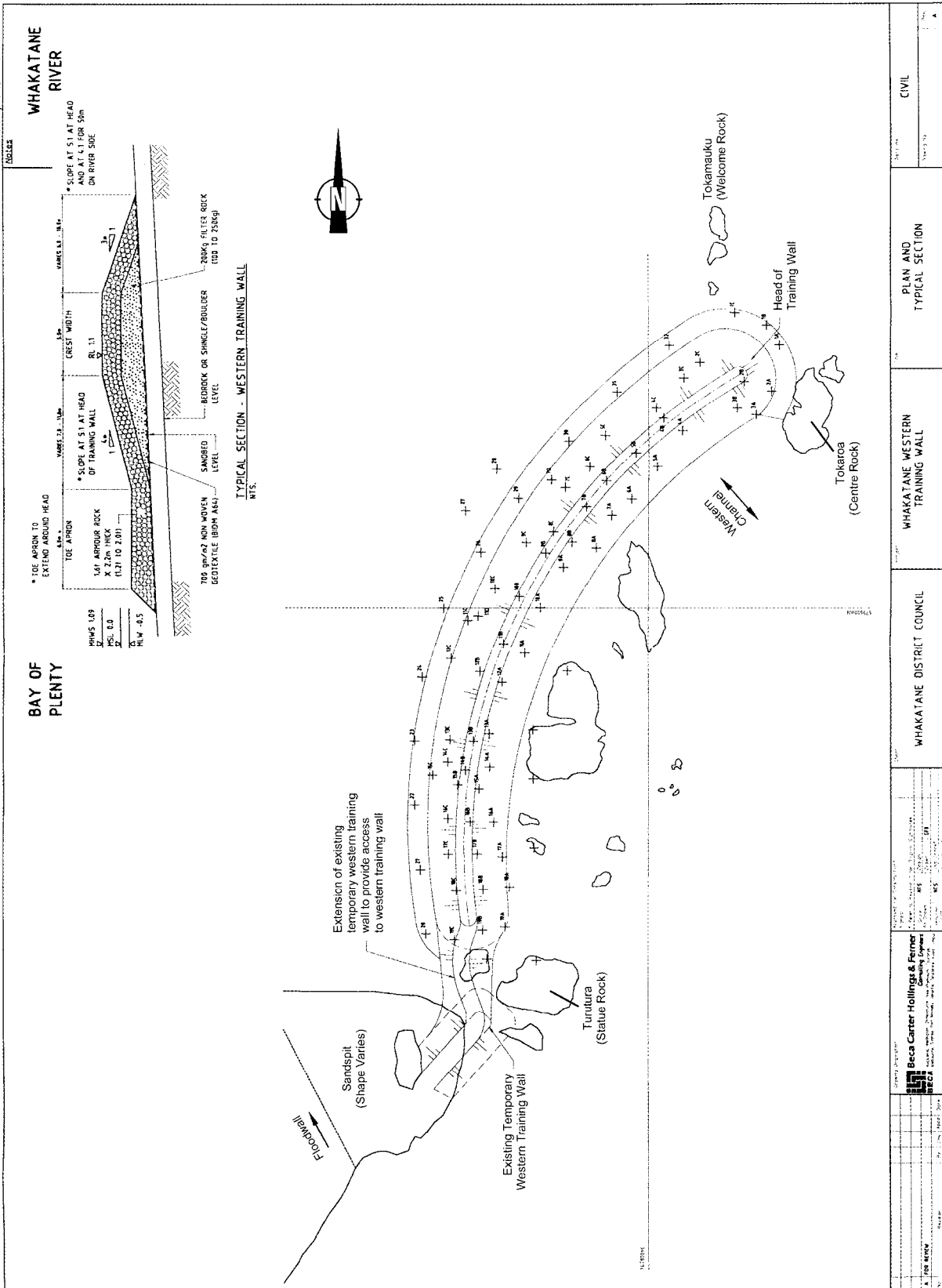


Map 6



<p>Project: Whakatane Harbour Training Walls</p> <p>Client: Whakatane District Council</p> <p>Scale: 1:500</p> <p>Date: 1 July 2003</p> <p>Author: [Name]</p> <p>Checked: [Name]</p> <p>Approved: [Name]</p>	<p>Whakatane District Council</p>	<p>Whakatane Western Training Wall</p>	<p>Eastern and Western Sea Walls</p>	<p>Civil</p>
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Map 7



Map 8

SIXTEENTH SCHEDULE
BAY OF PLENTY REGION
IWI AUTHORITIES
AND TRIBAL RUNANGA

The following is a list of Iwi Authorities and Tribal Runanga in the Bay of Plenty Region. The list is not exclusive of other iwi authorities, tribal runanga and other similar such organisations which may exist in the region.

	Iwi Authority/Tribal Runanga	Main Waka	Major River and Lake Catchments
1	Hauraki Maori Trust Board	Tainui	Western Tauranga Harbour Catchment
2	Ngaitai Iwi Authority	Tainui	Torere River, Waiiti Stream
3	Ngaiterangi Iwi Incorporation	Mataatua	Wairoa, Tauranga Harbour and Matakana Island
4	Ngati Pukenga Iwi Ki Tauranga	Mataatua	Eastern Tauranga Harbour and Waitao Stream
5	Ngati Ranginui Iwi Society	Takitimu	Wairoa and Eastern Tauranga Harbour
6	Ngati Whare Iwi Runanga	Mataatua	Whirinaki
7	Tapuika Iwi Authority	Te Arawa	Kaituna and Waihi Estuary
8	Tauranga Moana Maori Trust Board	Mataatua	Wairoa and Tauranga Harbour Catchment
9	Te Arawa Maori Trust Board	Te Arawa	Rotorua Lakes, Kaituna, Tarawera, Waihi Estuary and Pikowai
10	Te Runanga o Ngati Manawa	Mataatua	Rangitaiki, Wheao and Lower Whirinaki
11	Te Runanga o Ngati Pikiāo	Te Arawa	Rotorua Lakes and Kaituna
12	Te Runanga o Ngati Rangiteaorere	Te Arawa	Rotorua Lakes and Kaituna
13	Te Runanga o Te Ure o Uenukukopako	Te Arawa	Rotorua Lakes and Kaituna
14	Te Runanga o Ngati Awa Trust	Mataatua	Western Ohiwa Harbour, Rangitaiki, Whakatane and Lower Tarawera
15	Te Runanga o Ngati Rangitihi	Te Arawa	Rotorua Lakes, Kaituna and Tarawera
16	Te Runanga o Te Whanau Tribal Authority	Mataatua	Raukokore and Motu
17	Te Runanga o Tuwharetoa Ki Kawerau	Te Arawa	Tarawera
18	Te Whanau a Te Ehutu Iwi Authority	Mataatua	Raukokore and Motu
19	Tuhoe Waikaremoana Maori Trust Board	Mataatua	Rangitaiki, Whakatane and Ohiwa
20	Tuhourangi Runanga a Iwi	Te Arawa	Rotorua Lakes and Kaituna
21	Tuwharetoa Maori Trust Board	Te Arawa	Rangitaiki
22	Whakatohea Maori Trust Board	Mataatua	Eastern Ohiwa Harbour, Otara and Waioeka

GLOSSARY OF TERMS

Glossary of Terms

Aquaculture: Is the complete or partial use of land based or nearshore facilities for:

- 1 The production of commercially harvestable quantities of a species or
- 2 The intentional enhancement of natural stocks. This excludes the direct harvesting of natural stocks.

Act: Unless the context otherwise requires, Act means the Resource Management Act 1991.

Active Beach System: For the purpose of the rules in this plan, the active beach system is that area on the open coast between the 8.5 metre bathymetric contour and mean high water springs. For the purpose of the policies in this plan, the active beach system is that area on the open coast between the 8.5 metre bathymetric contour and the rear of the foredune.

Adverse Effect: An unwanted or detrimental effect.

Amenity Values: Refer to section 2 of the Resource Management Act 1991.

Ancestral: Of or inherited from ancestors.

Annual Plan: A mandatory document to be produced by local authorities outlining significant policies and objectives, the nature and scope of significant activities to be undertaken, performance targets and measures by which performance may be judged in relation to the objectives, and costs involved and funds available.

Anticipated Environmental Result: The intended result or outcome on the environment as a consequence of implementing the policy or policies and methods of implementation. It provides a means of assessing the success of the policies and methods.

ANZECC: Australian and New Zealand Environment and Conservation Council.

ASCH: Area sensitive to coastal hazards.

Ballast Water: Is water that is pumped on board a ship prior to sailing to permit the ship to float at its proper height and to provide added stability for the ship during its voyage.

Bay of Plenty Regional Council: Environment Bay of Plenty.

Bed: Refer to section 2 of the Resource Management Act 1991.

Benthic: Referring to organisms living in or on the sediments of aquatic habitats (lakes, rivers, ponds, the sea etc).

Best Practicable Option: Refer to section 2 of the Resource Management Act 1991.

BOPRCEP: Bay of Plenty Regional Coastal Environment Plan.

Catchment: The total area from which a single river collects surface runoff.

CMA: Coastal marine area.

Coastal Marine Area: Refer to section 2 of the Resource Management Act 1991.

Consent: A resource consent obtained subject to the provisions of this Plan and the Act.

Conservation Management Strategy: A management strategy prepared for the management of land and biological resources under Department of Conservation control.

- Conservation Covenants:** A legal agreement for conservation purposes.
- Contaminant:** Refer to section 2 of the Resource Management Act 1991.
- Controlled Activity:** Refer to section 2 of the Resource Management Act 1991.
- Councils:** The regional and district councils.
- Covenants:** Binding agreements or contracts usually registered on the land title.
- Criteria:** Standards by which something may be judged or assessed.
- Discharge:** Refer to section 2 of the Resource Management Act 1991.
- Discretionary Activity:** Refer to section 2 of the Resource Management Act 1991.
- District Council:** A district council constituted under Part IA of the Local Government Act 1974.
- District Plan:** Refer to section 2 of the Resource Management Act 1991.
- Ecology:** The study of the interrelationships between organisms and their natural environment, both living and non living (Dictionary of Biology 1985).
- Ecosystem:** Refer to section 2 of the Resource Management Act 1991.
- Effect:** Refer to section 3 of the Resource Management Act 1991.
- Effluent:** A complex waste material (e.g. liquid industrial discharge or sewage) that may be discharged into the environment.
- Environment:** Refer to section 2 of the Resource Management Act 1991.
- Environment Bay of Plenty:** The Bay of Plenty Regional Council.
- Environs:** The surrounding area.
- Esplanade Reserves:** Refer to section 2 of the Resource Management Act 1991.
- Esplanade Strip:** Refer to section 2 of the Resource Management Act 1991.
- Estuary:** A broad tidal area associated with a river where there is a mixing of saline and fresh water.
- Explanation/Principal Reasons:** The main reasons for which objectives, policies and methods of implementation have been set.
- Extraction:** Removal or separation.
- Fauna:** All the animal life of a given place or time.
- Flora:** All the plant life of a given place or time.
- Foreshore:** Refer to section 2 of the Resource Management Act 1991.
- Guidelines:** Principles to be used when undertaking an activity. They are designed to minimise the activity's negative effects on the environment.
- Hapu:** Section of large tribe or secondary tribe.
- ICOMOS:** International Council on Monuments and Sites.
- Inter-tidal:** Within the tidal range.

Intrinsic Values: Refer to section 2 of the Resource Management Act 1991.

IPCC: Intergovernmental Panel on Climate Change.

IUCN: International Union on the Conservation of Nature.

Iwi: Tribe or grouping of people, usually with a common ancestor.

Kaitiaki: A person or agent who cares for taonga; may be spiritual or physical. Guardian, steward, but the meaning of kaitiaki in practical application may vary between different hapu and iwi.

Kaitiakitanga: Refer to section 2 of the Resource Management Act 1991.

Land: Refer to section 2 of the Resource Management Act 1991.

Landfill: A waste disposal site used for the controlled deposit of solid wastes onto and into the land.

Landscape: An area of scenery.

Local Government: Regional and district councils.

Mahinga Mataitai: Refer to section 2 of the Resource Management Act 1991.

Maimai: Hunting blinds.

Mana: Effective customary authority or prestige.

Marine Protected Area: Marine areas that are protected under various pieces of legislation, in particular the Marine Reserves Act and the Fisheries Act.

Mauri: The essential life force or principle.

Mean High Water Springs: The average line of spring high tide.

Method of Implementation: The procedure or course of action to be followed, in accordance with the policies, to achieve the objective, detailing what is to be done, by whom and when.

MHWS: Mean high water springs.

Mitigate: In relation to an effect means to lessen or eliminate the severity or incidence of an effect, and includes compensation both before and after the effect.

Moturiki datum: Sea level, as defined at Moturiki Island, Mount Maunganui, from which heights are measured.

MSA: Maritime Safety Authority.

Natural and Physical Resources: Refer to section 2 of the Resource Management Act 1991.

Natural Environmental Regional Monitoring Network: A monitoring programme initiated by the Regional Council in 1990 for the analyses of the region's freshwater, coastal and estuarine ecology, water quality and water quantity.

Natural Hazard: Refer to section 2 of the Resource Management Act 1991.

Navigational Aid: Refer to the Maritime Transport Act 1994.

NERMN: Natural Environmental Regional Monitoring Network.

Network Utility Operator: Refer to section 166 of the Resource Management Act 1991.

New Zealand Coastal Policy Statement: A statement issued under section 57 of the Act.

Noise: Refer to section 2 of the Resource Management Act 1991.

Non-Complying Activity: Refer to section 2 of the Resource Management Act 1991.

Nutrient: Providing or contributing to nourishment.

NZCPS: New Zealand Coastal Policy Statement.

Organism: Any living animal or plant; anything capable of carrying on life processes.

Permitted Activity: Refer to section 2 of the Resource Management Act 1991.

Personal Watercraft: Includes but is not limited to personal watercraft, wet bikes and wave runners.

Point Source: An identifiable source or outlet.

Point Source Discharges: A discharge from a specific and identifiable outlet, onto or into land, air, a water body or the sea.

Pollution: Discharges of a contaminant that adversely affects the characteristic of the receiving environment.

Precautionary Approach: The ability to manage activities can be hindered by a lack of understanding about environmental processes and the effects of activities. Therefore an approach that is precautionary but responsive to increased knowledge is required. Although those intending to undertake activities seek certainty about what will be required of them, when there is little information as to the likely effects of those activities, public authorities are obliged to consider such activities on a case by case basis. In regional and district plans, such activities should be provided for as discretionary or non-complying. Any resource consent granted in such circumstances should be subject to whatever terms and conditions are necessary to avoid the possibility of serious and irreversible adverse effects on the environment that would not otherwise be remedied or mitigated.

Prohibited Activity: Refer to section 2 of the Resource Management Act 1991.

Public Works: Refer to section 2 of the Resource Management Act 1991.

Region: The Bay of Plenty Region. Comprises the area delineated on S.O. Plan No. 58080 deposited with the Chief Surveyor of the South Auckland Land District (The New Zealand Gazette on Thursday, 8 June 1989. Orders in Council for Local Government Reorganisation. Wellington: Tuesday, 13 June 1989 – Issues No. 99).

Regional Coastal Environmental Plan: Includes objectives, policies and methods with regard to the coastal environment.

Regional Council: Refer to section 2 of the Resource Management Act 1991.

Regional Plan: Refer to section 2 of the Resource Management Act 1991.

Regional Policy Statement: Refer to section 2 of the Resource Management Act 1991.

Regulation: Refer to section 2 of the Resource Management Act 1991.

Rehabilitation: To restore to a former level or state.

Resource Consent: Refer to section 2 of the Resource Management Act 1991.

Riparian Area and Margin Land: A strip of land adjacent to a waterway that generally extends from the perceived change in contour of the flood plain to the waterway itself. This is also called streamside management land.

River: Refer to section 2 of the Resource Management Act 1991.

River Mouth: As defined in the Second Schedule to this Plan.

RL: Reduced level.

Sediment: A number of materials deposited at the earth's surface by physical, chemical or biological agents.

Sedimentation: The settling out of earth particles that have been transported by wind and water.

Sewage: Waste matter from domestic or industrial establishments that is carried away in sewers or drains.

Siltation: Infilling with silt.

Structure: Refer to section 2 of the Resource Management Act 1991.

Sustainable Management: Refer to section 5 of the Resource Management Act 1991.

Taiapure: A taiapure – local fishery declared under the Maori Fisheries Act 1989, Part IIIA.

Tangata Whenua: Refer to section 2 of the Resource Management Act 1991.

Taonga: Highly prized property; a treasure.

Taonga Raranga: Plant that produces material highly prized for use in weaving.

Tapu: Under spiritual protection or restriction. Sacredness or beyond common usage.

Territorial Authority: Refer to section 2 of the Resource Management Act 1991.

Territorial Sea: Refer to section 2 of the Resource Management Act 1991.

Tiaki: Includes the ideas and principles of guardianship, care, wise management, resource indicators, where resources themselves indicate the state of their own mauri.

Tikanga Maori: Refer to section 2 of the Resource Management Act 1991.

Tino rangatiratanga: Chiefly authority, chieftainship, full tribal authority and refers to tribal self management – to manage and control in accordance with the preferences of the owner.

Toxic Dinoflagellates: A group of phytoplankton (algae) that are known to produce toxins, particularly in the marine environment.

Toxicity: The inherent potential or capacity of a material to cause adverse effects in a living organism.

Treaty of Waitangi (Te Tiriti o Waitangi): Refer to section 2 of the Resource Management Act 1991.

Tsunami: A sea wave of local or distant origin that results from sea floor fault movement, large scale sea floor slides or volcanic eruption on the sea floor.

Waahi tapu: Sacred site. These are defined locally by the hapu and iwi, which are the kaitiaki for the waahi tapu.

Waahi tupuna: Ancestral site.

Water: Refer to section 2 of the Resource Management Act 1991.

Whanau: The extended family, i.e. grandparents, parents, and children, sharing a mutual existence.