

Hawke's Bay Regional Resource Management Plan

(Includes Regional Policy Statement)

Operative
28 August 2006



Hawke's Bay Regional Resource Management Plan

Republished in part as at 18 December 2021

Important dates:

Operative Date	28 August 2006
Date of decisions on submissions	June 2001
Public notification of proposed plan	April 2000

Other revisions

Table of changes, amendments and corrections

	Date Notified	Date Council Decisions Issued	Date Operative (or in effect)
Amendment 1: Interim policies as directed by National Policy Statement for Freshwater Management 2011.	NA	NA	1 July 2011
Plan Change 1: Geographic coverage.	30 Aug 2006	19 Jul 2008	8 Nov 2014
Plan Change 2: Air quality.	10 Dec 2008	17 Mar 2010	1 Jan 2012
Withdrawal: Rule 18a from Proposed Plan Change 2: Air quality.	NA	1 Jul 2011	NA
Amendment 2: Removing conflict and avoiding duplication with revised Resource Management (National Environmental Standards for Air Quality) Regulations 2004.	NA	NA	1 Jan 2012
Plan Change 3: Onsite wastewater.	13 Jul 2011	6 Jun 2012	1 Oct 2012
Correction 1: Esk River minimum flow.	NA	NA	1 Oct 2012
Plan Change 4: Managing the built environment	7 Dec 2011	26 Mar 2013	1 Jan 2014
Plan Change 5: Land and freshwater management.	2 Oct 2012	5 Jun 2013	24 Aug 2019
Plan Change 6: Tukituki River catchment.	4 May 2013	26 Jun 2014	1 Oct 2015
Amendment 3: insertion of policies as directed by the National Policy for Freshwater Management 2014.	NA	NA	8 Nov 2014
Amendment 4: as directed by the National Policy for Freshwater Management (updated 2017).	NA	NA	7 Sept 2017
Amendment 5: Removing conflict and avoiding duplication with the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.	NA	NA	1 Nov 2018
Amendment 6: Insertion of objective and policies (2) as directed by the National Policy Statement for Freshwater Management 2020 (& consolidation of similar in Chapter 5.1A).	NA	NA	3 Sept 2020
Amendment 7: Removing conflict and avoiding duplication with the Resource Management (National Environmental Standards for Freshwater) Regulations 2020.	NA	NA	3 Sept 2020
Amendment 8: Footnotes to relevant rules referring to Resource Management (Stock Exclusion) Regulations 2020.	NA	NA	3 Sept 2020
Amendment 9: Removing conflict and avoiding duplication with the Resource Management (National Environmental Standards for Outdoor Tyre Storage) Regulations 2021.	NA	NA	20 Aug 2021
Amendment 10: Insertion of objective for housing bottom lines as directed by the National Policy Statement on Urban Development 2020.	NA	NA	18 Dec 2021

Resource Management Act 1991

Hawke's Bay Regional Council

HAWKE'S BAY REGIONAL RESOURCE MANAGEMENT PLAN

It is hereby certified that this is the Hawke's Bay Regional Resource Management Plan, incorporating the Hawke's Bay Regional Policy Statement, approved by resolution of the Council on the 17th day of August 2006.

The Council has further resolved that the Plan shall become operative on the 28th day of August 2006.

SIGNED under the Seal of)
Hawke's Bay Regional Council)
In the presence of:)


Eileen von Dadelszen
Chairman


Andrew Caseley
Chief Executive



Seal Number: 2524.

Date: 17 August 2006



HAWKE'S BAY REGIONAL RESOURCE MANAGEMENT PLAN

Change 4 ('Managing the Built Environment')

It is hereby certified that Change 4 ('Managing the Built Environment') to the Hawke's Bay Regional Resource Management Plan was adopted by the Hawke's Bay Regional Council on 28 November 2013.

Dated this 5th day of December 2013.

Signed under the Seal of the
Hawke's Bay Regional Council
In the presence of:

A handwritten signature in blue ink, appearing to read "F. Wilson", written over a horizontal line.

Fenton Wilson
CHAIRMAN

A handwritten signature in blue ink, appearing to read "E. Lambert", written over a horizontal line.

Elizabeth Lambert
CHIEF EXECUTIVE



Seal Number: 3743

HAWKE'S BAY REGIONAL RESOURCE MANAGEMENT PLAN

Change 5 ('Land and Freshwater Management')

It is hereby certified that Change 5 ('Land and Freshwater Management') to the Hawke's Bay Regional Resource Management Plan was adopted by the Hawke's Bay Regional Council on 31st July 2019.

Dated this 7th day of August 2019.

Signed under the Seal of the
Hawke's Bay Regional Council
In the presence of:



Rex Graham
CHAIRMAN



James Palmer
CHIEF EXECUTIVE



Seal Number: 4347

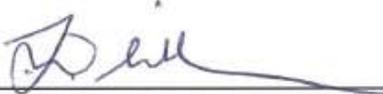
HAWKE'S BAY REGIONAL RESOURCE MANAGEMENT PLAN

Change 6 ('Tukituki River Catchment')

It is hereby certified that Change 6 ('Tukituki River Catchment') to the Hawke's Bay Regional Resource Management Plan was adopted by the Hawke's Bay Regional Council on 26th August 2015.

Dated this *21st* day of *September* 2015.

Signed under the Seal of the
Hawke's Bay Regional Council
In the presence of:



Fenton Wilson
CHAIRMAN



Elizabeth Lambert
INTERIM CHIEF EXECUTIVE



Seal Number: 3703

Chairman's Foreword

Mention Hawke's Bay and images of sunny beaches and the sun-dried landscape of Te Mata Peak spring to mind. Considered to be New Zealand's leading food and wine region, Hawke's Bay provides chardonnay, cabernet sauvignon and merlot wines which are amongst the best in the world. Not only is Hawke's Bay one of the world's premier wine regions it receives over 2200 hours of sunshine each year which makes Hawke's Bay the perfect environment in which to grow pip fruit, leading some to refer to the Bay as the "fruit bowl of New Zealand". Hawke's Bay is also home of the Cape Kidnappers Gannet Reserve, one of only two mainland gannet colonies in the world, of Te Urewera National Park surrounding Lake Waikaremoana in the northern part of the region, and of the Te Angi Angi Marine Reserve in the southern part of the region. These are but a selected sample of instances in which the natural environment is fundamental to the identity of Hawke's Bay. The sustainable management of the region's natural resources not only ensures the economic sustainability of Hawke's Bay, but will also ensure our children's children have the opportunity to enjoy the high quality environment that is Hawke's Bay. It is critical we do not lose sight of the fact we are merely safeguarding our environment – "kaitiaki tui iho."

This Regional Resource Management Plan, incorporating the Regional Policy Statement, is an important document for the Hawke's Bay region. It provides not only a framework within which the sustainable management of the region's natural and physical resources can be undertaken, but it also specifies policies and guidelines designed to provide for the long-term sustainable management of the region's resources. The Plan aims to achieve the regional council's vision of creating "a region that develops and prospers within a clean and healthy environment".

The Resource Management Act 1991 is the principal statute governing New Zealand's resource management, the purpose of which is "to promote the sustainable management of natural and physical resources". The Act establishes an integrated framework for managing activities affecting the environment, without stifling development. Sound resource management should go hand in hand with sound economic policies, contributing to the development of a dynamic, vibrant and sustainable Hawke's Bay that achieves the purpose of this Act.

In order to make the Council's resource management documents easily accessible to the people of Hawke's Bay for whom they are intended, the Council decided at an early stage to merge the regional policy statement and all other regional plans (except the Regional Coastal Plan) into one integrated and user friendly document. This document has been prepared by the Regional Council in partnership with the people of Hawke's Bay following a wide ranging and intensive consultation and submission process. This review of Hawke's Bay's resource management documents began in May 1999 with the release of a draft plan for consultation. Public comment was requested and considered and resulted in the notification of the Proposed Regional Resource Management Plan and Policy Statement in April 2000. The process provided in the legislation of inviting further submissions, hearing and making decisions about all submissions and completing the appeals process, has now been finalised.

It is with great pleasure that I present this Regional Resource Management Plan and Regional Policy Statement and thank everyone involved in bringing it to its operative state.

Eileen von Dadelszen
Chairman (17 August 2006)

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NOTES: Schedules marked with an asterisk (*) incorporate text only. The text for these Schedules is located at the end of this document.
Schedules marked with a double asterisk (**) incorporate text and maps. The text for these Schedules is located at the end of this document, as are the maps.
Alternatively the maps can be viewed online at www.hbrc.govt.nz.

STATUTORY ACKNOWLEDGEMENTS (NB: APPENDED TO PLAN AS SEPARATE PUBLICATIONS)

1 INTRODUCTION

1.1 Title and Purpose of Plan

1.1.1 This Plan is to be known as the **HAWKE'S BAY REGIONAL RESOURCE MANAGEMENT PLAN (incorporating the Regional Policy Statement)**. It has been prepared by the Hawke's Bay Regional Council ("HBRC") in accordance with the Council's functions under the Resource Management Act 1991 ("RMA").

1.1.2 The purpose of this Plan is to set out a policy framework for managing resource use activities in an integrated manner across the Hawke's Bay region. Management of the coastal marine area and wider coastal environment is largely addressed in the Hawke's Bay Regional Coastal Environment Plan, and the New Zealand Coastal Policy Statement. ***The Regional Policy Statement section of this document recognises the regional significance of the coastal marine area and wider coastal environment of Hawke's Bay. However rules covering the Coastal Marine Area and coastal environment are covered in the Regional Coastal Environment Plan.***

Therefore, the Hawke's Bay Regional Resource Management Plan has effect:

- ***Over the whole of the Hawke's Bay region in relation to the Regional Policy Statement.***
- ***Over the whole of the Hawke's Bay region, (Figure 1), excluding the coastal environment for all other activities that are the function of the HBRC under the RMA.***

1.1.3 This Plan replaces the Regional Policy Statement (HBRC, 1995), and the following regional plans prepared by the HBRC under the RMA:

- (a) The Regional River Bed Gravel Extraction Plan (HBRC, 1994).
- (b) The Regional Waste and Hazardous Substances Plan (HBRC, 1995).
- (c) The Regional Air Plan (HBRC, 1998).
- (d) The Regional Water Resources Plan (HBRC, 2000).

1.1.4 The process of developing this Plan involved the review and merger of the documents listed above, as well as the preparation of new policy. **In particular, the policy framework for land management contained within this Plan is new.** It is considered that the substantial reduction in the number of policy documents will improve the quality of the policy framework and make it easier to use. The reduction of policy documents will result in just two statutory planning documents under the RMA:

- (a) The Hawke's Bay Regional Resource Management Plan (incorporating the requirements for a regional policy statement), i.e. this Plan, and
- (b) The Hawke's Bay Regional Coastal Environment Plan.

1.1.5 This Plan has legal force under the RMA. The regional rules contained within it have the force and effect of a regulation under the Act. The HBRC must have regard to the provisions of the Plan when considering applications for resource consents. In addition, territorial local authorities within Hawke's Bay must ensure that their district plans are not inconsistent with the provisions of this Plan.

1.2 Plan Structure

1.2.1 As noted in section 1.1, this Plan is a combined regional policy statement and regional plan. Chapters 1-4 of the document meet the requirements of section 62 of the RMA in relation to the contents of regional policy statements. Chapters 5-8 of the document meet the requirements of section 67 of the RMA in relation to the contents of regional plans. Chapter 9 (Glossary), the Schedules and Maps are included to support both the Regional Policy Statement, and Regional Plan, as appropriate.

Chapter 1 Introduction - This Chapter introduces the purpose and structure of the Plan, and provides an overview of its statutory context.

Chapter 2 Key Regional Policy Statement Objectives – Chapter 2 sets out the key objectives sought to be achieved by the Regional Policy Statement. This chapter is fundamental to achieving integrated resource management in Hawke's Bay.

Chapter 3 Regionally Significant Issues, Objectives and Policies - Chapter 3 presents an overview of regionally significant resource management issues in Hawke's Bay, as required by section 62 of the RMA. It sets out the specific objectives and policies for addressing these regionally significant issues. Matters of resource management significance to iwi/hapu are also covered in this chapter.

Chapter 4 Non-regulatory Methods – Chapter 4 sets out the non-regulatory methods to be used by the HBRC. Non-regulatory methods include education, co-ordination, liaison with territorial authorities, economic instruments, works and services, monitoring, and research. For some of these methods much of the detail is contained within other documents e.g. the HBRC's Environmental Education Strategy.

Chapter 5 Regional Plan Objectives and Policies – Chapter 5 sets out the key objectives sought to be achieved by the Regional Plan by establishing an overall framework for the management of land, air quality, surface water quality, groundwater quality and the beds of lakes and rivers throughout the region (but not within the coastal environment). The policies relating to these objectives set environmental guidelines and how the guidelines will be implemented.

Chapter 6 Regional Rules and Resource Consents - Chapter 6 is the regulatory section of the Plan. It contains regional rules that allow, regulate or prohibit resource use activities across the region (but not within the coastal environment). Chapter 6 starts with a Users' Guide, to assist readers with interpretation of the rules, and a summary of all the rules contained within the Plan.

Chapter 7 Information Requirements – Chapter 7 sets out what information must be submitted with resource consent applications.

Chapter 8 Administrative Matters – Chapter 8 includes guidelines for Council's preferred approach for the use of regional rules, resource consent processes, and enforcement procedures. It describes the circumstances under which the HBRC will seek financial contributions from resource users, the procedures for dealing with cross-boundary issues, and the approaches for monitoring and reviewing this Plan.

Chapter 9 The Glossary provides clarification of some terms used in this document. An asterisk (*) indicates that a meaning is the same as that provided in Section 2 of the RMA.

Schedules The Schedules contain area-specific provisions, or other specific details relating to implementation of the policies or rules. The Schedules are cross-referenced within the main body of the Plan. It is envisaged that if further specific issues (as opposed to region-wide issues) arise once this Plan has become operative, additional Schedules will be promulgated by way of publicly notified changes to this Plan.

Maps The maps are at the rear of this Plan, or can be viewed on the CD-Rom provided.

1.3 Statutory Context

- 1.3.1 This section sets out the statutory context for this Plan. It has been included to help explain the context under which this Plan has been developed.

1.3.2 THE RESOURCE MANAGEMENT ACT 1991

OVERVIEW

- 1.3.2.1 The RMA is the principal statute for managing the use of natural and physical resources. The Act establishes an integrated framework for the management of activities affecting land, air, water and ecosystems, including the coast. Its overarching purpose is to promote the sustainable management of natural and physical resources.
- 1.3.2.2 Part II of the RMA sets out the purpose and principles of the Act, which govern decision making and the policy formation functions of regional councils in respect of resource management.
- 1.3.2.3 Section 5 of Part II contains the purpose of the RMA. Section 5 states:
“The purpose of this Act is to promote the sustainable management of natural and physical resources.
- In this Act, ‘sustainable management’ means 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.”*
- 1.3.2.4 A hierarchy of principles of the RMA is also contained within Part II. The principles define matters that the HBRC must address in relation to managing the use, development and protection of natural and physical resources. These are matters of national importance, which the HBRC must recognise and provide for (section 6); other matters such as kaitiakitanga, the efficient use and development of natural and physical resources and maintenance and enhancement of the quality of the environment, which the HBRC must have particular regard to (section 7); and the principles of the Treaty of Waitangi, which the HBRC must take into account (section 8).
- 1.3.2.5 The HBRC has given effect to the purpose of the RMA by establishing policies and methods in this Plan which focus on both managing environmental effects and enabling activities to take place. The Council believes that, while establishing a policy framework for sustaining natural and physical resources is clearly fundamental, it is also important to provide certainty and minimise costs for the people of the region. Hence, the Council has sought to regulate activities only to the degree necessary to meet the purpose of the Act. A key approach of this Plan is to permit minor activities which have little environmental effect, that would otherwise be restricted under the RMA.
- 1.3.2.6 Part III of the Act sets out duties and restrictions on people carrying out activities which may affect the environment. Most activities affecting ‘public’ resources – coasts, air, water, rivers and lakes – are restricted under the Act, e.g. discharges of contaminants, water abstractions, and structures in river beds. This means that a resource consent must be obtained before these types of activities can be undertaken, unless there are rules in a plan stating otherwise. By contrast, land use activities are not restricted under the RMA, unless a council writes rules regulating land use activities, as most land is a ‘private’ resource. Land use activities remain largely unregulated by the HBRC. Reference should be made to the relevant district plan for further requirements in respect of land use.

- 1.3.2.7 The Hawke's Bay Regional Resource Management Plan is a statutory document in accordance with the functions vested in the HBRC under the RMA. The functions relevant to this Plan are summarised below:
- (a) The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region.
 - (b) The preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance.
 - (c) The control of the use of land (including the beds of water bodies) for the purpose of soil conservation; the maintenance or enhancement of water quality; the maintenance of water quantity; the avoidance or mitigation of natural hazards; or the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances.
 - (d) The control of the taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body.
 - (e) The control of discharges of contaminants into or onto land, air, or water and discharges of water into water.
 - (f) In relation to the bed of a water body, the control of the introduction or planting of any plant, for the purpose of: soil conservation; the maintenance or enhancement of water quality; the maintenance of water quantity; or the avoidance or mitigation of natural hazards.

POLICY STATEMENTS AND PLANS

- 1.3.2.8 This Plan combines the requirements for preparation of a regional policy statement and a regional plan. Under the RMA, the preparation of a regional policy statement is mandatory, whereas the preparation of a regional plan (except for a regional coastal plan) is not. However, in most respects regional policy statements and regional plans are treated similarly under the Act. In particular:
- (a) The processes for preparing regional policy statements and regional plans are identical.
 - (b) The effects of each on resource consents and district plans are identical.
 - (c) The matters to be considered in preparing regional policy statements and regional plans are almost identical. There are minor additional considerations for regional plans: they must not be inconsistent with the regional policy statement or other regional plans of the region concerned; they must be prepared with regard to both the regional policy statement and regional plans of adjacent regions; and they must be prepared with regard to the Crown's interest in the coastal marine area.
- 1.3.2.9 The differences between regional policy statements and regional plans, in terms of the provisions of the RMA, are as follows:
- (a) **Purpose** - The purpose of regional policy statements is different to, and more tightly prescribed than, that of regional plans. The purpose of a regional policy statement is to provide an overview of the resource management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the whole region. The purpose of a regional plan is to assist a regional council to carry out any of its functions in order to achieve the purpose of the RMA.
 - (b) **Issues and iwi matters** - Regional policy statements must state the significant resource management issues of the region, and matters of resource management significance to iwi authorities. By contrast, regional plans are simply required to state the issues to be addressed in the plan.
 - (c) **Natural hazards and hazardous substances** - Regional policy statements must set out local authority responsibilities in respect of natural hazards and hazardous substances.

- (d) **Regional rules and resource consent information** - Rules can only be contained in a regional plan. In addition, a regional plan must set out the information to be submitted with an application for a resource consent.
- (e) **Combined plans** - A regional council may combine with one or more other regional councils, or one or more territorial authorities, to prepare plans jointly. No such provisions exist for regional policy statements.
- (f) **Changing regional policy statements and regional plans** - Any person may request a change to a regional plan. However only Ministers of the Crown and territorial authorities may request a change to a regional policy statement.

1.3.2.10 None of these differences precludes the HBRC from preparing this combined regional policy statement and regional plan. Council notes that under these requirements any person may request a change to this Plan.

1.3.3 COUNCIL'S POLICY DEVELOPMENT FRAMEWORK

1.3.3.1 As noted in section 1.1, the HBRC has prepared a number of regional plans under the RMA. This Plan has built upon, and merged, all of these except the Regional Coastal Environment Plan. However, it is important for plan users to note that the Regional Policy Statement part of this Plan applies over the whole region, including the coastal environment. The Regional Coastal Environment Plan will remain separate, in part owing to the role of the Minister of Conservation in approving regional coastal plans, and the existence of the New Zealand Coastal Policy Statement. At the time of writing this Plan, the New Zealand Coastal Policy Statement was the only national policy statement in existence.

1.3.3.2 The HBRC has merged the Regional Policy Statement and all other regional plans (excluding the Regional Coastal Environment Plan) into this one document in order to provide a more integrated and user-friendly approach. The overall size of this Plan is considerably smaller than the combined size of the policy statement and plans it has replaced. In addition, the risk of overlaps, gaps and inconsistencies between different rules or policies is lessened.

1.3.3.3 The timing of the preparing of the Hawke's Bay Regional Resource Management Plan was determined by the desire to improve upon other plans already prepared, the need to introduce land management policy, and the short duration of the former Proposed Regional Water Resources Plan (which was to be reviewed after 3 years). This Plan draws on the results of investigations, monitoring and research undertaken since the former plans were prepared.

1.3.3.4 In addition to its functions under the Resource Management Act 1991, the HBRC has related functions and programmes under other statutes. Flood protection works and soil conservation activities are undertaken pursuant to the Soil Conservation and Rivers Control Act 1941; the management of plant and animal pests is

carried out under the Biosecurity Act 1993 (including 'environmental' pest control programmes); and land drainage activities are undertaken pursuant to the Land Drainage Act 1908. The HBRC owns significant assets and areas of land in relation to its flood protection and drainage activities. In this respect, the Council has property owner rights equivalent to those of other property owners.

1.3.4 THE ROLE OF OTHER ORGANISATIONS

1.3.4.1 The HBRC views itself as just one of many organisations involved in resource management. It seeks to develop partnerships with other stakeholders, in order to work together to achieve environmental outcomes. Other key stakeholders are noted below.

(a) TERRITORIAL LOCAL AUTHORITIES

There are four main territorial local authorities in the Hawke's Bay region: Wairoa District Council, Napier City Council, Hastings District Council, and Central Hawke's Bay District Council. In addition, the Taupo and Rangitikei District Councils each have a small area in the Hawke's Bay region.

Territorial local authorities have statutory functions, powers and duties under the RMA, predominantly in relation to land use and subdivision. They must prepare a district plan to assist them in carrying out their functions under the RMA. The functions of territorial authorities and regional councils overlap in relation to land use, and can cause cross-boundary effects in other respects (e.g. land use activities regulated by the territorial authority can affect water quality, which is managed by the HBRC). It is therefore critical that the HBRC and the territorial authorities in the region establish a sound working relationship and compatible environmental policy.

(b) **RESOURCE USERS**

The environmental behaviour of a resource user is influenced by a number of factors. These include the market demand for "clean, safe" products; the environmental ethic of the business; the availability of information about sound environmental practices; the degree of public exposure; the need to comply with rules and regulations; and the sanctions for non-compliance. Because regional councils are just one area of influence, it is important to work with resource users to ascertain how the HBRC can be most effective. In particular, recognising the efforts made by resource users to improve their own environmental performance is important.

(c) **REGIONAL COMMUNITY**

As well as businesses, many other groups and individuals in Hawke's Bay carry out activities for managing or improving the environment. Groups include those established by statute - Fish and Game Councils, the New Zealand Historic Places Trust, the Queen Elizabeth the Second National Trust - and many non-statutory organisations active in Hawke's Bay, e.g. the Royal Forest and Bird Protection Society. It is important for the HBRC to recognise the initiatives of these groups and individuals, offering support if appropriate, and avoiding duplication in methods within this Plan.

(d) **GOVERNMENT ORGANISATIONS**

In addition to the HBRC and territorial authorities, there are three government organisations which play key roles in environmental management:

- (i) **The Ministry for the Environment** - Administers the RMA, and provides other government policy advice regarding the environment.
- (ii) **The Department of Conservation** - Promotes the conservation of natural and historic resources, administers the Crown conservation estate, and administers a number of Acts dealing with the management of natural and historic resources.
- (iii) **The Parliamentary Commissioner for the Environment** - Responsible for monitoring the effectiveness of government organisational arrangements for managing the environment, and acts as an "environmental ombudsman" for members of the public.

1.3.4.2 Many other local and national organisations contribute to the level of knowledge and understanding about natural resources and resource management, including Te Puni Kokiri, Crown Research Institutes, universities and other publicly funded agencies.

1.4 The Hawke's Bay Region

1.4.1 This section provides a brief overview of the natural and physical resources of the Hawke's Bay region. It draws predominantly on information contained within the HBRC's first State of the Environment report (HBRC, 1997). The State of the Environment report, together with other technical reports prepared by the Council, should be referred to for more detailed information about the Hawke's Bay region.

1.4.2 LOCATION AND HISTORY

- 1.4.2.1 The Hawke's Bay region covers a land area of approximately 1,416,000 hectares on the east coast of the North Island of New Zealand. The region stretches from north of Mahia Peninsula to just south of Porangahau, and is flanked in the east by the coastline and in the west by the Ruahine, Kaweka, Kaimanawa, Huiarau and Ahimanawa Ranges (Figure 1).
- 1.4.2.2 Prior to settlement, Hawke's Bay was covered in dense native forest, wetland vegetation, and high country tussock. Following European settlement the secondary vegetation of scrubland and fern, together with many wetlands and much of the steep back country forest and tussock, was further modified to introduced grassland. The loss of natural forest, tussock and wetlands has been very extensive, and has given rise to the relatively stark landscape that now typifies much of Hawke's Bay.
- 1.4.2.3 European settlement began in earnest in the 1840's and 50's, with sheep stations being the predominant rural land use. Settlements became established during this time at Clyde (Wairoa), Takapau, Napier, Taradale, Havelock North and Tikokino. By the end of 1856 nearly half the area of the region was in settlers' ownership and over half of this was occupied by sheep runs or pasture. Horticulture in the form of commercial orchards developed during the late 1800's, leading to greater diversification in land use. Livestock farming and horticulture have continued to be the main economic land uses throughout much of the 1900's. Vineyards were first established by the turn of the century, but remained a minor land use until the last 20 years. The area planted in grapes has grown significantly in recent years and is predicted to continue to expand, especially in river terrace areas. Forestry is also increasing at present, and dairying is being reintroduced, at the expense of meat and wool farming.
- 1.4.2.4 The population of the Hawke's Bay region at the 1996 census totalled 144,300. This represents an increase of 4,800 from the 1991 total of 139,500. Approximately 20% of the population is of Maori descent. The people of Hawke's Bay live mainly in the cities of Napier and Hastings (including Havelock North), which have a combined population of 115,000, and in the towns of Wairoa, Waipukurau and Waipawa.

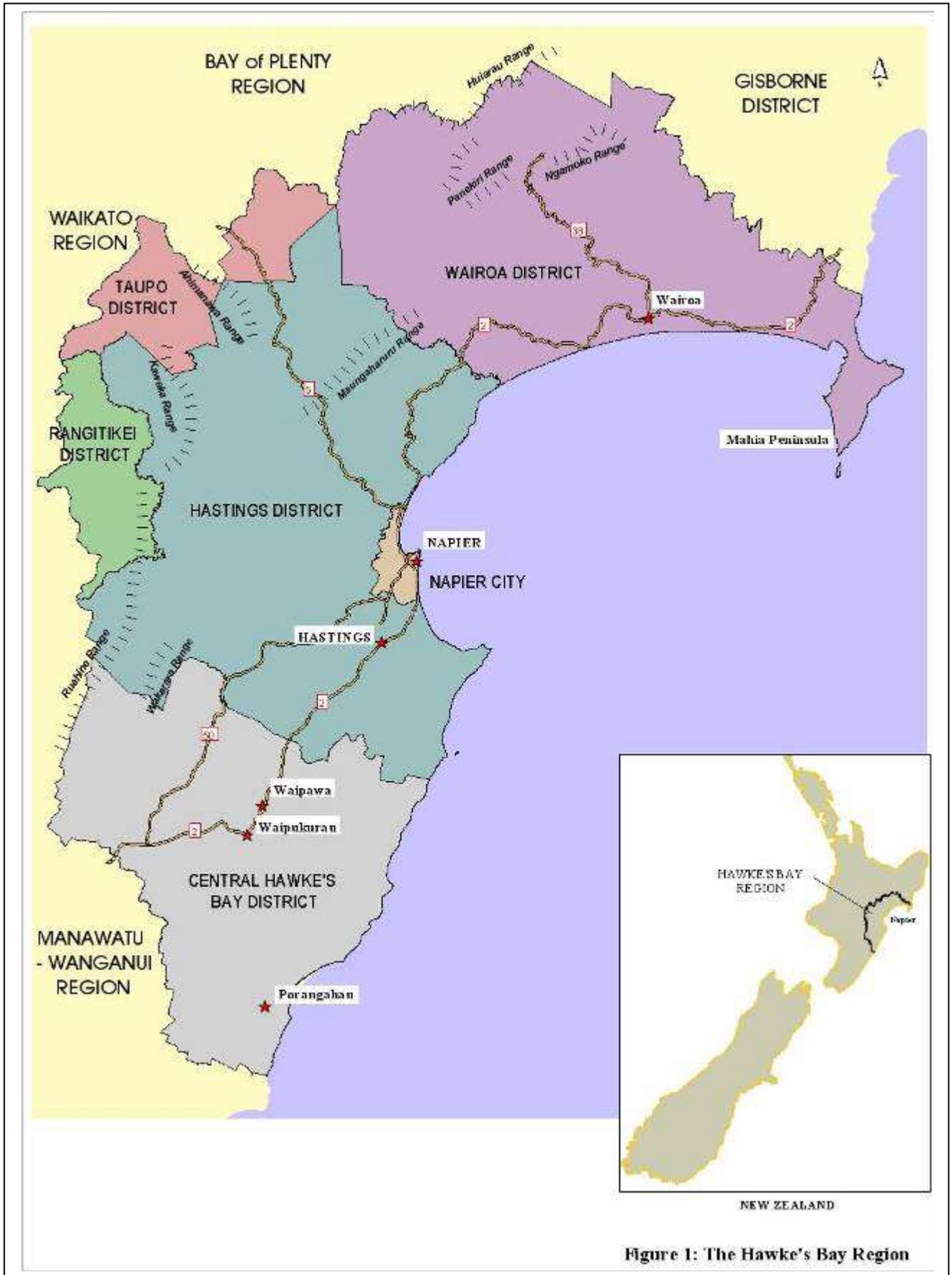


Figure 1: The Hawke's Bay Region

1.4.3 CLIMATE

- 1.4.3.1 The climate of Hawke's Bay is heavily influenced by its position eastward of the mountain ranges. The ranges provide a sheltering effect from the predominant westerly weather pattern over New Zealand, resulting in a dry, sunny, temperate climate. Droughts are a regular feature of Hawke's Bay, particularly in association with the El Nino-Southern Oscillation phenomenon. However, Hawke's Bay has also experienced repeated flooding, owing to the variability in rainfall both across the region and over time. This has resulted in a significant investment by the HBRC in extensive flood protection works. With respect to winds, over the central and southern parts of Hawke's Bay the predominant wind direction is west or south-west with very strong westerlies occurring during equinoctial periods. Southerlies can be equally severe but are usually of much shorter duration. In the north, the wind tends to blow most frequently from the north or north-west.

1.4.4 THE LAND

- 1.4.4.1 The landforms of Hawke's Bay are controlled by its geology. Overall, the region possesses three main landforms: greywacke ranges in the west (part of the main axial range of the North Island), large areas of alluvial plains formed by outwash from the ranges and volcanic deposits from the central volcanic area of New Zealand, and softer tertiary hill country towards the coast.
- 1.4.4.2 In the west, the greywacke ranges rise to 1724 m above sea level providing the headwaters for the region's rivers. This area contains both steep mountains and plateaux. The mountains, formerly covered by forest and tussock, have areas that are severely eroded. The plateau areas, which are gently sloping, are covered in tussock and pasture lands. In the north-west, the plateau areas bound the Rangitaiki Plateau with its deep pumice deposits. These deposits have also infilled the valleys of the Ngaruroro catchment and have been washed out onto the Heretaunga Plains.
- 1.4.4.3 East of the greywacke ranges, the tertiary sediments dominate and form the hill country. Movement of the earth's crust has tilted these generally parallel to the coast. The coastal ranges south of the Heretaunga Plains comprise both limestone capped plateaux and mudstone hill country. The stable limestone provides grand landscapes. The mudstone has a high potential for earthflow, slip and gully erosion.
- 1.4.4.4 Between the coastal ranges and the greywacke ranges are areas of low relief filled by gravels eroded from the greywacke and washed out onto plains. To the south these form the Ruataniwha Plains and further north the dissected gravel hill country west of State Highway 50. The largest area, the Heretaunga Plains, has formed from sediments deposited from the Tukituki, Ngaruroro and Tutaekuri rivers. During glacial periods deep gravel beds were deposited, with sands, silts and clays deposited during interglacial periods. This pattern has created a series of aquifers which provide water for the diverse soils of the plains and allows intensive use to be made of them.
- 1.4.4.5 North of the Heretaunga Plains the land generally slopes upwards from the coast towards the ranges in tilted blocks. These form the characteristic landforms of the Tutira area. In the Wairoa area siltstones provide a very slip prone hill country landscape.
- 1.4.4.6 Volcanic ash from the Taupo Volcanic Centre has been deposited over the Hawke's Bay landscape. The most recent ash showers were the Taupo deposits of 130 AD. They form recent soils requiring high rates of phosphate fertiliser for sustained plant and animal production.
- 1.4.4.7 Soil erosion is a key issue for Hawke's Bay. It can take many decades for topsoil to re-establish on slip scars, research shows that productivity rarely returns to more than 80% of the uneroded potential.
- 1.4.4.8 The unstable nature of much of Hawke's Bay's hill country can be seen from the many lakes. Many of these have been formed as a result of large landslides, probably induced by earthquakes that caused hills to collapse into valleys blocking streams. Further indications of instability can be seen from the many landslide scars. Landslides occur during high intensity rainstorms (when intensities are greater than 200 mm in 2 to 3 days). These events generally occur at least once every ten years somewhere within the region.

- 1.4.4.9 Wind erosion is also a problem on light cropping soils.
- 1.4.4.10 Land use in Hawke's Bay is slowly evolving. Viticulture is becoming more predominant on the flats, dairying is intensifying in the higher rainfall areas, pastoral farming is intensifying and plantation forestry is slowly extending (Maps showing the Land Use of the region as at 1995-96 are provided in Schedule II of the Maps).

1.4.5 AIR QUALITY

- 1.4.5.1 The Hawke's Bay region enjoys relatively clean air. The region has a low population density and only a few major industrial emissions. Monitoring undertaken since 1994 has shown that the air quality in Hawke's Bay has remained within the New Zealand Ambient Air Quality Guidelines (Ministry for the Environment, 1994), apart from unusually high levels of ash following eruptions of Mt Ruapehu. However, air quality problems do exist. Data from the HBRC's complaints register indicate that the three predominant air quality concerns are agricultural spray drift, odour and dust. All three problems are relatively localised in effect and do not compromise the overall quality of the regional air resource. However, some adverse effects are experienced and resource users will be required to avoid, remedy, or mitigate the adverse environmental effects of these activities on the air resource.

1.4.6 WATER RESOURCES

- 1.4.6.1 Hawke's Bay has seven major river systems and four major lakes, as well as many minor rivers, streams, lakes and wetland systems. The main rivers and lakes are shown in Figure 2.
- 1.4.6.2 The major river systems are the Wairoa, Mohaka, Esk, Tutaekuri, Ngaruroro, Tukituki and Porangahau Rivers. These are mostly fast flowing, clean, gravel rivers, with extensive braided reaches. They support a rich and diverse wildlife, and are well known for the recreational opportunities they offer, including fishing, jet boating, canoeing, rafting and swimming. They are used for water supply and irrigation purposes, but do not receive a large number of point source waste discharges. River flows and temperatures fluctuate markedly due to droughts, causing problems for instream biota and for water supply.
- 1.4.6.3 The four major lakes in Hawke's Bay are Lake Waikaremoana, Lake Waikareiti, Lake Tutira and Lake Poukawa. Lake Waikaremoana is a jewel of the Hawke's Bay region. It lies at an elevation of 615 metres above sea level, and is part of the Urewera National Park. The lake was formed by a landslide approximately 2200 years ago, and it is the deepest lake in the North Island. The lake and its environs are used for recreation. There are three hydroelectric power stations (Kaitawa, Tuai and Piripaua) downstream of Waikaremoana, with a combined generation capacity of 135 MW. Lake Waikareiti lies close to Lake Waikaremoana. It is considerably smaller, but is also used for recreational purposes. Lake Tutira (also formed by a landslide) is situated approximately 50 km north of Napier and, owing to its proximity to urban centres, is also used for recreation. Lake Poukawa is located within an intensively farmed area. It is a very shallow lake (with an average depth of just 1 m). Its size fluctuates, highly influenced by rainfall, evaporation, and drainage systems. It can increase up to three times its average size after heavy rainfall.
- 1.4.6.4 In Hawke's Bay groundwater is increasingly relied upon as a dependable and safe water supply for domestic, irrigation and industrial purposes. There are two known major groundwater systems in Hawke's Bay – under the Heretaunga Plains and Ruataniwha Plains (Figure 3) – but many smaller systems are also known and used.
- 1.4.6.5 The Heretaunga Plains aquifer system is critical for providing groundwater to Napier and Hastings, as well as for horticultural and industrial use. The main natural sources of recharge for the Heretaunga Plains aquifer system are the Ngaruroro River at Roys Hill, and rainfall falling on the unconfined aquifer. In addition, the HBRC operates an artificial recharge system in the Roys Hill area to supplement the natural rate of recharge.
- 1.4.6.6 Studies of the Heretaunga Plains aquifer to date have concluded that the overall rate of groundwater abstraction does not exceed the rate of recharge (Dravid and Brown, 1997). Groundwater is therefore in adequate supply at present, although seasonal fluctuations in groundwater level occur. These are most

marked in fringe areas, and can cause shallow bores and wells in these areas to dry up during summer. The quality of groundwater throughout the aquifer system is very good. However, careful management is required to ensure that this remains the case. Groundwater quality is at risk from various activities, including intensive primary production, domestic waste, agrichemical use, industrial activities, underground storage tanks, landfills and accidental spillages. Resource users will be required to avoid, remedy, or mitigate the adverse environmental effects of these activities on the water resource.

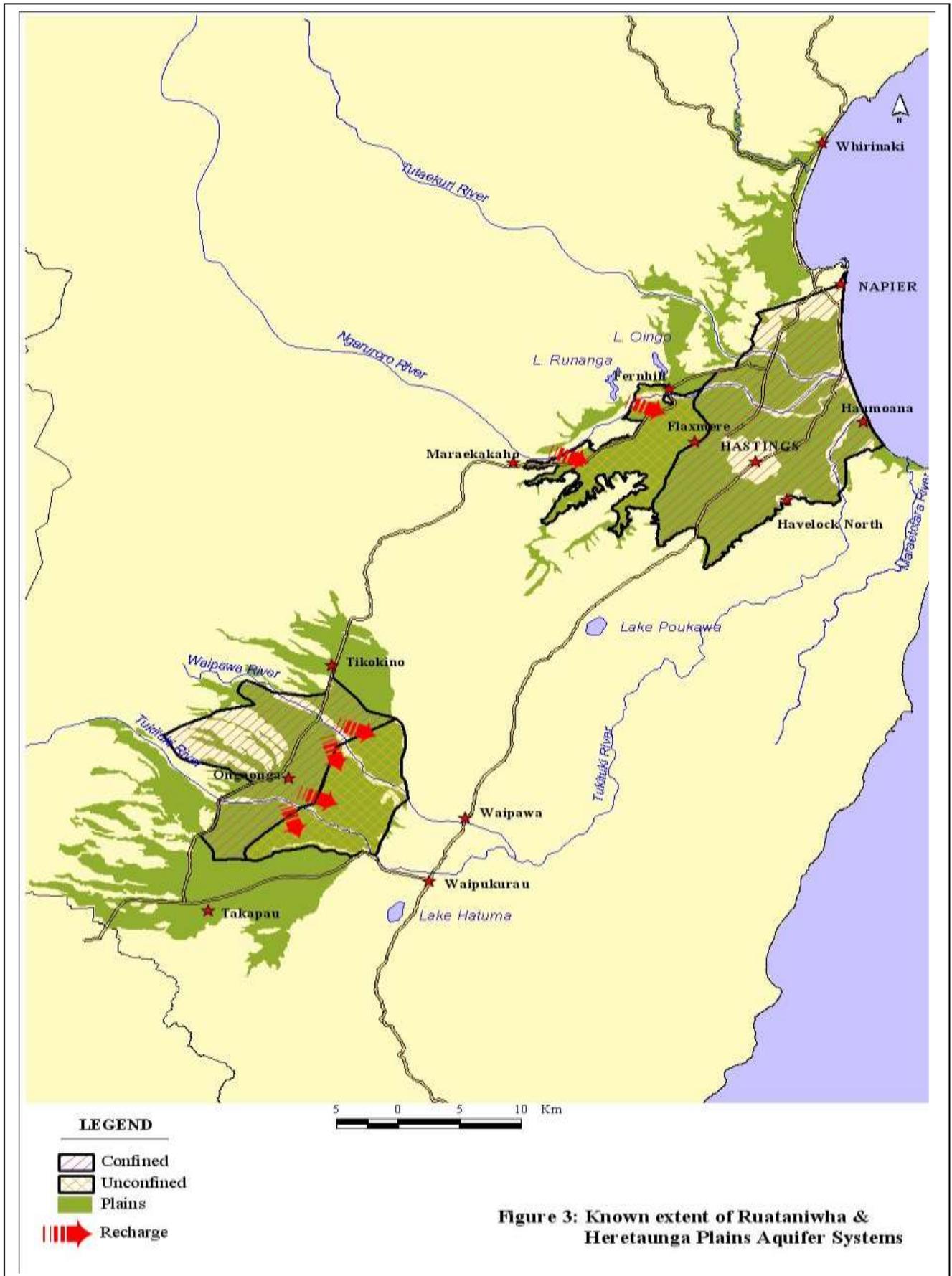
- 1.4.6.7 The Ruataniwha Plains aquifer system is located in Central Hawke's Bay, stretching across the Waipawa and Tukituki Rivers. The aquifer system comprises a shallow unconfined aquifer which is recharged from the Waipawa and Tukituki Rivers, and several deeper confined aquifers. The quantity of groundwater under the Ruataniwha Plains is considerably less than that under the Heretaunga Plains. In general the quality of groundwater within the Ruataniwha Plains alluvial aquifers is high in response to clean surface water recharging the alluvial aquifer system.

1.4.7 COASTAL RESOURCES

- 1.4.7.1 Hawke's Bay's varied coastal resources comprise deep offshore open waters, shallower continental shelf and a mixed and dynamic coastline, which forms the interface of the coastal environment with the land and freshwater environments. The coastline ranges from undulating sea cliffs to low-lying areas of longshore bars and dunes, interspersed with both sandy and shingle beaches. A series of reefs and a number of small islands occur offshore.
- 1.4.7.2 The coastal environment is a rich and productive ecosystem with a broad range of habitats supporting a diverse flora and fauna. Coastal dunelands, river mouths, reefs and rocky shores and outcrops are amongst the significant habitats in Hawke's Bay. A number of areas of significant conservation value have been identified in the Regional Coastal Environment Plan, and form a key part in the management of the coastal environment.
- 1.4.7.3 A number of major facilities and public utilities are located within the Hawke's Bay coastal environment. These include roads and port facilities, such as the Port of Napier and the wharves, slipways, and marina of the Inner Harbour.
- 1.4.7.4 The Regional Coastal Environment Plan applies to the Hawke's Bay coastal environment, which includes the coastal marine area.

1.4.8 PHYSICAL RESOURCES

- 1.4.8.1 The economic, and to some extent the social and cultural wellbeing of the people of Hawke's Bay is largely dependent upon the physical infrastructure of the region.
- 1.4.8.2 The roading and rail networks, the port and the regional airport, all provide essential facilities for the transport of both people and freight. The telecommunication and radio-communication networks provide for the personal, business and emergency communication, for the transfer of data and information, and for access to regional, inter-regional and international information sources. Energy networks provide and distribute electrical and gas energy which is essential for ensuring the health and safety of the people of the region.
- 1.4.8.3 The region's industrial activities and urban areas are also an important resource, providing for the employment, housing, health, and education and recreation of people in the region.



1.5 The Maori Dimension

1.5.1 OVERVIEW OF RMA REQUIREMENTS

1.5.1.1 The RMA requires that the HBRC recognises and provides for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga, and when exercising functions and powers in relation to managing the use, development and protection of natural and physical resources that it:

- shall have particular regard to kaitiakitanga, and
- takes into account the principles of the Treaty of Waitangi.

1.5.1.2 The RMA includes the following requirements:

“...Promote the sustainable management of natural and physical resources” where ‘sustainable management’ means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities [including Maori] to provide for their social, economic, and cultural wellbeing and for their health and safety...” (Section 5);

*“...Provide for the following matters of natural importance: ...
.....the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.” (Section 6 (e))*

“...All persons exercising functions and powers under [the Act] shall have particular regard to....Kaitiakitanga.” (Section 7(a))

“... All persons exercising functions and powers under [the Act] shall take into account the principles of the Treaty of Waitangi (Te Tiriti O Waitangi).” (Section 8)

*“... When preparing or changing a regional policy statement, the Regional Council shall have regard to:
(a) (ii) any relevant planning document recognised by an iwi authority affected by the regional policy statement; and
[any]...
.....regulations relating to the conservation or management of taiapure or fisheries.” (Section 61 (2) (a) (ii) and (iii))*

*“A regional policy statement shall state - ...
matters of resource management significance to iwi authorities.” (Section 62 (1) (b))*

1.5.1.3 The Regional Policy Statement therefore must identify issues of significance to Maori to ensure that they are treated in accordance with the above provisions in achieving integrated management of the natural and physical resources of Hawke's Bay.

1.5.1.4 This section contains a number of key Maori terms and concepts, the meaning of which may vary between hapu and iwi within the region and may not be easily expressed in the English language. However, in order to promote a fuller appreciation of the contents of this section, the English meaning of key Maori terms and concepts is included in the glossary to this Plan.

1.5.2 HBRC AND IWI RESOURCE MANAGEMENT VALUES

1.5.2.1 The preparation of this Regional Resource Management Plan has provided the HBRC with the opportunity to re-examine its own values for the Hawke's Bay community in order to find some common ground and balance with Tikanga Maori values (for Ngati Kahungunu), which not only accord with the spirit of the Treaty of Waitangi but also give a uniquely New Zealand approach to environmental management. The “statement of values and principles” below describes the approach to resource management in Hawke's Bay, comparing the overall philosophy and principles of the HBRC and of Tangata Whenua of the region.

STATEMENT OF VALUES AND PRINCIPLES	
Hawke's Bay Regional Council Principles Of Resource Management	Tikanga Maori Values within Ngati Kahungunu
<p>Concept of Sustainable Management The HBRC strives to manage the natural and physical environment in a sustainable manner, thus preserving its potential to meet the needs of future generations.</p>	<p>Wairuatanga means spirituality based on the notion that natural and physical resources are "taonga tuku iho" (God Given Gifts), the sustainable use of which must encompass all of the elements of "kaitiakitanga" (sustainable stewardship) while recognising the heritage of future generations.</p>
<p>Responsible Management In the exercise of its statutory management responsibilities, the HBRC seeks to minimise regulation. It aims to be fiscally responsible and accountable. Professionalism and recognition of the value of scientific knowledge and understanding will underpin this responsibility.</p>	<p>Rangatiratanga is the right and responsibility for the exercise of kaitiakitanga for the benefit of present and future generations. Within the framework of the Treaty of Waitangi it provides for a partnership with HBRC.</p>
<p>Close Relationships It is important to the HBRC to have enduring healthy relationships with other organisations and agencies with which the Council shares responsibility for the environment.</p>	<p>Whanaungatanga means relationships, based on spiritual origins, and expanded to include both the nature of "taonga tuku iho" and the diversity of people's interests that impact on sustainable use.</p>
<p>Community Participation The HBRC respects people and their needs, and recognises the need for community participation during the development and implementation of this Plan. The Council can be most effective when it has a shared vision and responsibility with the people of Hawke's Bay.</p>	<p>Kotahitanga is the unanimity, accord or consensus reached through the process of consultation for the betterment of the community.</p>
<p>Integrity Business activity in Hawke's Bay and its contribution to the development and prosperity of the region is recognised and encouraged where it is environmentally sustainable.</p>	<p>Manaakitanga is the voluntary rangitiratanga gesture of benevolence toward people in both the formal and informal sense.</p>

- 1.5.2.2 The concepts of Tikanga Maori used are those adopted by the Runanga O Ngati Kahungunu Executive Board in the mid 1990s and are not binding on other iwi within Hawke's Bay.
- 1.5.2.3 Much of what is contained in section 1.6 following reflects these sets of values and principles.

1.6 Iwi Environmental Management Principles

1.6.1 IWI CONCEPTS OF RESOURCE MANAGEMENT

1.6.1.1 Seven consultative hui were held in 1998 to update tangata whenua issues contained in Chapter 5 of the Regional Policy Statement (operative 7 October 1995). The set of issues below has been developed from iwi plans and from the consultative hui, and grouped according to the tikanga value most appropriately affected (see section 1.6.2).

1.6.1.2 WAIRUATANGA

- (a) The need to protect the Mauri, the life sustaining force of natural and physical resources, including waterways and water bodies
- (b) Protection of waahi tapu
- (c) The need for resource managers to take account of Maori spiritual values such as concepts of mauri, tapu, mana, wehi and ihi.

1.6.1.3 A paramount consideration for tangata whenua is the way in which the value concept of 'wairuatanga' (spirituality) can be incorporated into the management ethos of Council as to enhance the sustainable management process.

1.6.1.4 Wairuatanga is not only the foundation for Maori values but also the bond that ties together the other value concepts of rangatiratanga, whanaungatanga, kotahitanga and manaakitanga.

1.6.1.5 RANGATIRATANGA

- (a) Provide clear lines of accountability in this Plan to provide links between policies, objectives and methods.
- (b) Recognition of the guarantees of "tino rangatiratanga" and its relationship with 'kawanatanga' in resource management planning and decision making; call for a wider application of the Treaty partnership principle.
- (c) Recognition of the right to exercise kaitiakitanga through whanau, hapu and iwi.
- (d) Active participation of tangata whenua in policy and decision-making processes of councils.
- (e) Recognition of and provision for traditional and contemporary Maori knowledge in the sustainable management of the region's natural and physical resources.
- (f) Protection of flora used for rongoaa (medicinal) and other cultural purposes from absorption of contaminated water, caused by the application of pesticides and/or chemical sprays.
- (g) Protection of aquatic ecosystems, flora, fauna and fisheries habitat.
- (h) Maintenance of water quality standards in keeping with kaitiakitanga principles: the preservation of mauri and the conservation of species.

1.6.1.6 Rangatiratanga devolves from whakapapa in the first instance and continues to be addressed through the Treaty of Waitangi and thence to the Resource Management Act. This results in the kaitiakitanga that Maori practise through their mana whenua and mana moana over the natural and physical resources of land, air and water.

- 1.6.1.7 The partnership base of the Treaty of Waitangi establishes the relationship between Maori and the Crown. Rangatiratanga was guaranteed to tangata whenua through this partnership, in terms of the continued access to their taonga and tribal self regulation. The Crown's role has been passed on in specific matters through the RMA to local and territorial authorities, these are addressed through plans and policy statements. The individual roles of tangata whenua and the Council, and their partnership towards achieving sustainable management of the environment, are recognised within these documents.
- 1.6.1.8 The environment and the community can benefit from incorporating the Maori resource management principle of guardianship, or kaitiakitanga, that adds to the sustainable management of natural and physical resources and without imposing unnecessary cost to prospective or current resource users or the development process.
- 1.6.1.9 **WHANAUNGATANGA**
- (a) The need to re-affirm the Maori social fabric of whanau/hapu/iwi and other models of Maori representation, statutory or otherwise, as a means to better consultation and on-going good relationships.
 - (b) Recognition of marae as the physical manifestation of tino rangatiratanga and the most appropriate place for consultation with Treaty partners and with councils.
 - (c) The need for the development of relationships between tangata whenua and councils that transcends statutory and Treaty obligations to find joint solutions for and joint inputs into enforcement and compliance procedures.
- 1.6.1.10 Whanaungatanga is the concept that embraces relationships based on both spiritual and physical origins of Maori. It embraces common interests between people usually evidenced through whakapapa. Whanaungatanga is also the concept that recognises the position and intertwined relationship of Maori in respect of the natural and physical world.
- 1.6.1.11 Recognition of the key linkages of whanau, hapu and iwi, along with other forms of Maori representation, gives a clearer understanding of the process for consultation on Maori issues. This is important to resource consent seekers, in terms of providing certainty in the preparation of resource consent applications, without necessarily adding to costs.
- 1.6.1.12 **KOTAHITANGA**
- (a) Recognition of and provision for traditional Maori knowledge in the sustainable management of the region's natural and physical resources.
 - (b) The need for tangata whenua and councils to act jointly to protect those characteristics of the natural and physical resources of special value to Maori, including waahi tapu, tauranga waka, mahinga kai, mahinga mataitai and taonga raranga.
 - (c) Recognition of the various models of Maori representation and their positive contribution arising out of their dual roles of kaitiaki in the sense of protection and that of a significant resource user.
- 1.6.1.13 Kotahitanga denotes unity. It is the concept upon which diplomacy and understanding is based and implies conciliation and bridge-building. It is a process through which communities can strike a balance of values and a means to mutual advantage.
- 1.6.1.14 The issues themselves assert that tangata whenua tikanga, cultural knowledge and practices should be incorporated into Council's management and planning for enhancement, not just for the benefit of Maori but also the community at large. Where tangata whenua join in partnership with Council on common issues the outcomes are more likely to be positive and of economic benefit.

1.6.1.15 **MANAAKITANGA**

- (a) Adequate resourcing of the iwi and constituent hapu to enable participation in all aspects of resource management in the region.
- (b) Councils seeking consultation with tangata whenua, irrespective of which model(s) of representation is/are involved, provide relevant information in an understandable form and timely fashion.
- (c) Tangata whenua and councils jointly promote an attitude of education as a preference to regulations for the achievement of sustainable resource management.

1.6.1.16 These are linked to, and are a consequence of, the four concepts listed above. In philosophical terms they represent the bestowal or grant of benefits through the exercise of rangatiratanga rights/responsibilities.

1.6.1.17 The resourcing within a management planning process provides an analogy for manaakitanga issues in that the first four concepts of issues herein define the philosophical considerations, culture, relationships and desired practices from which objectives and policies arise, whereas the budget is the cost to achieve those objectives.

1.6.2 **DISCUSSION**

1.6.2.1 This section, together with the more comprehensive Schedule I, provides a background to assist in understanding why the issues listed above are considered to be significant.

1.6.2.2 **THE MAORI MANAGEMENT SYSTEM**

1.6.2.3 This system involves three distinct states of tapu, rahui and noa. Those responsible for the exercise of the systems within a whanau/hapu were those leaders with the training (matauranga) and the prestige, power and authority (rangatiratanga) to set the norms for society. As applied to natural and physical resources these three states can be described as follows:

- (a) **The common state of noa** - Within the notion of sustainability and good conservation practices, resources were freely available for whanau/hapu/iwi.
- (b) **The restricted or temporary state of rahui** - Temporary bans were imposed where there were, or were likely to be, threats to the mauri and/or a particular species, or where a particular spiritual appeasement period was appropriate. An example of the latter case is a drowning in the proximity of a common fishing spot. A temporary ban or rahui would be declared to appease the spirits.
- (c) **The totally inaccessible state of tapu** - In respect to locations and resources where a state of tapu was imposed, there was a total and absolute ban, which lasted until uplifted by someone with the necessary mana, matauranga and rangatiratanga.

1.6.2.4 Whereas rahui clearly indicated a temporary state, tapu usually implied permanency. The parallels to systems of management within this Plan can be readily seen in terms of the categories of resource use which:

- (a) require no consent where there is the expectation that users will observe good conservation practices
- (b) are the subject of Council (rangatiratanga) imposed conditions/rules
- (c) are prohibited activities.

1.6.2.5 **THE ROLE OF WATER**

1.6.2.6 The predominant view of Maori in Hawke's Bay is that water is the essential ingredient of life: a priceless treasure left by ancestors for the life-sustaining use by their descendants. These descendants are, in turn, charged with a stewardship duty, kaitiaki, to ensure that these treasures are passed on, to those following, in as good a state, or indeed better, than they were received. Water and associated resources confirm life to humanity and thereby form a basis for identification, belonging, and mana.

1.6.2.7 Water therefore acquires a wairua, consistent with how Maori perceived its quality and use. A form of classification system based on various states of water is used which embraces both the spiritual and the physical worlds as described in the terms waiora, waimaori, waikino, waimate and waitai. This classification system in turn leads to strict etiquette in the use of water, so that metaphysical pollution is considered to be a significant risk, as is the more understood physical pollution.

1.6.2.8 **MAORI RESOURCE OWNERSHIP**

1.6.2.9 Four of the seven consultative hui on this Plan were held in the Wairoa sub-region. This is because:

- (a) The sub-region is home to at least three iwi.
- (b) Approximately 58% of the population in Wairoa District is of Maori ethnicity.
- (c) Maori own some 50% of the land in the sub-region.
- (d) Within the whole of Ngati Kahungunu (from Mahia to Wairarapa) there are 70 marae – 28 of which are in Wairoa.
- (e) Socio-economically Maori in the Wairoa sub-region have the highest ratio per capita of state dependency, a factor that meaningful consultation needs to take into account.

1.6.2.10 Land in Maori ownership within the Wairoa area is concentrated mainly into about 17 trusts, or incorporations, engaged principally in drystock farming. HBRC's "Policy Development Framework" within this Plan provides for farm plans which will benefit this type of commonly owned Maori land. The expectation is that, when properly managed, many of these properties will add to the productivity, and hence the prosperity, of the community.

1.6.2.11 In that sense, the managers of the trust farms will need to show some leadership applying the bicultural values within this Plan, in their search for improved prosperity through sustainable resource management.

1.6.2.12 Whether Maori are themselves resource owner/managers or merely resource users, the ethics involving true kaitiakitanga require them to be just as vigilant in following tikanga guidelines for resource conservation.

1.6.2.13 Those things aside, tangata whenua believe that their concepts add a meaningful dimension to sustainable environmental health and management and this is expressed through an active involvement in the protection of natural and physical resources of the region.

2 KEY REGIONAL POLICY STATEMENT OBJECTIVES

2.1 Introduction

- 2.1.1 This Chapter sets out the key objectives of the Plan which apply across the region, in terms of section 62 (1) (c) of the RMA. They embody the HBRC's approach to the preparation of the Plan.
- 2.1.2 It is, therefore, intended to provide the overall framework for the management of natural and physical resources in Hawke's Bay.

2.2 Issue

- 2.2.1 **The need to establish a resource management framework in order to promote the sustainable management of the natural and physical resources of the Hawke's Bay region.**

Explanation and Reasons

- 2.2.2 Section 30 of the RMA sets out the functions of HBRC in relation to resource management. In order to work towards integrated management of the region's natural and physical resources, HBRC has identified the need to:
- Firstly, integrate its resource management documents as far as is practicable.
 - Secondly, express its general approach to the management of natural and physical resources, before focusing on the specific.
- 2.2.3 Accordingly Chapters 2 and 3 of this Plan contain the regionally significant issues, objectives and policies which apply across the whole region. The objectives and policies set out in Chapter 5 of this Plan have been developed in accordance with section 67 (1) of the RMA and are applied as appropriate to the use of a particular resource.

2.3 Plan Objectives

- OBJ 1** To achieve the integrated sustainable management of the natural and physical resources of the Hawke's Bay region, while recognising the importance of resource use activity in Hawke's Bay, and its contribution to the development and prosperity of the region.
- OBJ 2** To maximise certainty by providing clear environmental direction.
- OBJ 3** To avoid the imposition of unnecessary costs of regulation on resource users and other people.

Explanation and Reasons

- 2.3.1 These objectives have been adopted by the HBRC to set the overarching resource management framework for the region's resources. Hawke's Bay Regional Council recognises the integrated nature and importance of both resource use and environmental quality and the need for this to be apparent in the Plan.
- 2.3.2 These objectives build on the sustainable philosophy of the RMA, while also incorporating the private sector's and the public's desire for efficient and accountable decision-making.
- 2.3.3 These are the key Regional Policy Statement objectives. They also provide a linkage between the Regional Policy Statement and the objectives contained in Chapter 5 of this document, that chapter forming part of the Regional Plan.

2.3.4 The following table clarifies which objectives are contained in the Regional Policy Statement and which are contained in the Regional Plan:

Table 1. Regional Policy Statement Objectives and Regional Plan Objectives

OBJECTIVE	TOPIC	LOCATION
Objectives LW1 – LW3	Integrated land use and freshwater management	REGIONAL POLICY STATEMENT
Objectives UD1 – UD6	Managing the Built Environment	
Objectives 4-10	Coastal Resources	
Objectives 11-14	Loss and Degradation of Soil	
Objective 15	Scarcity of Indigenous Vegetation and Wetlands	
Objectives 16-18	Effects of Conflicting Land Use Activities	
Objective 19	Agrichemical Use	
Objective 20	Management of Organic Material	
Objectives 21-22	Groundwater Quality	
Objectives 23-24	Groundwater Quantity	
Objectives 25-26	Surface Water Quantity	
Objective 27	Surface Water Quality	
Objectives 28-29	River Bed Gravel Extraction	
Objective 30	Natural Hazards	
Objectives 31-32	Physical Resources	
Objectives 33-36	Matters of Significance to Iwi/Hapu	
Objective 37	Land	
Objective 38	Air Quality	
Objective 39	Surface Water Quality	
Objective 40	Surface Water Quantity	
Objectives 41-42	Groundwater Quality	
Objective 43	Groundwater Quantity	
Objective 44	Beds of Rivers and Lakes	

2.4 Giving Effect to the RPS

2.3.5 To achieve the best outcome for the Hawke's Bay region, it is necessary to ensure consistency in resource management approaches. This will be achieved through the:

- amendment of regional and district plans to give effect to this Statement and
- adoption of consistent approaches and bottom-lines.

2.3.6 It is recognised, however, that some Districts come under the jurisdiction of more than one Regional Council. In such cases a pragmatic approach may be necessary to ensure that those Councils are able to develop statutory policy in the most effective and efficient manner for their District that best reflects the variance of regional governance in that District.

3 REGIONALLY SIGNIFICANT ISSUES, OBJECTIVES AND POLICIES

3.1 Introduction

- 3.1.1 Under s 62 (1) of the RMA, a regional policy statement must state the “significant resource management issues of the region”. This section is written pursuant to this requirement and sets out the regionally significant issues in Hawke’s Bay. These issues are a fundamental element of this Plan and, together with the provisions of the RMA, provide the framework for the objectives and policies set out in response. These objectives and policies are specific to certain activities as set out in the Regional Policy Statement, unlike Chapter 5 where the objectives and policies apply to the use of resources within the Regional Plan framework.
- 3.1.2 The list of regionally significant issues set out in this chapter was distilled from a much larger list of potential resource management issues. This larger list, together with the approach used to derive the list of regionally significant issues, is contained in a background report to this Plan – “Background Report 1: Issues” (HBRC, 1999).
- 3.1.3 What makes an issue regionally significant? For the purposes of the Hawke's Bay Regional Resource Management Plan, a regionally significant issue is considered to be one that satisfies one or more of the following criteria:
- (a) **Widespread problem** – A problem which is relevant throughout the region, possibly crossing local authority boundaries.
 - (b) **Scarce resource** – The existence of a natural or physical resource that is scarce, rare or unique, and/or under threat. Scarce resources encompass internationally and nationally recognised resources (including resources that are nationally significant in accordance with section 6 of the RMA). They also include physical resources that have particular locational requirements or that form interlinked networks and natural resources that become scarce through unsustainable use.
 - (c) **Resource use conflict** – The presence of, or potential for, significant conflicts in resource use.
 - (d) **Cumulative impact** – The presence of, or potential for, significant cumulative impacts arising from resource use.
- 3.1.4 In essence, a regionally significant issue is one that requires a substantial, region-specific, response under the RMA. Regionally significant issues do not include matters that are regulated or protected under other legislation. Nor do they include matters relating to a national or international problem, where such matters are more appropriately dealt with at a national or international level. However, in these cases the HBRC would comply with any other legislation (if required) and any national direction given in relation to the problem.
- 3.1.5 It is important to recognise that an issue does not need to be identified as regionally significant, in order for the HBRC to address resource use activities under the RMA. This has been established in Chapter 5 where the HBRC has exercised its functions and powers under the RMA in a manner consistent with Part II of the Act. This requirement alone is adequate to address many resource use activities, such as controls on bore drilling, damming, structures in rivers and lakes, etc. What distinguishes these matters from those issues that are regionally significant is that they are not substantial problems in the region, and they do not require a response that is unique to Hawke's Bay.
- 3.1.6 Using the criteria noted above, 12 regionally significant issues have been identified. These are described in sections 3.2 to 3.13.
- 3.1.7 This chapter also sets out objectives and policies in response to the identified regionally significant issues. In order to provide a consistent approach, the policies for each regionally significant issue have been categorised under the following headings:
- (a) **Role of non-regulatory methods** - This type of policy identifies the role of non-regulatory methods in addressing the issue. These policies are linked to Chapter 4, where detailed provisions regarding non-regulatory methods are set out.

- (b) **Regulation** - This type of policy establishes how specific activities will be regulated by regional rules.
- (c) **Resource allocation** - This type of policy establishes how resources will be allocated.
- (d) **Decision-making criteria** - This type of policy sets up criteria to be used in making decisions on resource consent applications. These policies are intended to supplement the environmental guidelines established in Chapter 5.
- (e) **Problem-solving approaches** - This type of policy establishes an approach to solving a particular problem.
- (f) **Technical procedure** - This type of policy sets out a technical or scientific procedure or requirement to be used for specific elements of resource management.

3.1.8 The following table (Table 2 overleaf) provides a summary of the objectives, policies and methods set out in Chapter 3, including the relevant rules in Chapter 6.

Table 2. Summary of Objectives, Policies and Methods in Chapters 3 and 5

Objective	Policies	Rule Number	Non Regulatory Methods
Objective 3.1AA.1			
Objectives LW1 – LW3	LW1A, LW1, LW2, LW3, LW4		Refer Policy LW4
Objectives UD1 – UD6	UD1 – UD14.2		<ul style="list-style-type: none"> ▪ Education & Coordination ▪ Encouragement for Self-regulation ▪ Liaison with territorial authorities ▪ Advocacy ▪ Research and Investigation ▪ Provision of Information
Objectives 4 –10	Refer to Regional Coastal Plan		
Objective 11	1, 3	7, 8	<ul style="list-style-type: none"> ▪ Economic Instruments ▪ Education & Coordination ▪ Encouragement for Self-regulation
Objective 12	1, 2		
Objective 13	1		
Objective 14	1		
Objective 15	4		<ul style="list-style-type: none"> ▪ Economic Instruments ▪ Works and Services
Objective 16	5, 6, 8	10, 14, 15, 18, 28, 30	<ul style="list-style-type: none"> ▪ Liaison with territorial authorities
Objective 17	5, 7, 8		
Objective 18	5, 7, 8		
Objective 19	9, 10	9, 10	<ul style="list-style-type: none"> ▪ Education and Coordination
Objective 20	11, 12, 13, 14	12, 13, 14, 30, 52	<ul style="list-style-type: none"> ▪ Advocacy ▪ Promotion of composting ▪ Encouragement for self-regulation
Objective 21	15, 16, 17, 18	1, 2, 6, 10, 14, 15, 16, 30, 35 - 43, 49, 52	<ul style="list-style-type: none"> ▪ Liaison with territorial authorities ▪ Education and Coordination ▪ Encouragement for self-regulation
Objective 22	15, 17, 18, 19, 20, 21, 22	1, 2, 3, 6, 10, 14, 15, 36, 38, 39, 40, 41, 52	

Objective	Policies	Rule Number	Non Regulatory Methods
Objective 23	23, 24, 25, 26, 27, 29, 30, 31, 32, 33	1, 2, 53, 55	<ul style="list-style-type: none"> ▪ Education and Coordination ▪ Advocacy with territorial authorities
Objective 24	23, 25, 26, 27, 28, 30	2, 53, 60	<ul style="list-style-type: none"> ▪ Research and Investigation
Objective 25	34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44	54, 55, 60, 61	<ul style="list-style-type: none"> ▪ Liaison with territorial authorities ▪ Education and Coordination
Objective 26	34, 36, 38	55, 60, 61	<ul style="list-style-type: none"> ▪ Encouragement for self-regulation
Objective 27	45, 46, 47, 48, 49	6, 10, 14, 15, 39, 40, 42, 43, 52	<ul style="list-style-type: none"> ▪ Research and Investigation ▪ Economic Instruments ▪ Education and Coordination
Objective 28	50, 51, 52		<ul style="list-style-type: none"> ▪ Works and Services
Objective 29	54	74	
Objective 30	53		
Objective 31	55		<ul style="list-style-type: none"> ▪ Liaison with territorial authorities ▪ Works and Services ▪ Natural hazard priorities
Objective 32	56		<ul style="list-style-type: none"> ▪ Provision of Information
Objective 33	56		<ul style="list-style-type: none"> ▪ Liaison with territorial authorities
Objective 34	57, 58		<ul style="list-style-type: none"> ▪ Provision of Information
Objective 35	59, 60, 61, 62, 63		
Objectives 36 & 37	64, 65, 66		
Objective 38	67, 68	7, 8, 48	
Objective 39	69, 70	11, 12, 13, 17 - 30	
Objective 40	71, 72	5, 6, 7, 8, 12, 13, 30, 31, 32, 33, 34, 35, 36, 37, 42, 43, 47, 49, 50, 51, 52	
Objective 41	73, 74	54, 55	
Objectives 42 & 43	75, 75	1, 2, 4, 12, 13, 30, 35, 36, 37, 42, 43	
Objective 44	77, 78	53, 55, 62	
Objective 45	79, 80	31, 32, 33, 47, 49, 52, 54, 55, 56, 57, 59, 63- 76	

3.1AA Consolidated Regional Policy Statement provisions inserted by various national directions

Introduction

3.1AA.a From time to time, national directions (e.g. in national policy statements, national environmental standard or other forms of regulation direction issued by Central Government Ministers) directs councils to insert provisions or amend plan provisions as soon as practicable **without** using a Schedule 1 RMA process. This chapter consolidates the various objectives and policies that have been directed to be in regional policy statements (refer to Chapter 5.1A for similar consolidated regional plan provisions). These objectives and policies are to be treated just like any other regional policy statement objective or policy included elsewhere in the RRMP.

3.1AA.b Consolidation is done for ease of reference and avoiding repetition throughout multiple chapters of the RRMP.

OBJECTIVES

OBJ 3.1AA.1: Housing bottom lines for Napier -Hastings Urban Environment ^[1]

1. Over the short-medium term and long term, the amount of development capacity that is sufficient to meet expected housing demand plus the appropriate competitiveness margin as set out in Table 2A, is provided for the Napier-Hastings urban environment.
2. Planning decisions relating to the Napier-Hastings urban environment must have particular regard to the housing bottom lines in Table 2A.

Table 2A: Housing bottom lines for Napier-Hastings Urban Environment, 2020-2050 ^[2, 3]

Area	Housing bottom lines (number of dwellings)		
	Short to medium term (2020 to 2030) includes an additional competitiveness margin of 20%	Long term (2031 – 2050) includes an additional competitiveness margin of 15%	2020 – 2050 TOTAL (includes competitiveness margins)
Napier-Hastings urban environment TOTAL	8,370	11,650	20,020
Hastings urban environment	5,190	7,640	12,830
Napier urban environment	3,180	4,010	7,190

^[1] Objective 3.1AA.1 was inserted on 18 December 2021 as directed by clause 3.6 of the National Policy Statement on Urban Development 2020.

^[2] The purpose of housing bottom lines is to clearly state the amount of development capacity that is sufficient to meet expected housing demand plus the appropriate competitiveness margin in the Napier-Hastings urban environment. These housing bottom lines for the 2020-2050 period are based on the assessment published in 2021 titled 'Housing Development Capacity Assessment 2021, prepared by m.e Consulting for Napier City Council, Hastings District Council and Hawke's Bay Regional Council.'

^[3] Housing bottom lines as described in Clause 3.6(3) of the National Policy Statement on Urban Development 2020 are:

- a) for the short-medium term (3-10 years), the sum of:
 - i) the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin for the short-term; and
 - ii) the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin for the medium-term; and
- b) for the long term (11-30 years) the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin, for the long term.

3.1A Integrated Land Use and Freshwater Management

ISSUES

ISS LW1A E kore Parawhenua e haere ki te kore a Rakahore

Parawhenua (Water) would not flow if it were not for Rakahore (Rock)

He huahua te kai pai! He wai te kai pai!

Huahua (preserved birds) are a treasured delicacy. However water is a necessity.

Explanation: These two proverbs encapsulate the interrelationship between two significant elements – land and water. The Māori world is formed on the interconnectedness and interdependency of people to all living creatures and to the environments in which they live. The well-being of the whole is dependent on the well-being of its constituent parts.

ISS LW1 **Multiple and often competing values and uses of fresh water can create conflict in the absence of clear and certain resource management policy guidance.**

ISS LW2 **Integration of the management of land use and water quality and quantity increases the ability to promote sustainable management of the region's natural and physical resources.**

OBJECTIVES

OBJ LW 1 **Integrated management of fresh water and land use and development**

Fresh water and the effects of land use and development are managed in an integrated and sustainable manner which includes:¹

1. protecting the quality of outstanding freshwater bodies in Hawke's Bay;
- 1A. protecting wetlands, including their significant values;^{1A}
2. the maintenance of the overall quality of freshwater within the Hawke's Bay region and the improvement of water quality in water bodies that have been degraded to the point that they are over-allocated;
- 2B. establishing where over-allocation exists, avoiding any further over-allocation of freshwater and phasing out existing over-allocation;
3. recognising that land uses, freshwater quality and surface water flows can impact on aquifer recharge and the coastal environment;
4. safeguarding the life-supporting capacity and ecosystem processes of fresh water, including indigenous species and their associated fresh water ecosystems;
5. recognising the regional value of fresh water for human and animal drinking purposes, and for municipal water supply;
6. recognising the significant regional and national value of fresh water use for production and processing of beverages, food and fibre;
7. recognising the potential national, regional and local benefits arising from the use of water for renewable electricity generation;
8. recognising the benefits of industry good practice to land and water management, including audited self-management programmes;
- 8A. recognising the role of afforestation in sustainable land use and improving water quality;
9. ensuring efficient allocation and use of water;
12. recognising and providing for river management and flood protection activities;
13. recognising and providing for the recreational and conservation values of fresh water bodies; and

¹ There is no particular priority or ranking intended by the matters' order of appearance. For the avoidance of doubt, varying degrees of emphasis may apply, irrespective of their particular placement in the list, arising from the use of verbs in each sub-clause.

^{1A} While significant values of wetlands can include nutrient filtering, flood flow attenuation, sediment trapping and cultural, spiritual, recreational, aesthetic and educational values, their values as habitat to fish, invertebrate, plant and bird life is likely to be significant for wetlands across the region.

14. promoting the preservation of the natural character of the coastal environment, and rivers, lakes and wetlands, and their protection from inappropriate subdivision, use and development.

OBJ LW2 Integrated management of freshwater and land use development

The management of land use and freshwater use that recognises and balances the multiple and competing values and uses of those resources within catchments. Where significant conflict between competing values or uses exists or is foreseeable, the regional policy statement and regional plans provide clear priorities for the protection and use of those freshwater resources.

OBJ LW3 Tāngata whenua values in management of land use and development and freshwater

Tāngata whenua values are integrated into the management of freshwater and land use and development including:

- a) recognising the mana of hapu, whanau and iwi when establishing freshwater values; and
- b) recognising the cumulative effects of land use on the coastal environment as recognised through the Ki uta ki Tai ('mountains to the sea') philosophy; and
- c) recognising and providing for wairuatanga and the mauri of fresh water bodies in accordance with the values and principles expressed in Chapter 1.6, Schedule 1 and the objectives and policies in Chapter 3.14 of this Plan; and
- d) recognising in particular the significance of indigenous aquatic flora and fauna to tāngata whenua.

Principal reasons and explanation

Objectives LW1, LW2 and LW3 (and associated policies) assist HBRC to give effect to the 2011 National Policy Statement for Freshwater Management by setting out a broad overall framework (in parallel with other objectives in the RPS) for improving integrated management of the region's freshwater and land resources. These RPS provisions only partly implement the NPS for Freshwater Management. Regional plan policies and methods (including rules) also assist in giving effect to the NPS for Freshwater Management.

In Hawke's Bay, the issues and pressures on land and water resources vary throughout the region. As a result, the urgency for clarity around water allocation and to maintain or improve water quality also varies. For example, the food and wine production Hawke's Bay is renowned for is focussed mostly on the Heretaunga Plains, while for example plantation forestry and wool growing is typically located on hill country. These catchment differences have influenced HBRC's decision to prioritise catchments where the issues, pressures and conflicts are most pressing.

Objectives LW1, LW2 and LW3 are intended to outline the broad principles for policy-making and regional plan preparation to improve integrated decisions being made about the way the region's land and freshwater resources are used, developed or protected across the region's varying catchments and sub-catchments.

As well as different pressures in different catchments, freshwater values in Hawke's Bay also vary spatially. In addition to the national values of fresh water identified in the 2011 NPSFM's Preamble, HBRC has undertaken a process to assess freshwater values in Hawke's Bay. This included beginning with a Regional Water Symposium in 2010, followed by a process involving stakeholder representatives to develop the Hawke's Bay Regional Land and Water Management Strategy and a second Land and Water Symposium in 2011. This process helped HBRC to understand how to prioritise and strengthen policy options and management decisions for the different catchments. HBRC has also applied the River Values Assessment System (RiVAS)² to assess some of the values of rivers in the region. The results of the RiVAS assessments for Hawke's Bay reinforced the values identified at the symposiums and by the stakeholder reference group.

The predominant view of Māori in Hawke's Bay is that water is the essential ingredient of life: a priceless treasure left by ancestors for their descendants' life-sustaining use. This Plan sets out iwi environmental management principles (see Chapter 1.6), matters of significance to iwi/hapū (see Chapter 3.14) and commentary about the Māori dimension to resource management (see Schedule 1).

POLICIES

POL LW1A Problem solving approach – Wetlands and outstanding freshwater bodies

1. To work collaboratively with iwi, territorial authorities, stakeholders and the regional community:
 - a) to identify outstanding freshwater bodies at a regional level and include provisions in the Regional Policy Statement to list those waterbodies and guide the protection of the outstanding qualities of those waterbodies; and
 - b) to prepare a Regional Biodiversity Strategy and thereafter include provisions in the Regional Policy Statement and/or regional plans to (amongst other things) guide the protection of significant wetland habitat values identified by the Strategy.

² RiVAS, developed by Lincoln University, provides a standardised method that can be applied to multiple river values. It helps to identify which rivers are most highly rated for each value and has been applied in several regions throughout the country.

2. In relation to Policy LW1A.1, the identification of outstanding freshwater bodies will be completed and an associated change to the Regional Policy Statement will be publicly notified prior to public notification of any further³ catchment-based plan changes⁴ prepared in accordance with Policy LW1.

POL LW1 Problem solving approach - Catchment-based integrated management

1. Adopt an integrated management approach to fresh water and the effects of land use and development within each catchment area, that:⁵
- b) provides for *mātauranga a hapū* and local tikanga values and uses of the catchment;
 - c) provides for the inter-connected nature of natural resources within the catchment area, including the coastal environment;
 - cA) recognises and provides for the need to protect the integrity of aquifer recharge systems;
 - cB) recognises and manages the co-existing values of wetland habitat and agricultural production;
 - d) gives effect to provisions relating to outstanding freshwater bodies arising from the implementation of Policy LW1A;
 - dA) maintains, and where necessary enhances, the water quality of those outstanding freshwater bodies identified in the catchment, and where appropriate, protects the water quantity of those outstanding freshwater bodies;
 - e) promotes collaboration and information sharing between relevant management agencies, iwi, landowners and other stakeholders;
 - f) takes a strategic long term planning outlook of at least 50 years to consider the future state, values and uses of water resources for future generations;
 - g) aims to meet the differing demand and pressures on, and values and uses of, freshwater resources to the extent possible;
 - gA) involves working collaboratively with the catchment communities and their nominated representatives;
 - h) ensures the timely use and adaptation of statutory and non-statutory measures to respond to any significant changes in resource use activities or the state of the environment;
 - iC) avoids development that limits the use or maintenance of existing electricity generating infrastructure or restricts the generation output of that infrastructure;
 - iD) provides opportunities for new renewable electricity generation infrastructure where the adverse effects on the environment can be appropriately managed;
 - iE) recognises and provides for existing use and investment;
 - j) ensures efficient allocation and use of fresh water within limits to achieve freshwater objectives; and
 - k) enables water storage infrastructure where it can provide increased water availability and security for water users while avoiding, remedying or mitigating adverse effects on freshwater values.
2. When preparing regional plans:
- a) use the catchment-wide integrated management approach set out in POL LW1.1; and
 - b) identify the values for freshwater and wetlands and their spatial extent within each catchment and for catchments identified in Policy LW2.1:
 - i) the values must include those identified in Table 1; and
 - ii) may include additional values; and

³ Plan Change 6 for the Tukituki River catchment pre-dates this provision.

⁴ Notwithstanding Policy LW1A.2, a catchment-based regional plan change for the Mohaka River catchment may proceed in the meantime. For the avoidance of doubt, issue-specific regional plan changes (for example, urban stormwater or natural hazards and oil and gas resources) may also proceed in the meantime.

⁵ There is no particular priority or ranking intended by the matters' order of appearance. For the avoidance of doubt, varying degrees of emphasis may apply, irrespective of their particular placement in the list, arising from the use of verbs in each sub-clause.

- bA) recognise and provide for outstanding freshwater bodies and their values arising from the implementation of Policy LW1A; and
 - c) establish freshwater objectives for all freshwater bodies for the values identified in clause (b) and clause (bA) above; and
 - d) so as to achieve the freshwater objectives identified under clause (c), set:
 - i) groundwater and surface water quality limits and targets; and
 - ii) groundwater and surface water quantity allocation limits and targets and minimum flow regimes; and
 - e) set out how the groundwater and surface water quality and quantity limits and targets will be implemented through regulatory or non-regulatory methods including specifying timeframes for meeting water quality and allocation targets.
3. When setting the objectives referred to in Policy LW1.2, ensure:
- a) the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water are safeguarded; and
 - b) adverse effects on water quantity and water quality that diminish mauri are avoided, remedied or mitigated; and
 - c) the microbiological water quality in rivers and streams is safe for contact recreation where that has been identified as a value under Policy LW1.2 or Policy LW2 Table 1.⁶
4. When identifying methods and timeframes in regional plans to achieve limits and targets required by Policy LW1.2(e) have regard to:
- a) allowing reasonable transition times and pathways to meet any new water quantity limits or new water quality limits included in regional plans. A reasonable transition time is informed by the environmental and socio-economic costs and benefits that will occur during that transition time, and should include recognition of the existing investment; and
 - b) promoting and enabling the adoption and monitoring of industry-defined and Council approved good land and water management practices.

Principal reasons and explanation

Catchment-based resource management is promoted in Policy LW1 and is consistent with Objective C1 of the 2011 National Policy Statement for Freshwater Management. Policy LW1 provides a 'default' planning approach for all catchments and catchment areas across the region, irrespective of the catchment area's values being identified in Policy LW2. Many of the principles and considerations for catchment-based planning have emerged from the 2011 Hawke's Bay Land and Water Management Strategy.

National values of freshwater were listed in the 2011 NPSFM preamble and values have also been identified in the Hawke's Bay LAWMS.

Approaches to issues, values and uses of catchments will vary so Policy LW1.1, Policy LW1.2, Policy LW1.3 and Policy LW1.4 do not prescribe a one-size-fits-all approach for all catchments in Hawke's Bay. Each catchment-based process will need to be tailored for what is the most appropriate approach for that catchment (or grouping of catchments). Regional plans and changes to regional plans will be the key planning instrument for implementing catchment-based approaches to land use and freshwater resource management.

POL LW2 Problem solving approach - Prioritising values

Subject to achieving Policy LW1.3:

1. Give priority to maintaining, or enhancing where appropriate, the primary values and uses of freshwater bodies shown in Table 1 for the following catchment areas⁷ in accordance with Policy LW2.3:
 - a) Greater Heretaunga / Ahuriri Catchment Area;
 - b) Mohaka Catchment Area; and
 - c) Tukituki Catchment Area.

⁶ NOTE: Policy LW1.3(c) applies to any values and uses identified in Table 1 which refer to "amenity for contact recreation", "amenity for water-based recreation" or "recreational trout angling."

⁷ A map illustrating the indicative location of these Catchment Areas is set out in Appendix 'A'.

- 1A. Policy LW2.1 applies:
 - a) when preparing regional plans for the catchments specified in Policy LW2.1; and
 - b) when considering resource consents for activities in the catchments specified in Policy LW2.1 when no catchment-based regional plan has been prepared for the relevant catchment.
2. In relation to catchments not specified in Policy LW2.1 above, the management approach set out in Policy LW1.1, Policy LW1.2, Policy LW1.3 and Policy LW1.4 will apply.
- 2A. In relation to values not specified in Table 1, the management approach set out in Policy LW1.1, Policy LW1.2, Policy LW1.3 and Policy LW1.4 will apply.
3. When managing the fresh water bodies listed in Policy LW2.1:
 - a) recognise and provide for the primary values and uses identified in Table 1; and
 - b) have particular regard to the secondary values and uses identified in Table 1.
4. evaluate and determine the appropriate balance between any conflicting values and uses within (not between) columns in Table 1, using an integrated catchment-based process in accordance with Policy LW1.1, Policy LW1.2, Policy LW1.3 and Policy LW1.4 or when considering resource consent applications where no catchment-based regional plan has been prepared.

TABLE 1:

Catchment Area	Primary Value(s) and Uses – in no priority order	Secondary Value(s) and Uses – in no priority order
Greater Heretaunga / Ahuriri Catchment Area	<ul style="list-style-type: none"> • any regionally significant native water bird populations and their habitats • Cultural values and uses for: <ul style="list-style-type: none"> ○ mahinga kai ○ nohoanga ○ taonga raranga ○ taonga rongoa • Fish passage • Individual domestic needs and stock drinking needs⁸ • Industrial & commercial water supply • Native fish habitat in the Ngaruroro River and Tutaekuri River catchments • Recreational trout angling and trout habitat in: <ul style="list-style-type: none"> ○ the Mangaone River ○ the Mangatutu Stream ○ the Ngaruroro River and tributaries upstream of Whanawhana cableway ○ the Ngaruroro River mainstem between the Whanawhana cableway and confluence with the Maraekakaho River ○ the Tutaekuri River mainstem above the Mangaone River confluence • The high natural character values of the Ngaruroro River and its margins upstream of Whanawhana cableway, including Taruarau River • The high natural character values of the Tutaekuri River and its margins above the confluence of, and including, the Mangatutu Stream • Trout spawning habitat • Urban water supply for cities, townships and settlements and water supply for key social infrastructure facilities • freshwater use for beverages, food and fibre production and processing and other land-based primary production 	<ul style="list-style-type: none"> • Aggregate supply and extraction in Ngaruroro River downstream of the confluence with the Mangatahi Stream • Amenity for contact recreation (including swimming) in lower Ngaruroro River, Tutaekuri River and Ahuriri Estuary • any locally significant native water bird populations and their habitats • Native fish habitat, notwithstanding native fish habitat as a primary value and use in the Tutaekuri River and Ngaruroro River catchments • Recreational trout angling, where not identified as a primary value and use • Trout habitat, where not identified as a primary value and use

⁸ In line with s14(3)(b)(ii) of the RMA, it is recognised that drinking water for stock is allowed, provided that it does not have an adverse effect on the environment.

Catchment Area	Primary Value(s) and Uses – in no priority order	Secondary Value(s) and Uses – in no priority order
Mohaka Catchment Area	<ul style="list-style-type: none"> • Amenity for water-based recreation between State Highway 5 bridge and Willowflat • any regionally significant native water bird populations and their habitats • Cultural values and uses for: <ul style="list-style-type: none"> ○ mahinga kai ○ nohoanga ○ taonga raranga ○ taonga rongoa • Fish passage • Individual domestic needs and stock drinking needs⁸ • Long-fin eel habitat and passage • Recreational trout angling and trout habitat in the Mohaka River and tributaries upstream of, and including, the Te Hoe River • Scenic characteristics of Mokonui and Te Hoe gorges • The high natural character values of the Mohaka River and its margins • Trout spawning habitat 	<ul style="list-style-type: none"> • Aggregate supply and extraction in Mohaka River below railway viaduct • any locally significant native water bird populations and their habitats • Native fish habitat below Willowflat • Recreational trout angling, where not identified as a primary value and use • Trout habitat, where not identified as a primary value and use • Water use associated with maintaining or enhancing land-based primary production • Water use for renewable electricity generation in areas not restricted by the Water Conservation Order
Tukituki Catchment Area	<ul style="list-style-type: none"> • any regionally significant native water bird populations and their habitats • Cultural values and uses for: <ul style="list-style-type: none"> ○ mahinga kai ○ nohoanga ○ taonga raranga ○ taonga rongoa • Fish passage • Individual domestic needs and stock drinking needs⁸ • Industrial & commercial water supply • Native fish and trout habitat • Recreational trout angling and trout habitat in: <ul style="list-style-type: none"> ○ the Mangaonuku Stream ○ the Tukipo River ○ the Tukituki River mainstem downstream to Red Bridge ○ the Waipawa River • The high natural character values of: <ul style="list-style-type: none"> ○ the Tukituki River upstream of the end of Tukituki Road; and ○ the Waipawa River above the confluence with the Makaroro River, including the Makaroro River • Trout spawning habitat • Urban water supply for cities, townships and settlements and water supply for key social infrastructure facilities • freshwater use for beverages, food and fibre production and processing and other land-based primary production 	<ul style="list-style-type: none"> • Aggregate supply and extraction in lower Tukituki River • Amenity for contact recreation (including swimming) in lower Tukituki River. • any locally significant native water bird populations and their habitats • Recreational trout angling, where not identified as a primary value and use • Trout habitat, where not identified as a primary value and use • Water use for renewable electricity generation in the Tukituki River (mainstem) and the Waipawa River above SH50 including the Mākaroro River.

Principal reasons and explanation

Policy LW2.1 and 2.3 prioritises values of freshwater in three Catchment Areas where significant conflict exists between competing values. Clearer prioritised values in 'hotspot' catchments where significant conflicts exist was an action arising from the 2011 Hawke's Bay Land and Water Management Strategy. Policy LW2 implements OBJ LW2 in particular insofar as explicit recognition is made of the differing demands and pressures on freshwater resources, particularly within the three nominated 'hotspot' catchment areas. In relation to the remaining catchment areas across the region, Policy LW2 does not pre-define any priorities, thus enabling catchment-based regional plan changes (refer Policy LW1) for those areas to assess values and prioritise those values accordingly.

The primary and secondary values in Table 1 are identified to apply to the catchment overall, or to sub-catchments or reaches where stated. Table 1 recognises that not all values are necessarily equal across every part of the catchment area, and that some values in parts of the catchment area can be managed in a way to ensure, overall, the water body's value(s) is appropriately managed. With catchment-based regional planning processes, it is potentially possible for objectives to be established that meet the primary values and uses at the same time as meeting the secondary values.

[Refer also:

- OBJ1, OBJ2 and OBJ3 in Chapter 2.3 (Plan objectives);
- Objectives and policies in Chapter 3.4 (Scarcity of indigenous vegetation and wetlands);
- Objectives and policies in Chapter 3.8 (Groundwater quality);
- Objectives and policies in Chapter 3.9 (Groundwater quantity);
- Objectives and policies in Chapter 3.10 (Surface water resources); and
- Objectives and policies in Chapter 3.14 (Recognition of matters of significance to iwi/hapū).

POL LW3 Problem solving approach – Managing the effects of land use

1. To manage the effects of the use of, and discharges from, land so that:
 - a) the loss of nitrogen from land to groundwater and surface water, does not cause catchment area or sub-catchment area limits for nitrogen set out in regional plans to be exceeded;
 - b) the discharge of faecal matter from livestock to land, and thereafter to groundwater and surface water, does not cause faecal indicator bacteria water quality limits for human consumption and irrigation purposes set out in regional plans to be exceeded;
 - c) the loss of phosphorus from production land into groundwater or surface water does not cause limits set out in regional plans to be exceeded.
- 1A. To provide for the use of audited self management programmes to achieve good management of production land.
2. To review regional plans and prepare changes to regional plans to promote integrated management of land use and development and the region's water resources.

Principal reasons and explanation

Policy LW3 makes it clear that HBRC will manage the loss of contaminants (nitrogen, phosphorus and faecal indicator bacteria) from land use activities to groundwater and surface water in order to ensure that groundwater and surface water objectives and limits identified in specified catchment areas are achieved. Restrictions under section 15 of the RMA may also apply to land use activities. Phosphorus and nitrogen leaching and run-off will be managed by both regulatory and non-regulatory methods. This approach will be complemented by industries' implementation of good agricultural practices.

HBRC had prepared a NPSFM Implementation Programme that outlined key regional plan and policy statement change processes required to fully implement the earlier 2011, 2014 and 2017 versions of NPSFMs by 2030. However, that programme has been reconfigured due to the 2020 NPSFM that came into effect on 3 September 2020 and several of the amendments made to the RMA in 2020.

POL LW4 Role of non-regulatory methods

To use non-regulatory methods, as set out in Chapter 4, in support of regulatory methods, for managing fresh water and land use and development in an integrated manner, including:

- a) **research, investigation and provision of information and services** – HBRC has in place a programme of research, monitoring and assessment of the state and trends of Hawke's Bay's natural resources. That programme will continue to be enhanced to assist HBRC implement the NPSFM and Hawke's Bay Land and Water Management Strategy;
- b) **advocacy, liaison and collaboration** – HBRC will promote a collaborative approach to the integrated management of land use and development and the region's freshwater resources;
- c) **land and water strategies** – the 2011 Hawke's Bay Land and Water Management Strategy contains a variety of policies and actions. A range of agencies and partnerships will be necessary to implement the actions and policies in the Strategy;
- e) **industry good practice** – HBRC will strongly encourage industry and/or catchment-based good practices for production land uses along with audited self management programmes as a key mechanism for achieving freshwater objectives at a catchment or sub-catchment level.

Principal reasons and explanation

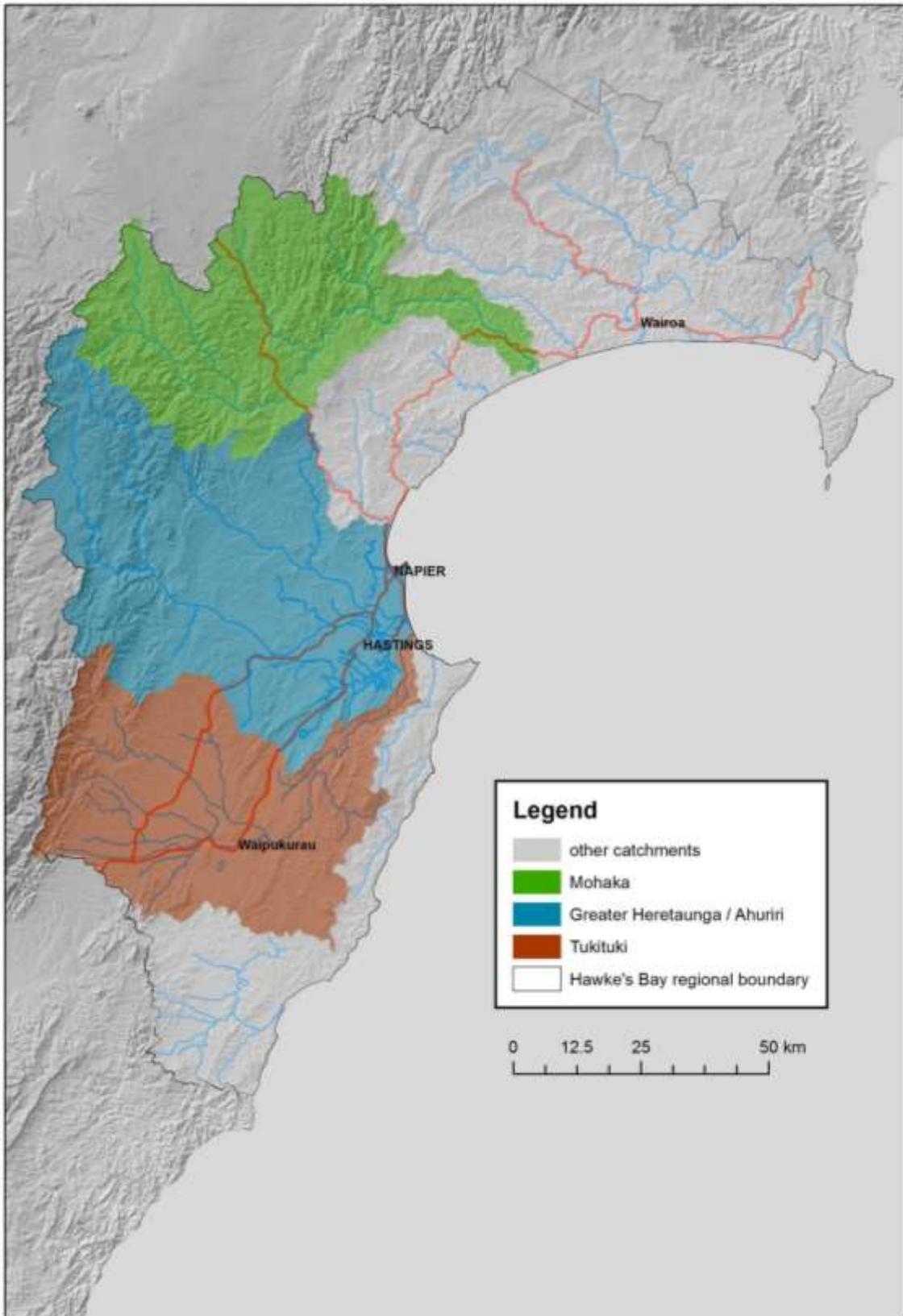
Policy LW4 sets out the role of HBRC's non-regulatory methods in supporting regional rules and other regulatory methods to assist management of freshwater and land use and development in an integrated manner. This policy (and Policy LW1) recognises the need for a collaborative approach as an important means of minimising conflict and managing often competing pressures for the use and values of fresh water.

Anticipated Environmental Results

[Refer also anticipated environmental results in Chapters 3.3; 3.4; 3.7; 3.8; 3.9; 3.10; and 3.11]

Anticipated Environmental Results	Indicator(s)	Data Source(s)
1. Land and water management is tailored and prioritised to address the key values and pressures of each catchment	Freshwater objectives, targets and limits for catchments and/or groups of catchments are identified in regional plans for catchments Physical and biological parameters Social, cultural and economic indices	Regional plans and changes to regional plans HBRC's NPSFM Implementation Programme SOE monitoring and reporting Local authority records User surveys Catchment-specific monitoring programmes
2. Regional economic prosperity is enhanced	Regional GDP trends and unemployment trends for primary sector and associated manufacturing and processing	Statistics NZ Economic activity surveys Employment records by sector
3. Water is efficiently allocated	Level of allocation Catchment contaminant load modelling and monitoring Water use restriction timings and durations	SOE monitoring HBRC Consents records Compliance records Catchment-specific monitoring reports Water-supply management plans
4. Quality of fresh water in region overall is maintained or improved.	Catchment targets are met and limits in regional plans are not exceeded Catchment contaminant load modelling and monitoring	SOE monitoring Compliance records Catchment-specific monitoring reports
5. Water storage is developed to provide increased water availability and security for water users	Consents issued for water storage projects Improved security of supply of water for users in times and places of water scarcity	HBRC consent records Building consent authority records
6. Tikanga Maori and tāngata whenua values are taken into account when managing freshwater	Cultural indices developed through cultural monitoring frameworks	Cultural health monitoring records

Appendix A – Indicative locations of ‘Catchment Areas’ in POL LW2



3.1B Managing the Built Environment

Urban Development and Strategic Integration of Infrastructure

ISSUES

- ISS UD1 The adverse effects of sporadic and unplanned urban development (particularly in the Heretaunga Plains sub-region), on:**
- a) the natural environment (land and water);**
 - b) the efficient provision, operation, maintenance and upgrading of physical infrastructure or services (particularly strategic infrastructure); and**
 - c) the economic, cultural and social wellbeing of the Region's people and communities.**

Explanation

Unplanned urban form and ad hoc management of urban growth can have adverse effects on people and communities, and on the natural environment (land and water). Effective management of growth in the region is necessary to ensure development occurs in a planned, sustainable manner and in a way that also does not compromise the planned provision, operation, maintenance and upgrading of strategic and regionally significant infrastructure. This aligns with the statutory functions of the Regional Council in giving effect to the Act as contained in section 30 of the Resource Management Act 1991 – in particular:

- “(1)(a) the establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region;*
(b) the preparation of objectives and policies in relation to any actual or potential effects of the use, development or protection of land which are of regional significance; ...
(gb) the strategic integration of infrastructure with land use through objectives, policies, and methods;”

Managing urban growth and development is a regionally significant issue because what occurs in one area will invariably have an effect on other places. This is particularly so for the urban centres of Napier and Hastings, and surrounding coastal and rural settlements in and around the Heretaunga Plains. As at 2010, 8,000 households are projected to be required between 2015 and 2045 in the Heretaunga Plains area. Growth in the other parts of the Region is not projected to be significant over that period.

Managed growth intervention recognises the actual or potential effects urban growth can have on people and communities, and on the natural environment. Unplanned urban development can have adverse effects on sensitive natural environments (streams, wetlands, lakes and rivers), and result in high travel costs, reverse sensitivity and social isolation. Planning urban development in advance will ensure development is directed away from potential and known hazard areas.

Managed growth intervention also recognises the important role that efficient infrastructure (e.g. road, rail, ports, airports, electricity networks, telecommunications, drainage, dams, water and wastewater networks) plays in supporting settlement growth and prosperity. The protection of the region's strategic infrastructure is essential for growth. A lack of integration between land use and infrastructure can result in poor infrastructure investment decisions, public funding pressures, reverse sensitivity effects and inefficient land use patterns.

In the past, Hastings and Napier have planned for growth independently. However, in recognising the interrelationship of these key urban centres, and the pressures on shared resources and infrastructure, Hawke's Bay Regional Council, Hastings District Council and Napier City Council embarked on a collaborative approach to urban growth and development out to 2045, culminating in the development of the Heretaunga Plains Urban Development Strategy (HPUDS2010).^{1a}

The purpose of the Heretaunga Plains Urban Development Strategy is to assist, in a collaborative manner, the local authorities to plan and manage growth on the Heretaunga Plains and some additional coastal communities beyond the immediate Heretaunga Plains. The Strategy takes a long-term approach to addressing the key issues facing the Heretaunga Plains in a more integrated way, and focuses on a preferred settlement pattern that will lead to more compact development through gradual restriction on urban boundaries to allow for proper planning and design work.

The Regional Policy Statement seeks to give effect to the general tenets of HPUDS2010 at the regional level, where the outcomes of the HPUDS2010 process align with the statutory functions of the Regional Council.

Much of the urban growth policy in the Regional Policy Statement is therefore directed at a sub-regional level to the Heretaunga Plains and surrounding coastal and rural settlements. The Wairoa and Central Hawke's Bay Districts, and Hastings District hinterland, have different pressures, which warrant less regional policy direction in terms of urban growth management at this time. This may change over time, requiring further regional policy intervention at a later date.

For the purposes of the Regional Policy Statement, the Heretaunga Plains sub-region is geographically defined in Schedule XIV, matching the geographical extent adopted for HPUDS2010 and the Heretaunga Plains Transportation Strategy.

^{1a} Heretaunga Plains Urban Development Strategy, Adopted August 2010

ISS UD2 The adverse effects from urban development encroaching on versatile land (particularly in the Heretaunga Plains sub-region where the land supports regionally and nationally significant intensive economic activity), and ultimately the adverse effects of this on the economic wellbeing of the Region's people and communities both now and for future generations.

Explanation

The Heretaunga Plains sub-region contains areas with a high proportion of very high value versatile land. There are competing demands for this valuable finite resource. The diversity and intensity of horticultural and viticultural production on the Heretaunga Plains, for instance, creates a high demand for land which is in short supply, whilst the same land is highly desirable for urban and rural lifestyle development.

The versatile land of the region, particularly in the Heretaunga Plains sub-region is a regionally, if not nationally, significant resource for primary production and ultimately underpins the economy of the Region. Therefore, pressure from urban development encroaching on this resource is a regionally significant issue.

Pressure for urban expansion on to agricultural land continues unless controlled, because the financial incentives are strong. The increased market value of land developed for urban use is considerable and beyond agricultural returns to sustain. Once developed, the economic value of urban and industrial infrastructure typically means this land is permanently removed from primary production. In short, within agriculture, land use conflicts occur between short-term economic incentives and the future sustainability of the soils. Subdivision for urban development removes land from agricultural production but also impacts on the productivity of other land, in particular through reverse sensitivity.

The concentration of highly versatile soils in conjunction with significant concentration of the Region's population on the Heretaunga Plains, reinforces the focus of urban growth policy in the Regional Policy Statement on the Heretaunga Plains sub-region at this time.

OBJECTIVES

URBAN FORM (REGION)

OBJ UD1 Establish compact, and strongly connected urban form throughout the Region, that:

- a) achieves quality built environments that:
 - i. provide for a range of housing choices and affordability,
 - ii. have a sense of character and identity,
 - iii. retain heritage values and values important to tangata whenua,
 - iv. are healthy, environmentally sustainable, functionally efficient, and economically and socially resilient, and
 - v. demonstrates consideration of the principles of urban design;
- b) avoids, remedies or mitigates reverse sensitivity effects in accordance with objectives and policies in Chapter 3.5 of this plan;
- c) avoids, remedies or mitigates reverse sensitivity effects on existing strategic and other physical infrastructure in accordance with objectives and policies in Chapter 3.5 and 3.13 of this plan;
- d) avoids unnecessary encroachment of urban activities on the versatile land of the Heretaunga Plains; and
- e) avoids or mitigates increasing the frequency or severity of risk to people and property from natural hazards.

Principal reasons and explanation

A sprawling uncontrolled pattern of development does not promote sustainable forms of development and promotes less efficient use of existing infrastructure. High levels of amenity, quality living environments, and retention of significant features and values are harder to achieve when development is not well designed and connected. Sprawling development also leads to unsustainable encroachment onto versatile land which underpins much of the Region's economy. Transitioning to a more compact, well-designed and strongly connected urban form better supports the economic, social and cultural wellbeing of the Region's people and communities.

[Refer also:

- OBJ7 and OBJ8 (Chapter 3.2 – Coastal Resources) re: coastal values important to tangata whenua, and development in coastal hazard areas
- OBJ16 and OBJ18 (Chapter 3.5 – Conflicting Land Uses) re: nuisance effects from location of conflicting land uses
- OBJ31 (Chapter 3.12 – Natural Hazards) re: natural hazards
- OBJ32 and OBJ33 (Chapter 3.13 – Maintenance and Enhancement of Physical Infrastructure) re: recognising and providing for operation, maintenance and development of physical infrastructure, and specific locational requirements
- OBJ36 and OBJ37 (Chapter 3.14 – Matters of Significance to Iwi/Hapu) re: values important to tangata whenua]

INTENSIFICATION OF RESIDENTIAL AREAS (HERETAUNGA PLAINS SUB-REGION)

OBJ UD2 Provide for residential growth in the Heretaunga Plains sub-region through higher density development in suitable locations.

Principal reasons and explanation

New development accommodates growth and provides the opportunity to enhance the quality of the environment. In the right location, more intensive forms of development will, amongst other things, promote efficient use of existing infrastructure or any planned infrastructure already committed to by Local Authorities (e.g. by funding) but not yet constructed, minimise energy use (as development spreads, the demand for transport and energy use increases), and reduce the need to encroach onto the versatile land of the Heretaunga Plains.

PROVISION FOR BUSINESS LAND (HERETAUNGA PLAINS SUB-REGION)

OBJ UD3 Identify and provide for the land requirements for the growth of business activities in the Heretaunga Plains sub-region in a manner that supports the settlement pattern promoted in OBJ UD1.

Principal reasons and explanation

The provision of adequate land for future business activities is important for long term economic growth and the provision of both employment and services to the sub-region's existing and future communities. HPUDS2010 identified that there is already an adequate supply of commercial land within the Heretaunga Plains sub-region to accommodate projected demand and growth. In relation to industrial land, HPUDS2010 identified a limited number of areas appropriate for additional industrial land expansion and growth. These additional areas (identified in Policy UD4.5) are expected to accommodate projected growth and demand for industrially-zoned land out to 2045, and any additional growth in the event that the projections change from what was anticipated in HPUDS2010.

PLANNED PROVISION FOR URBAN DEVELOPMENT (HERETAUNGA PLAINS SUB-REGION)

OBJ UD4 Enable urban development in the Heretaunga Plains sub-region, in an integrated, planned and staged manner which:

- a) allows for the adequate and timely supply of land and associated infrastructure; and
- b) avoids inappropriate lifestyle development, ad hoc residential development and other inappropriate urban activities in rural parts of the Heretaunga Plains sub-region.

Principal reasons and explanation

Successful long term growth management is dependent on integrating long term land use, the infrastructure necessary to support this growth and the ability to fund and supply the infrastructure in a timely and equitable manner. In order to protect the productivity of rural land in the Heretaunga Plains, all inappropriate urban development should be avoided.

INTEGRATION OF LAND USE WITH SIGNIFICANT INFRASTRUCTURE (REGION)

OBJ UD5 Ensure through long-term planning for land use change throughout the Region, that the rate and location of development is integrated with the provision of strategic and other infrastructure, the provision of services, and associated funding mechanisms.

Principal reasons and explanation

Strategic infrastructure in the wider region is essential to the well-being and health and safety of people and communities. Consideration needs to be given to sequencing and costs of infrastructure development in decision making. These can have significant effects on efficiency and the economic well-being of communities. Recognition of the importance of strategic infrastructure will lead to greater weight being given to its requirements and the desirability to reduce incompatibility and conflicts.

[Refer also OBJ32 and OBJ33 (Chapter 3.13 – Maintenance and Enhancement of Physical Infrastructure) re: recognising and providing for operation, maintenance and development of physical infrastructure, and specific locational requirements]

INTEGRATION OF TRANSPORT INFRASTRUCTURE WITH DEVELOPMENT (REGION)

OBJ UD6 Ensure that the planning and provision of transport infrastructure is integrated with development and settlement patterns and facilitates the movement of goods and people and provision of services throughout the Region, while:

- a) limiting network congestion;
- b) reducing dependency on private motor vehicles;
- c) reducing emission of contaminants to air and energy use; and
- d) promoting the use of active transport modes.

Principal reasons and explanation

Development that is not well integrated with transport infrastructure can result in increased car dependency, higher energy use, greater traffic volumes, and inefficient freight movement. Land use patterns that are integrated with transport infrastructure minimise energy

use through network optimisation, and enables greater recognition of the importance of strategic transport networks in supporting the economic and social wellbeing, and health and safety, of people and communities.

[Refer also OBJ32 and OBJ33 (Chapter 3.13 – Maintenance and Enhancement of Physical Infrastructure) re: recognising and providing for operation, maintenance and development of physical infrastructure, and specific locational requirements]

POLICIES

PROVIDING FOR DEVELOPMENT

PROVISION FOR URBAN ACTIVITIES (HERETAUNGA PLAINS SUB-REGION)

POL UD1 In providing for urban activities in the Heretaunga Plains sub-region, territorial authorities must place priority on:

- a) the retention of the versatile land of the Heretaunga Plains for existing and foreseeable future primary production, and
- b) ensuring efficient utilisation of existing infrastructure, or
- c) ensuring efficient utilisation of planned infrastructure already committed to by a local authority, but not yet constructed.

Principal reasons and explanation

Efficient utilisation of existing infrastructure investment (or planned infrastructure already committed to (e.g. by funding) by not yet constructed) and the retention of the versatile land of the Heretaunga Plains for existing and foreseeable future primary production must underpin all decisions surrounding provision for urban activity in the Heretaunga Plains sub-region in order to achieve the desired settlement pattern outlined in HPUDS2010. For clarification, the supply of land for residential and industrial activities where they support effective and efficient use and management of versatile land would not conflict with Policy UD1, and would assist in achieving Policy UD1(a).

PROVISION FOR BUSINESS ACTIVITIES (HERETAUNGA PLAINS SUB-REGION)

POL UD2 In the Heretaunga Plains sub-region, district plans shall provide for business activities to 2045, in a manner which:

- a) Reinforces the role of Napier and Hastings cities as the commercial and business core of the Heretaunga Plains, whilst supporting adequate capacity in defined rural towns and settlements for a range of day-to-day services and activities;
- b) Promotes the utilisation, redevelopment and intensification of existing commercial land;
- c) Promotes the utilisation, redevelopment and intensification of existing industrial land, and provides sufficient additional greenfields industrial land to ensure demand for new land can be met by supply;
- d) Promotes the utilisation of existing infrastructure availability, capacity and quality as far as reasonably practicable;
- e) Avoids unnecessary encroachment onto the versatile land of the Heretaunga Plains;
- f) Avoids, remedies or mitigates reverse sensitivity effects in accordance with Objectives and Policies in Chapters 3.5 and 3.13 of the plan;
- g) Ensures close proximity to, major transport hubs and multi-modal transport networks.
- h) promotes close proximity to labour supply.
- i) Avoids or mitigates the following locational constraints:
 - i. projected sea level rise as a result of climatic changes
 - ii. active coastal erosion and inundation
 - iii. stormwater infrastructure that is unable to mitigate identified flooding risk
 - iv. flood control and drainage schemes that are at or over capacity
 - v. active earthquake faults
 - vi. high liquefaction potential
 - vii. nearby sensitive waterbodies that are susceptible to potential contamination from runoff, stormwater discharges, or wastewater treatment and disposal.
 - viii. no current wastewater reticulation and the land is poor draining
 - ix. water short areas affecting the provision of adequate water supply.

Principal reasons and explanation

In achieving a more compact urban settlement pattern, the emphasis should be on utilising and redeveloping existing commercial and industrial land to accommodate business growth, in the first instance. This will ensure efficient utilisation of existing and planned infrastructure, minimisation of reverse sensitivity issues, and efficiencies in utilising the presence of existing labour supply. Across the Heretaunga Plains sub-region there is potential to provide for most anticipated new commercial activity within existing zoned commercial land through redevelopment and uptake of existing commercially-zoned land to 2045. However, there is some expectation that additional industrial land may be required at some point during that period, depending on uptake.

Any provision for new business land should be focussed around existing infrastructure to minimise public costs and in particular to achieve integration with transport networks. Any new infrastructure should be planned in a manner which recognises the importance of the links to and from the Heretaunga Plains sub region and the role these links serve for the efficient distribution of goods throughout the region. Phasing or sequencing of business land for development is not necessary provided that a ready supply is available, as it is expected that the market will dictate its rate of development.

POL UD3 RURAL RESIDENTIAL AND LIFESTYLE DEVELOPMENT (HERETAUNGA PLAINS SUB-REGION)
In the Heretaunga Plains sub-region, district plans shall include policies and methods discouraging or avoiding ad hoc residential development and further rezoning for rural residential purposes or lifestyle development outside existing rural residential zones.

Principal reasons and explanation

Similar to urban development, rural residential or lifestyle development can also act to remove valuable land from agricultural production and can also impact on the productivity of other land (i.e. rural or industrial), in particular through reverse sensitivity. These forms of development should not be confused with residential development (eg: farm houses) that is ancillary to primary production activities or to boundary adjustments that may effectively create a lifestyle site by reducing the land area surrounding a dwelling to create a larger more productive balance title. Provision for rural residential and lifestyle development should be carefully managed to minimise fragmentation of the versatile land of the Heretaunga Plains. There is currently an excess supply of rural residential zoned areas within the Heretaunga Plains sub-region, considered sufficient to cater for projected demand for rural residential lots in the sub-region through to 2045, and further rezoning for this purpose is considered unnecessary for the foreseeable future.

ACHIEVING CONTAINMENT OF URBAN ACTIVITIES

POL UD4.1 ESTABLISHING URBAN LIMITS (HERETAUNGA PLAINS SUB-REGION)
Within the Heretaunga Plains sub-region, district plans shall identify urban limits for those urban areas and settlements within which urban activities can occur, sufficient to cater for anticipated population and household growth to 2045.

POL UD4.2 NEW RESIDENTIAL GREENFIELD GROWTH AREA CRITERIA (HERETAUNGA PLAINS SUB-REGION)
In determining future Residential Greenfield Growth Areas, not already identified within Policy UD4.3, for inclusion within urban limits in the Heretaunga Plains sub-region, the following general criteria shall apply:

- a) Must form an extension contiguous with existing urban areas and settlements.
- b) Land is identified as having low versatility, and/or productive capacity has been compromised by:
 - i. Size and shape of land parcels that mitigates against productive use;
 - ii. Surrounding land uses and reverse sensitivity;
 - iii. Lack of water and/or poor drainage.
- c) Clear natural boundaries exist, or logical greenbelts could be created to establish a defined urban edge.
- d) Supports compact urban form.
- e) Can be serviced at reasonable cost.
- f) Can be integrated with existing development.
- g) Can be integrated with the provision of strategic and other infrastructure (particularly strategic transport networks in order to limit network congestion, reduce dependency on private motor vehicles and promote the use of active transport modes).
- h) An appropriate separation distance from electricity transmission infrastructure should be maintained in order to ensure the continued safe and efficient operation and development of the electricity transmission network.
- i) Promotes, and does not compromise, social infrastructure including community, education, sport and recreation facilities and public open space.
- j) Avoids or mitigates the following locational constraints:
 - i. projected sea level rise as a result of climatic changes
 - ii. active coastal erosion and inundation
 - iii. stormwater infrastructure that is unable to mitigate identified flooding risk
 - iv. flood control and drainage schemes that are at or over capacity
 - v. active earthquake faults
 - vi. high liquefaction potential
 - vii. nearby sensitive waterbodies that are susceptible to potential contamination from on-site wastewater systems or stormwater discharges
 - viii. no current wastewater reticulation and the land is poor draining

- ix. identified water short areas with the potential to affect the provision of an adequate water supply.

APPROPRIATE RESIDENTIAL GREENFIELD GROWTH AREAS (HERETAUNGA PLAINS SUB-REGION)

POL UD4.3 Within the Heretaunga Plains sub-region, areas where future residential greenfield growth for the 2015-2045 period has been identified as appropriate and providing choice in location, subject to further assessment referred to in POL UD10.1, POL UD10.3, POL UD10.4 and POL UD12, are:

- a) Bay View
- b) Park Island / Parklands
- c) Taradale Hills
- d) Te Awa / The Loop
- e) Arataki Extension
- f) Haumoana (south of East Road) / Te Awanga
- g) Havelock North Hills (lower extension)
- h) Howard Street
- i) Irongate Road / York
- j) Kaiapo Road
- k) Lyndhurst
- l) Lyndhurst Road extension
- m) Maraekakaho rural settlement
- n) Middle Road / Iona / Hills
- o) Murdoch Road / Copeland
- p) Omaha / Bridge Pa (marae-based)
- q) Waimarama

All indicative areas are shown in Schedule XIVa.^{1b}

INAPPROPRIATE RESIDENTIAL GREENFIELD GROWTH AREAS (HERETAUNGA PLAINS SUB-REGION)

POL UD4.4 Within the Heretaunga Plains sub-region, areas where future^{1c} residential greenfield growth has been determined as inappropriate, beyond existing settlements are:

- a) Waipatiki Beach
- b) Tangoio
- c) Whirinaki
- d) Puketapu
- e) Jervoistown and Meeanee
- f) Clive
- g) East Clive
- h) Clifton
- i) Ocean Beach – apart from the potential for appropriate growth of the existing Waipuka bach settlement^{1d} on Maori land inland of areas at risk of coastal hazards
- j) Natural detention areas (50 year flood ponding areas).
- k) Haumoana (north of East Road)

^{1b} All spatial areas are indicative only until formalised via a plan change; and reference should be made to the Heretaunga Plains Urban Development Strategy for more information on these future greenfield growth areas.

^{1c} 'Future' greenfield growth refers to areas not already zoned for some form of residential development in existing district plans.

^{1d} This area is defined as being Areas A to D in the Ocean Beach Structure Plan (2007).

POL UD4.5 APPROPRIATE INDUSTRIAL GREENFIELD GROWTH AREAS (HERETAUNGA PLAINS SUB-REGION) Within the Heretaunga Plains sub-region, areas where future industrial greenfield growth for the 2015-2045 period have been identified as appropriate, subject to further assessment referred to in POL UD10.1, POL UD10.3, POL UD10.4 and POL UD12, are :

- a) Irongate industrial area
- b) Omahu industrial area
- c) Whakatu industrial area
- d) Tomoana industrial area
- e) Awatoto industrial area

The indicative locations of the above areas are shown in Schedule XIVb.^{1e}

Principal reasons and explanation

Demographic changes to the population within the Heretaunga Plains sub-region will ultimately influence demand for land. Setting urban limits allows long term land use and infrastructure to be adequately managed and planned for, and provides certainty around where future development is planned to occur. Urban limits will ensure development consolidates within and around existing settlements which is critical to transitioning to a more compact urban settlement pattern in the Heretaunga Plains sub-region. In 2010, projected demographic changes for the sub-region over the 35 year period to 2045 (sourced from Statistics New Zealand) anticipate moderate population growth, an older population, and declining household occupancy rates leading to an increase in household numbers of 8,014 to 58,925 (a 15.7% increase).

In transitioning to a more compact settlement pattern, the 2010 Heretaunga Plains Urban Development Strategy adopted a gradual move towards a greater proportion of new households being supplied through higher density development over time (refer Table 1, POL UD7 explanation). However, these changes were still assessed as resulting in 'on the ground' requirements for urban development beyond current supply for this purpose. Of the total 8,014 new households projected over the period, some 3,358 are proposed to be supplied through greenfield development. Urban limits therefore need to encompass sufficient additional land area to accommodate this level of greenfield development.

The greenfield growth areas referred to in Policy UD4.3 are areas which provide choice in location around existing settlements in the Napier City and Hastings District, but not already zoned for some form of residential development in plans existing at 2010. These areas are not subject to Policy UD4.2 and are appropriate for inclusion within the urban limits subject to further assessment pursuant to Policies UD10.1, UD10.3, UD10.4 and UD12. Development in these areas ahead of rezoning has the potential to reduce the efficiency of infrastructure provision, limit the options available in developing the area, and impact on the uptake of lots in another area. Therefore inappropriate ad hoc residential development should be avoided in accordance with Policy UD10.2 until rezoning of the areas identified in Policy UD4.3 has taken place.

Policy UD4.2 allows for the creation of new greenfield growth areas in the Heretaunga Plains sub-region. Any new greenfield growth areas within the urban limits must promote the overall transition to the compact settlement philosophy adopted in the Regional Policy Statement; be economically, socially and environmentally sustainable; and provide for locational choice.

All new greenfield areas proposed under Policy UD4.2 will be subject to the HPUDS review process, whereby greenfield growth areas, other than those identified in Policy UD4.3, will be decided in collaboration with Hawke's Bay Regional Council, Napier City Council and Hastings District Council as per the HPUDS 2010 review process, prior to re-zoning taking place. This process applies to both private and council led plan changes, and ensures the consequences and actions of re-zoning new greenfield areas are adequately considered in the context of the whole of the Heretaunga Plains sub-region.

The HPUDS review process, means the creation of new greenfield areas under Policy UD4.2 is only likely to occur in the following circumstances. Firstly, if one of the greenfield growth areas specified in Policy UD4.3 is deemed unviable for development, a new area will need to be proposed to compensate for the 'lost lots' in that area. Secondly, if reporting in Policy UD14.1 suggests the future development trends for the Heretaunga Plains sub-region have changed, and more growth areas are required than initially anticipated.

The areas determined as inappropriate for further residential greenfield development at this time (for various reasons), have been identified in Policy UD4.4 (established during development of the 2010 Heretaunga Plains Urban Development Strategy).

POL UD5 CONTAINING URBAN ACTIVITIES WITHIN URBAN LIMITS (HERETAUNGA PLAINS SUB-REGION) Except as provided for in POL UD6.1 (provision for papakainga and marae-based development), district plans shall include policies and methods to avoid inappropriate urban activities beyond urban limits established in accordance with POL UD4.1 within the Heretaunga Plains sub-region.

Principal reasons and explanation

In containing urban development, it is essential that urban activities are avoided beyond the urban limits established in response to POL UD4.1.

^{1e} Reference should be made to the Heretaunga Plains Urban Development Strategy for more information on these future greenfield growth areas.

PROVISION FOR PAKAINGA AND MARAE-BASED DEVELOPMENT (REGION)

POL UD6.1 District plans shall, where appropriate enable papakainga and marae-based development in accordance with tikanga Maori values, outside existing urban areas and any urban limits, provided development:

- a) Avoids or mitigates the following locational constraints:
 - i. projected sea level rise as a result of climatic changes
 - ii. active coastal erosion and inundation
 - iii. stormwater infrastructure that is unable to mitigate identified flooding risk
 - iv. flood control and drainage schemes that are at or over capacity
 - v. active earthquake faults
 - vi. high liquefaction potential
 - vii. nearby sensitive waterbodies that are susceptible to potential contamination from on-site wastewater systems or stormwater discharges
 - viii. no current wastewater reticulation and the land is poor draining
 - ix. identified water short areas with the potential to affect the provision of an adequate water supply.

PAPAKAINGA AND MARAE-BASED DEVELOPMENT (REGION)

POL UD6.2 Papakainga and marae-based development shall be encouraged, where possible; to:

- a) integrate with existing development
- b) integrate with the provision of strategic and other infrastructure (particularly strategic transport networks in order to limit network congestion, reduce dependency on private motor vehicles and promote the use of active transport modes).
- c) Promote, and not compromise, social infrastructure including community, education, sport and recreation facilities and public open space.

Principal reasons and explanation

Housing and associated activities around rural marae have been in existence for many years. Provision is made for accommodating growth through papakainga and marae-based development on ancestral land, which may fall outside urban limits. The continuation and expansion of papakainga and other marae based activities, subject to relevant statutory processes, gives effect to the requirements of sections 6(e), 7(a) and 8 of the Act and also recognises the statutory provisions in the Te Ture Whenua Maori Act 1993. This policy provides tangata whenua with the potential to meet their housing and economic development needs.

ENCOURAGING INTENSIFICATION OF RESIDENTIAL ACTIVITY

INTENSIFICATION IN EXISTING RESIDENTIAL AREAS (HERETAUNGA PLAINS SUB-REGION)

POL UD7 In the Heretaunga Plains sub-region, district plans shall include objectives, policies and methods promoting intensification by redevelopment of suitable locations within existing residential areas.

Principal reasons and explanation

An increasing proportion of the residential growth of the Heretaunga Plains sub-region is expected to take place through intensification, by redevelopment within existing residential and rural residential areas, in the move towards more compact urban form for the Heretaunga Plains sub-region. The existing urban areas most suited to intensification will be determined by the relevant territorial authority and included in the district plan. Between 2015 and 2045, the proportion of growth accommodated through intensification is intended to increase from approximately 45% to 60% (refer Table 1 below).

Table 1: Proportion of Additional Households by Type of Development for the Heretaunga Plains Sub-Region 2015-2045
(based on 2010 projections)

Type of Development	Proportion of Additional Households [No.]			
	2015-2025	2025-2035	2035-2045	2015-2045
Intensification	45% [1,872]	55% [1,502]	60% [674]	51% [4,048]
Greenfields	45% [1,872]	40% [1,092]	35% [394]	42% [3,358]
Rural Residential	10% [416]	5% [136]	5% [56]	7% [608]
TOTAL	100% [4,160]	100% [2,730]	100% [1,124]	100% [8,014]

DENSITY OF RESIDENTIAL DEVELOPMENT AREAS (HERETAUNGA PLAINS SUB-REGION)

POL UD8

In the Heretaunga Plains sub-region, residential subdivision and development shall seek to achieve the following minimum net densities, where appropriate, within greenfield growth or intensification development areas, to be achieved in a staged manner by 2045:

- a) an average yield of 15 lots or dwellings per hectare in each greenfield growth area developed post 31 December 2015;
- b) an average yield of 20 lots or dwellings per hectare within each intensification development area.

Principal reasons and explanation

The setting of net density targets reflects the promotion of more intensive developments, in transitioning to more compact urban form for the Heretaunga Plains sub-region over time. The policy expresses desired minimum net densities averaged over each greenfield growth area or intensification development area in a staged manner. It is accepted that achievement of these densities may be constrained by various limiting factors, such as orientation, topography and geology, which may lead to areas achieving lower or higher density yields. However, it is expected that overall greenfield growth areas and intensification development areas will set out to achieve these minimum net densities, and that they will be achieved across the sub-region by 2045.

The mechanism of how to achieve the density targets through subdivision and land use development will be provided in the relevant district plan. This will enable territorial authorities to determine the speed in which intensification occurs, and develop appropriate design guidelines for influencing intensive development for inclusion in their district plans. Further, before rezoning land for urban purposes, territorial authorities are required to ensure that structure plans are put in place (see Policy UD10.1).

ACHIEVING STRATEGIC INTEGRATION OF INFRASTRUCTURE WITH LAND USE

SEQUENCING (HERETAUNGA PLAINS SUB-REGION)

POL UD9.1

In the Heretaunga Plains sub-region, district plans shall provide for the strategic integration of infrastructure and development through the staged release of new greenfield growth areas.

SEQUENCING DECISION-MAKING CRITERIA (HERETAUNGA PLAINS SUB-REGION)

POL UD9.2

In the Heretaunga Plains sub-region, the sequencing of development for greenfield growth areas shall be based on the following criteria:

- a) Availability and costs of infrastructure services (water, wastewater, stormwater, transport and electricity distribution);
- b) The operational capacity of strategic infrastructure (particularly strategic transport networks); and
- c) Balanced supply and locational choice across the sub-region.

Other factors that may be taken into account include (but are not limited to):

- d) The accessibility and capacity of social infrastructure (particularly community, education, sport and recreation facilities and public open space);
- e) The sustainable management of natural and physical resources;
- f) The availability of employment opportunities in and near the greenfield growth areas;
- g) The willingness and timeframe of landowners to participate in greenfield growth plans;
- h) The opinion of developers regarding land for greenfield growth to ensure the sequencing is feasible and will result in positive growth and investment.

Principal reasons and explanation

The market has not always delivered infrastructure or a development pattern in a way that is efficient and cost-effective for the community. Addressing the timing and sequencing of development is designed to ensure, within broad limits, that development proceeds in a way that gives infrastructure service providers time to match demand, and the ability to fund that service delivery, and also to ensure sufficient locational choice. Sequencing will provide more certainty to the community, developers and infrastructure providers about when and where development is likely to occur. The overall purpose is to provide a broad framework that signals to the market the importance of integrating public and private development decisions.

STRUCTURE PLANS (HERETAUNGA PLAINS SUB-REGION)

POL UD10.1

In the Heretaunga Plains sub-region, development of urban activities within greenfield growth areas shall occur in accordance with a comprehensive structure plan. Structure plans shall be prepared when it is proposed to amend the district plan, and shall be included in the district plan to provide for urban activities.

AD HOC URBAN DEVELOPMENT (HERETAUNGA PLAINS SUB-REGION)

POL UD10.2 In the Heretaunga Plains sub-region, avoid inappropriate ad hoc urban development within the residential greenfield growth areas identified in Policy UD4.3 or created under Policy UD4.2 prior to rezoning taking place.

STRUCTURE PLANS (REGION)

POL UD10.3 Notwithstanding Policy UD10.1, structure plans for any area in the Region shall:

- a) Be prepared as a single plan for the whole of a greenfield growth area;
- b) Be prepared in accordance with the matters set out in POL UD12;
- c) Show indicative land uses, including:
 - i. principal roads and connections with the surrounding road network and relevant infrastructure and services;
 - ii. land required for stormwater treatment, retention and drainage paths;
 - iii. any land to be set aside for business activities, recreation, social infrastructure , environmental or landscape protection or enhancement, or set aside from development for any other reason; and
 - iv. pedestrian walkways, cycleways, and potential public passenger transport routes both within and adjoining the area to be developed;
- d) Identify significant natural, cultural and historic or heritage features;
- e) Identify existing strategic infrastructure; and
- f) Identify the National Grid (including an appropriate buffer corridor).

STRUCTURE PLANS (REGION)

POL UD10.4 Notwithstanding Policy UD10.1, in developing structure plans for any area in the Region, supporting documentation should address:

- a) The infrastructure required, and when it will be required to service the development area;
- b) How development may present opportunities for improvements to existing infrastructure provision;
- c) How effective provision is made for a range of transport options and integration between transport modes;
- d) How provision is made for the continued use, maintenance and development of strategic infrastructure;
- e) How effective management of stormwater and wastewater discharges is to be achieved;
- f) How significant natural, cultural and historic or heritage features and values are to be protected and/or enhanced;
- g) How any natural hazards will be avoided or mitigated; and
- h) Any other aspects relevant to an understanding of the development and its proposed zoning.

Principal reasons and explanation

Structure plans provide a mechanism for integrating urban development with infrastructure, making the best use of existing infrastructure, and identifying and providing for the additional infrastructure required to meet the needs of incoming residents and businesses. Development occurring ahead of rezoning has the potential to reduce the efficiency of infrastructure and limit the options available when developing a structure plan for the area.

Structure plans provide the mechanism for integrating new development with existing urban areas, ensuring urban growth is accommodated in a sustainable way, and that all constraints are investigated and addressed or protected at the time of initial zoning for urban purposes. Infrastructure providers should be consulted early on in the structure planning process to ensure appropriate decisions are made as to how servicing is to be achieved, whether the proposed development is appropriate, and what limitations may exist. Policy UD10.3(e) and (f) ensure strategic infrastructure is taken into account when developing an area for urban activities, in particular sub-clause (f) specifically gives effect to Policy 11 of the National Policy Statement on Electricity Transmission, which refers to identification of an appropriate buffer corridor around National Grid lines.

REZONING FOR URBAN DEVELOPMENT (REGION)

POL UD11 Notwithstanding Policy UD10.1, within the Region, any rezoning for the development of urban activities should be accompanied by a structure plan for inclusion in the district plan, in accordance with the matters in POL UD10.3 and POL UD10.4, and POL UD12.

MATTERS FOR DECISION-MAKING (REGION)

- POL UD12** In preparing or assessing any rezoning, structure plans, or other provisions for the urban development of land within the Region, territorial authorities^{1f} shall have regard to:
- a) The principles of the New Zealand Urban Design Protocol (Ministry for the Environment, 2005);
 - b) New Zealand Standard NZS4404:2010 Land Development and Subdivision Infrastructure, and subsequent revisions;
 - c) Good, safe connectivity within the area, and to surrounding areas, by a variety of transport modes, including motor vehicles, cycling, pedestrian and public transport, and provision for easy and safe transfer between modes of transport;
 - d) Location within walkable distance to community, social and commercial facilities;
 - e) Provision for a range of residential densities and lot sizes, with higher residential densities located within walking distance of commercial centres;
 - f) Provision for the maintenance and enhancement of water in waterbodies, including appropriate stormwater management facilities to avoid downstream flooding and to maintain or enhance water quality;
 - g) Provision for sufficient and integrated open spaces and parks to enable people to meet their recreation needs, with higher levels of public open space for areas of higher residential density;
 - h) Protection and enhancement of significant natural, ecological, landscape, cultural and historic heritage features;
 - i) Provision for a high standard of visual interest and amenity;
 - j) Provision for people's health and well-being through good building design, including energy efficiency and the provision of natural light;
 - k) Provision for low impact stormwater treatment and disposal;
 - l) Avoidance, remediation or mitigation of reverse sensitivity effects arising from the location of conflicting land use activities;
 - m) Avoidance of reverse sensitivity effects on existing strategic and other physical infrastructure, to the extent reasonably possible;
 - n) Effective and efficient use of existing and new infrastructure networks, including opportunities to leverage improvements to existing infrastructure off the back of proposed development;
 - o) Location and operational constraints of existing and planned strategic infrastructure;
 - p) Appropriate relationships in terms of scale and style with the surrounding neighbourhood; and
 - q) Provision of social infrastructure.

Principal reasons and explanation

These matters provide general guidance to territorial authorities and developers involved in the preparation and assessment of urban developments, recognising that good urban design will increase the efficiency and effectiveness of urban areas – both in terms of quality of life, and the efficient and effective provision of infrastructure and community services. These matters are considered especially important in achieving quality urban environments given the policy direction towards higher density development.

^{1f} The matters set out in POL UD12 are in addition to local authorities' legal obligations stated in the Resource Management Act to give effect to, or have regard to, national policy statements, national environmental standards, iwi management plans, etc.

SERVICING OF DEVELOPMENTS (REGION)

- POL UD13** Within the region, territorial authorities shall ensure development is appropriately and efficiently serviced for the collection, treatment, disposal or re-use of sewage and stormwater, and the provision of potable water by:
- Avoiding development which will not be serviced in a timely manner to avoid or mitigate adverse effects on the environment and human health; and
 - Requiring these services to be designed, built, managed or upgraded to maximise their ongoing effectiveness.

Principal reasons and explanation

Appropriate provision for sewerage, stormwater and potable water infrastructure is essential to people's wellbeing, health and safety and to environmental health, as well as ensuring adverse effects on the receiving environment are avoided or mitigated. Developments must manage the disposal and treatment of sewage and stormwater recognising the receiving environment (its receiving capacity, and limitations in terms of environmental quality). Servicing should be considered early in the development process. This will ensure that appropriate decisions are made as to how servicing is to be achieved, whether the proposed development is appropriate, and what site limitations may exist. This also enables consideration of water conservation and water efficiency methods.

[Refer also POL18(d) (Chapter 3.8 – Groundwater Quality) re: connections to reticulated systems]

MONITORING AND REVIEW OF DEVELOPMENT IN HERETAUNGA PLAINS SUB-REGION

MONITORING (HERETAUNGA PLAINS SUB-REGION)

- POL UD14.1** Information will be collected on development and infrastructure trends and pressures in the Heretaunga Plains sub-region, so that these trends and pressures can be responded to appropriately and in a timely manner, to support further regular reviews of the Heretaunga Plains Urban Development Strategy and so this information can be used to assess the need for changes to the settlement pattern in Policies UD2, UD3, UD4.1, UD4.2, UD4.3, UD4.4, UD4.5, UD7 and UD8.

REVIEWS (HERETAUNGA PLAINS SUB-REGION)

- POL UD14.2** Hawke's Bay Regional Council will review Policies UD2, UD3, UD4.1, UD4.2, UD4.3, UD4.5, UD4.4, UD7 and UD8, including the extent, location and sequencing of land for development in the Heretaunga Plains sub-region, in collaboration with Napier City Council, Hastings District Council, the New Zealand Transport Agency and any other relevant parties, if any of the following situations occur:
- reporting in POL UD14.1 recommends that a review is needed; or
 - household and/or population growth varies by more than 10% over 5 consecutive years from the household and population predictions in HPUDS; or
 - HPUDS partners agree that insufficient land exists within the identified greenfield growth areas to cater for household and business growth anticipated within 10 years of the analysis; or
 - HPUDS partners agree that exceptional circumstances have arisen such that a review is necessary to achieve Objectives UD2, UD3 and UD4 in particular.

Principal reasons and explanation

The preferred settlement pattern for future growth in the Heretaunga Plains sub-region is based on certain assumptions about likely future development trends and requirements in the Heretaunga Plains sub-region. Policy UD14.1 establishes the need to collect and report information on development trends and pressures that is needed to help inform future revisions of HPUDS and to provide information to support Policy UD14.2. The information referred to in Policy UD14.1 can be collected in a variety of ways including those set out in HPUDS and Method UD2. Policy UD14.2 recognises that conditions could change such that the preferred settlement pattern and greenfield growth areas need to be reviewed to ensure ongoing management of development in the Heretaunga Plains sub-region remains appropriate. Examples of exceptional circumstances include a natural event causing widespread damage to land and property; a large local or sub-regional company relocating operating facilities into, or out of, the area.

METHODS

Many of the policies in this chapter will be given effect to by territorial authorities through inclusion of appropriate provisions in district plans and in decisions on resource consents and designations. The policies in this chapter will also be given effect to through methods in the Regional Resource Management Plan and Regional Coastal Environment Plan.

The following are additional methods being used or to be used by the Regional Council to implement policies in this Chapter. Territorial authorities may also use or intend using any of these methods or similar methods:-

Advocacy

MET UD1 Hawke's Bay Regional Council will:

- a) Promote alignment of relevant regional and district plan provisions applying to land use management throughout the region and in particular, on the versatile land of the Heretaunga Plains.
- b) Encourage the replacement of onsite wastewater disposal systems where there are multiple systems in close proximity, with reticulated wastewater systems.
- c) Promote awareness of the effects of stormwater discharges on water quality.
- d) Promote low impact urban design and development (LIUDD).
- e) Encourage the adoption of land based mitigation of stormwater, including the use of wetlands.
- f) Advocate a whole-of-catchment approach to the management of water.
- g) Promote development setbacks and buffer zones to protect natural physical processes, ensure natural hazard mitigation and manage reverse sensitivity effects.
- h) Promote awareness of natural hazard risk, particularly risks associated with coastal erosion and inundation.
- i) Promote awareness of limits on availability of potable water supplies and potential reverse sensitivity impacts on lawful efficient water use.
- j) Promote setbacks and buffer zones to protect the ongoing operation, maintenance and development of strategic infrastructure.

Monitoring and Review

MET UD2 Hawke's Bay Regional Council, in conjunction with the territorial authorities in the Heretaunga Plains sub-region, will update the Heretaunga Plains Urban Development Strategy on a regular basis through regular review of the information used, particularly in the forecasting of growth, funding of infrastructure and assumptions. As a minimum, monitoring of the demographic projections upon which HPUDS is based and projected actual uptake rates will be undertaken following each census. These reviews will feed back into monitoring the effectiveness of the Regional Policy Statement.

Cross Boundary Liaison/Collaboration

MET UD3 Hawke's Bay Regional Council will:

- a) Liaise and collaborate on cross boundary infrastructure issues.
- b) Promote a collaborative approach to the sustainable management of versatile land.
- c) Promote a collaborative approach to the management of the coastal environment.

Transportation Strategies

MET UD4 Hawke's Bay Regional Council will ensure urban growth management feeds into and informs transportation strategies and funding – such as the Heretaunga Plains Transportation Study, regional transport strategies, and corridor studies.

Provision of Information and Services

MET UD5 Hawke's Bay Regional Council will continue to monitor, research and map natural hazards, and review hazard and risk information, and provide information and guidance to territorial authorities on natural hazards and natural hazard risk.

Preparation and Review of Objectives, Policies and Methods in Regional Plans

MET UD6

Hawke's Bay Regional Council will set out objectives, policies and methods in regional plans which:

- a) Avoid cumulative effects of discharges from on-site wastewater treatment and disposal systems;
- b) Discourage discharges from new community wastewater collection, treatment and disposal systems in circumstances where a suitable existing community system is available;
- c) Ensure discharges of stormwater are managed so that the impact on water quantity of development is similar to that which existed prior to the development and avoids or mitigates any increase in downstream flood risk;
- d) Ensure appropriate treatment of stormwater discharges occurs to avoid or mitigate inappropriate adverse effects on water quality and the receiving water body;
- e) Encourage and where appropriate require the progressive upgrading and development of discharges from wastewater and stormwater systems where these currently result in inappropriate adverse effects on the environment;
- f) Control the adverse effects of development on water bodies, including their value as sources of drinking water;
- g) Enable the development and use of strategic infrastructure while controlling adverse effects of that development and use.

[Refer also:

- *POL5 and POL6 Non-Regulatory Methods (Chapter 3.5) re: land use conflicts*
- *POL55 Non-Regulatory Methods (Chapter 3.12) re: natural hazards*
- *Methods in Chapter 4 – sections 4.3 (Liaison with Territorial Authorities, 4.5 (Works and Services), 4.6 (Research and Investigation) and 4.7 (Monitoring)*
- *POL56 Non-Regulatory Methods (Chapter 3.13) re: Territorial Authority liaison and provision of information in relation to regional infrastructure]*

ANTICIPATED ENVIRONMENTAL RESULTS

- AER UD1** Availability of sufficient land to accommodate population and household growth, as and where required, while retaining versatile land for existing and foreseeable future primary production.
- AER UD2** Balanced supply of affordable residential housing and locational choice in the Heretaunga Plains sub-region.
- AER UD3** More compact, well-designed and strongly connected urban areas.
- AER UD4** Napier and Hastings retained as the primary urban centres for the Heretaunga Plains sub-region.
- AER UD5** Encroachment of urban activities (residential, commercial, industrial) onto the versatile land of the Heretaunga Plains is confined to defined greenfield growth areas within specified urban limits.
- AER UD6** The retention, as far as is reasonably practicable, of the versatile land of the Heretaunga Plains for existing and foreseeable future primary production.
- AER UD7** Efficient utilisation of existing infrastructure.
- AER UD8** Efficient utilisation of infrastructure which has already been planned and committed to by a Local Authority (e.g. by funding) but not yet constructed.
- AER UD9** Increased use of public transport and active transport modes (cycling, walking), reduced dependency on the private motor vehicle and reduced energy use.
- AER UD10** Planned provision for, and protection of, infrastructure to support existing development and anticipated urban growth in defined growth areas.
- AER UD11** Urban activities and urban development maintains groundwater and surface water quality and habitat health.
- AER UD12** Urban development is avoided in areas identified as being at unacceptable risk from natural hazard (flooding, coastal inundation, coastal erosion, liquefaction, land instability).
- AER UD13** New development is appropriately serviced by wastewater, stormwater, potable water and multi-modal transport infrastructure.
- AER UD14** The efficient provision of freight links for distribution to and from the region.

3.2 The Sustainable Management of Coastal Resources

ISSUE

- 3.2.1 ***Integrated management of the region's coastal resources across a wide range of natural and physical conditions, administrative responsibilities cultural considerations, and matters of social and economic well being.***

OBJECTIVES

- OBJ 4** Promotion of the preservation of the natural character of the coastal environment and its protection from inappropriate subdivision, use and development.
- OBJ 5** The maintenance and where practicable and in the public interest, the enhancement of public access to and along the coast.
- OBJ 6** The management of coastal water quality to achieve appropriate standards, taking into account spatial variations in existing water quality, actual and potential public uses, and the sensitivity of the receiving environment.
- OBJ 7** The promotion of the protection of coastal characteristics of special significance to iwi, including waahi tapu, tauranga waka, taonga raranga, mahinga kai and mahinga mataitai.
- OBJ 8** The avoidance of further permanent development in areas prone to coastal erosion or inundation, taking into account the risk associated with global sea level rise and any protection afforded by natural coastal features.
- OBJ 9** Appropriate provision for economic development within the coastal environment, including the maintenance and enhancement of infrastructure, network utilities, industry and commerce, and aquaculture.
- OBJ 10** Enabling safe and efficient navigation.

Explanation and Reasons

- 3.2.2 The coastal environment includes the coastal marine area (the area from mean high water springs to the outer limits of the territorial sea) and the adjacent land that is affected by maritime influences, the air above it, and coastal water.
- 3.2.3 People and communities in the region are aware of, and have concerns about, the sustainable management of the coastline.
- 3.2.4 The environment of the coastline contributes to the characteristics which give Hawke's Bay its unique identity. This environment provides a social, recreational, cultural and economic resource for the regional community and for visitors. Public use and enjoyment of the coastline are, in turn, dependent on the protection and maintenance of its physical and biological diversity, health and well-being. Areas of wildlife habitat, marine and land-based vegetation, and geomorphological features also have value. These contribute to the distinctive natural identity of New Zealand in general, and the region in particular.
- 3.2.5 Among the significant features of the region's coastline are the spiritual and cultural significance of the sea to tangata whenua, the recreational amenities of coastal areas, and the importance of the coastal waters as a way of transporting goods.
- 3.2.6 Integrated management of the coast requires special effort as the regional council and the territorial authorities in the region jointly manage the coastal environment area landward of the "Coastal Marine Area". This is achieved through district and (as appropriate) regional plans. However, the "Coastal Marine Area" is primarily the responsibility of the Hawke's Bay Regional Council, which must prepare a Regional Coastal Plan. HBRC has combined its regional coastal plan with other regional planning provisions applicable to the coastal environment into the Regional Coastal Environment Plan. The coastal environment includes the coastal marine area and an area of land immediately adjacent to the coast. The Minister of Conservation also retains some specific responsibilities over the coastal marine area.
- 3.2.7 The New Zealand Coastal Policy Statement (NZCPS) provides principles for, and guidance to, regional and territorial authorities in managing coastal resources. The NZCPS links matters of national importance, as set out in the Act, with the objectives, policies, rules and other provisions of regional and district plans, including the Regional Coastal Environment Plan. The Regional Coastal Environment Plan thus contains a greater level of detail for areas and activities within the coastal environment than the broad regional policy framework for coastal resources included in the Regional Policy Statement.
- 3.2.8 The preservation of the natural character of the coastal environment is specified as a matter of national importance in the Act. The natural character of the coast embraces ecological, physical, spiritual, cultural, intrinsic and aesthetic values. While it is a matter of national importance to preserve those values, the Act does not preclude appropriate use and development, particularly where natural character has already been compromised.
- 3.2.9 Public access to and along the coast is an important issue for the residents of Hawke's Bay. It is also a matter of national importance in the RMA. In planning for the use, development and protection of the natural and physical resources in the coast, public access as far as possible should be maintained. In certain circumstances it may be desirable to enhance public access to and along the coast.

- 3.2.10 Good water quality is important for the sustainable management of natural and physical resources in the coastal environment and is an issue of prime concern to the residents of Hawke's Bay. However, water quality may vary over time and in different areas. An appropriate management framework includes achieving standards through management of discharge including point and non-point source discharges from land and to sea.
- 3.2.11 Tangata whenua of Hawke's Bay have strong traditional and cultural relationships with the sea. The identification and protection of coastal characteristics of special significance to iwi recognises the special relationships that iwi have with coastal resources.
- 3.2.12 Avoiding permanent development in areas prone to coastal erosion or inundation and taking into account the risk associated with global sea level rise is necessary to achieve the purpose of the Act. This approach enables people to provide for their safety and recognises the reasonably foreseeable needs of future generations. It also gives a clear indication to resource users that development in these areas is inappropriate and indicates that local authorities are accountable for any development that does occur in these areas.
- 3.2.13 The provisions of the Act do not relate solely to the control of environmental effects. Providing for economic development in the coastal environment within the region is necessary to achieve the purpose of the Act because the Act requires the Council to promote the sustainable management of both natural and physical resources. Physical resources include land and structures and includes the structures in the region which add to the present and future economic well-being of the region. The responsibility for providing for the social, economic, cultural, health and safety needs of the community lies in part with the Regional Council. The economic well-being of the people and communities of the region requires the continuation of an economic infrastructure.
- 3.2.14 There are a number of existing surface water activities in Hawke's Bay ranging from passive recreation to recreational use of boats, yachts and pleasure craft, to commercial fishing and port related shipping. New activities may occupy coastal marine space and may have the potential to enhance or conflict with navigational needs. Promoting safe and efficient navigation is necessary to promote the purpose of the Act because it enables people and communities to provide for their social, cultural and economic well-being and for their health and safety.

POLICIES

- 3.2.15 There are no specific policies relating to the coastal environment part of this Plan, although provisions within the Regional Policy Statement parts of this Plan do apply within the coastal environment. Specific regional plan provisions (including policies) for the coastal environment are contained within the Regional Coastal Environment Plan.
- 3.2.16 The Hawke's Bay Regional Coastal Environment Plan is a combined Plan, incorporating the regional coastal plan that HBRC is required to prepare. It sets out in some detail objectives, policies and methods including rules which are the basis for management of the coastal environment. Thus the Regional Policy Statement of this Plan does not repeat or elaborate on the above objectives, and the Regional Coastal Environment Plan should be referred to for further detail.
- 3.2.17 Under the Act, HBRC has shared responsibility with the territorial authorities for management of activities and effects of activities within the coastal environment.
- 3.2.18 Some aspects of those activities are the sole responsibility of district councils – particularly managing the effects of land uses, development and subdivision in terms of the Act and in ways which are not inconsistent with this Regional Policy Statement or regional plans. District Plans should also be referred to as these may set out specific objectives, policies, methods and rules for the landward side of the coastal environment.

3.3 Loss and Degradation of Soil

ISSUE

3.3.1 Loss and degradation of soil, in particular:

- (a) Accelerated hill country erosion caused by the clearance of vegetation, inappropriate pastoral farming, and earthworks.
- (b) Wind erosion caused by inappropriate cultivation practices.
- (c) Degradation of soil health due to inappropriate management practices.
- (d) The adverse effect of soil loss on water quality.

OBJECTIVES

- OBJ 11** An ongoing reduction in the extent and severity of hill country erosion.
- OBJ 12** The avoidance of loss in the productive capability of land, as a result of inappropriate land use practices hastening wind erosion.
- OBJ 13** The avoidance of nuisance effects or economic losses on adjoining properties as a result of wind erosion.
- OBJ 14** The avoidance of loss in the productive capability of land, as a result of reduced soil health.

Explanation and Reasons

- 3.3.2 Hill country erosion refers to large and obvious examples of mass movement. These include earth flows, gully erosion, slips, slump erosion, and rock slides. Hill country erosion is very prominent in Hawke's Bay, particularly in northern and coastal areas. A degree of natural erosion can be expected, and this is evident even in naturally forested areas after severe storm events. However, erosion rates have been accelerated where:
 - (a) Land has been managed for maximum production (through increased pasture areas and high stocking rates) rather than in a manner which more closely aligns with the capability of the land.
 - (b) Vegetation has been cleared, resulting in insufficient deep-rooting vegetative species that bind erodible soils.
 - (c) Tracking and other earth works lays the land bare, exposing it to rain, frost and wind.
- 3.3.3 There are three issues regarding erosion: a natural rate of erosion (under natural vegetation); accelerated erosion due to the removal of natural forest, and pasture establishment; and aggravated accelerated erosion, due to inappropriate land management practices, such as over grazing of pasture.
- 3.3.4 Intensive pastoral farming undertaken on land that is not physically capable of sustaining high stocking rates, such as some hill country in Hawke's Bay, will accelerate erosion. The degradation of pasture by grazing stock, and the pugging and compaction of soils may further increase the susceptibility of hill slopes to mass movement.
- 3.3.5 Although pasture cover can return within a few years after a period of erosion, it is likely that the new growth will be less productive than previous pasture, as the underlying sub-soil is thinner and holds fewer nutrients. Generally, it takes about 20 years for pasture to return to 70-80% of its pre-erosion cover, and if erosion is repeated, areas may become barren (Ministry for the Environment, 1997). However, the impact on productivity can be worse. Trustrum et al. (1984) reported that pastoral land in Hawke's Bay which has been subject to slips can take up to 60 years to return to 80% of its pre-slip productivity level. If erosion is repeated, areas may become barren.
- 3.3.6 As well as reducing productivity, erosion can have other effects. There can be disruption to infrastructure such as roads and fences. Mass movement of soil can also add large volumes of sediment to water bodies - affecting water quality and ecosystems, and exacerbating flood risks.
- 3.3.7 Forest vegetation can reduce the amount and degree of erosion by intercepting rainfall, increasing evapotranspiration rates and reinforcing soils through the root network. Good forestry practice can reduce the risk of soil erosion that may follow harvesting, particularly when followed by storm events. The level and extent of erosion that results from the removal of trees is dependent on a number of factors including the tree species, the area felled, the method of felling, the implementation of other forestry management techniques used to minimise runoff and erosion and the underlying geology.

- 3.3.8 The northern part of the Hawke's Bay region has a predominance of siltstone hill country. This area is the most erosion-prone landform in the region, and is subject to high intensity rainstorms with a recurrence interval averaging 3 to 5 years. These cyclonic rainstorms can cause erosion on large areas. Extreme events during the last two decades have included Cyclone Bola in 1988 which caused widespread impacts, and the series of cyclones in 1997 which severely affected land in the Wairoa District. It was estimated (Trustum and Page, 1991) that Cyclone Bola moved 1.35 million m³ of soil in the Tutira catchment, and that 90% of the sediment was derived from just 44% of the area. This equates to a surface lowering of about 42 mm across the entire catchment, or about 85 mm in the highly erodible area.
- 3.3.9 The (mostly coastal) hill country of southern Hawke's Bay largely consists of jointed mudstone. This is subject to earthflow erosion, particularly where it is dissected by gullies or undercut by streams. However, the extent of erosion is not as severe as that in the northern siltstone hill country.
- 3.3.10 The Hawke's Bay region's lowland areas are characterised by stable soils with a relatively high fertility. However, some of these areas are susceptible to wind erosion. Wind erosion is most likely to occur where the land has been laid bare by cropping, erosion or earth works. Wind erosion exacerbated by cultivation has been identified in areas of Hawke's Bay, where soils are dry and light. Such erosion has resulted in the loss of the soil resource, and dust nuisance to properties downwind. In extreme cases, dust resulting from wind erosion has caused immediate economic losses by smothering crops on properties downwind. Wind erosion can also occur in coastal dune areas, and hill country areas during summer droughts.
- 3.3.11 The degradation of soil health, including its physical and biological properties, reduces a soil's productivity, often leading to increased inputs of fertiliser, irrigation and cultivation as short term compensators. This increases the risk of leaching and increases use of water and is not sustainable in the long term.¹

POLICIES

POL 1 ROLE OF NON-REGULATORY METHODS

- 3.3.12 To use non-regulatory methods, as set out in Chapter 4, as the primary means for achieving the objectives above and the environmental guidelines set out in Chapter 5, including:
- (a) **Economic instruments** - The provision of financial incentives to facilitate the retirement or sustainable use of erosion-prone areas.
 - (b) **Education and co-ordination** – Actively promoting self-regulation by land owners, assisting with the formation of Landcare Groups, preparing soil conservation farm plans, providing information about sustainable land management practices, and responding to requests for advice.
 - (c) **Encouragement for self-regulation** – Promote and support self-regulation, including the adoption by resource user groups, of guidelines and codes of practice by resource user groups.

Explanation and Reasons

- 3.3.13 Policy 1 sets out the role of the HBRC in providing financial incentives and promoting self-regulation, better land management practices and education, as the primary response to addressing the loss and degradation of soil in the region. By providing financial incentives, and encouraging greater responsibility, accountability, and awareness of the effects of land use, the loss and degradation of soil should be reduced.

¹ For the purposes of this plan “soil health” refers to physical parameters including soil structure and porosity, biological parameters including soil organic matter and earthworms, and chemical parameters including soil contaminants but excluding soil chemical properties generally accepted as measurements of soil fertility.

POL 2 PROBLEM SOLVING APPROACH - WIND EROSION

3.3.14 To use both non-regulatory methods as set out in Chapter 4, and enforcement procedures available under section 17 of the Act, to ensure cropping activities are undertaken in a manner which uses the best practicable option to minimise the risk of both erosion and the discharge of offensive or objectionable dust beyond the boundary of the subject property.

Explanation and Reasons

3.3.15 Policy 2 sets out Council's two-pronged approach to wind erosion – the encouragement of best practices to minimise the risk of both topsoil loss and of nuisance effects beyond a property boundary; in conjunction with the discouragement of any on-going breach of section 17 by the use of enforcement action.

POL 3 PROBLEM SOLVING APPROACH – VEGETATION REMOVAL

3.3.16 (a) To use both non-regulatory methods, as set out in Chapter 4, to discourage the removal of vegetation on highly erodible land, particularly Class VIIe and VIII land, except where:

- (i) The removal of vegetation is for the purpose of providing environmental benefits, including land stabilisation, enhancement of water quality, and/or the establishment of indigenous plant species.
- (ii) The removal of vegetation is for the purpose of establishing or maintaining a network utility firebreak² or fence line.
- (iii) The removal of vegetation is for the purpose of harvesting vegetation that was planted for commercial purposes.
- (iv) The removal of vegetation involves a plant pest and is consistent with the requirements of the Regional Plant Pest Management Strategy.

(b) To use regulatory methods, as set out in Chapter 6, to discourage the removal of vegetation except where the conditions/standards/terms of Rules 7 and 8 are met.

Explanation and Reasons

3.3.17 Policy 3 provides guidance to resource users when considering activities proposed in areas of highly erodible land, particularly on land with a land use capability class of VIIe or VIII. This policy seeks to discourage, through enforcement action and non-regulatory methods, the removal of vegetation in areas of highly erodible land.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Reduction in area of land prone to wind erosion	% land prone to wind erosion	% soils at risk from erosion mapped
No long-term degradation in soil health	Change in area susceptible to decline in soil health	Results of "500 soils" project
An increase in the area of the region being sustainably managed	% region being sustainably managed against land use capability	Land cover mapping (5 yearly)
Reduction of sediment deposited in the region's water bodies	Number of incidents reported/complaints received	Council records

² **Firebreak** means an adequate cleared area that is not vegetated to prevent the spread of fire between vegetated areas.

3.4 Scarcity of Indigenous Vegetation and Wetlands

ISSUE

- 3.4.1 **The scarcity of indigenous vegetation, wetlands, and habitats of indigenous fauna as a result of vegetation modification or clearance and land drainage.**

OBJECTIVE

- OBJ 15** The preservation and enhancement of remaining areas of significant indigenous vegetation, significant habitats of indigenous fauna and ecologically significant wetlands.

Explanation and Reasons

- 3.4.2 Before settlement, Hawke's Bay was covered in dense native forest, wetlands and high country tussock. The vast majority of native forest and tussock has been removed, and wetlands have been drained, as a result of successive settlement by Maori and European. This pattern is typical of what happened throughout New Zealand and, indeed, elsewhere in the world wherever land has been developed for human settlement. It is unreasonable to expect revegetation of the landscape back to its pre-settlement state, as this would essentially require a reversing of the pattern of settlement. However, it is important to value the areas of indigenous vegetation and habitat that remain, and encourage the establishment of other areas.
- 3.4.3 Wetlands provide important areas of indigenous habitat, adding to the biodiversity of Hawke's Bay and the stability and quality of the region's waterways. These areas provide habitat for many of our birds, plants and amphibians. They also filter sediment and nutrients, regulate water flows, decrease the frequency and size of floods, and curb erosion.
- 3.4.4 The majority of wetland areas that once covered the Hawke's Bay region have been drained and developed. Less than 10% of the original wetland area of Hawke's Bay remains, and many of the remaining areas are in poor condition or under threat from land use activities.
- 3.4.5 The remaining areas of indigenous vegetation and wetlands are vulnerable to various threats, in particular:
- (a) modification or clearance of indigenous vegetation
 - (b) drainage, diversion of water, or water abstraction affecting the quantity of water in wetlands
 - (c) the presence of animal or plant pests
 - (d) pollutants entering wetlands from aerial spraying, topdressing or land runoff, and
 - (e) land use activities around the margins, particularly wandering and grazing stock and heavy machinery.
- 3.4.6 Because the extent of indigenous vegetation and wetlands is already limited in Hawke's Bay, it is important that those areas remaining are preserved, rather than reduced even further.

POLICIES

POL 4A ROLE OF NON-REGULATORY METHODS

To use both non-regulatory and regulatory methods for protecting significant values of wetlands.

POL 4 ROLE OF NON-REGULATORY METHODS

To use non-regulatory methods, as set out in Chapter 4, as the primary means for achieving the preservation and enhancement of remaining areas of significant indigenous vegetation and ecologically significant wetlands, in particular:

- (a) **Economic instruments** – Providing financial support for the preservation of remaining areas of significant indigenous vegetation or wetlands, including support for the covenanting of indigenous vegetation, at a level of funding as established in the HBRC's Annual Plan.

For the purposes of this policy, significant indigenous vegetation includes any of the following:

- (i) Vegetation that has been especially set aside by statute or covenant, or is otherwise legally managed for protection or preservation.
- (ii) Areas of indigenous vegetation over 40 hectares in size.
- (iii) Any area of naturally occurring indigenous vegetation, with the following characteristics:
 - being over one hectare, where the average canopy height is greater than 6 m

- being five hectares or greater, with an actual or emerging predominance of indigenous tree species of any height (where ‘tree species’ is any species which may attain a diameter at breast height of 30 centimetres or greater in Hawke’s Bay).
 - (iv) Vegetation recommended for protection under the Protected Natural Areas programme or another programme of the Department of Conservation, or recommended for protection in a report by the Forest Heritage Fund or Nga Whenua Rahui Committees.
- (b) **Works and services** – Providing works and services, or financial support, for the preservation of remaining ecologically significant indigenous wetlands at a level of funding as established in the HBRC’s Annual Plan, subject to a management plan or statutory covenant being established for each wetland receiving assistance. Priority for Council’s works and service-related projects will be given to the following wetlands⁴ (see Figure 4):
 - Whakaki Lake
 - Lake Poukawa/Pekapeka Swamp
 - Opoutama Lagoon
 - Whakamahi Lagoon
 - Ngamotu Lagoon
 - Lake Hatuma
 - Waitangi Estuary
 - Maungawhio Lagoon
 - Lake Runanga
 - Lake Oingo.
- (c) **Liaison with territorial authorities** - Advocating to territorial authorities that they establish mechanisms in their district plans which preserve and enhance areas of significant indigenous vegetation and wetlands.
- (d) **Education** – Encouraging landowners not to undertake drainage and diversion activities where these adversely affect the indigenous ecosystems of wetland areas. Protection and support is available through the covenanting of significant areas.

Explanation and Reasons

- 3.4.7 Policy 4 sets out the role of the HBRC in providing financial support, undertaking works and services and liaising with territorial authorities to achieve the preservation and enhancement of the remaining areas of significant indigenous vegetation and wetlands. The HBRC recognises the importance of these remaining significant areas and as a result funding has been established within the Annual Plan for the non-regulatory methods.
- 3.4.8 These non-regulatory methods will assist HBRC in protecting the significant values of wetlands in accordance with Objective A2(B) of the 2011 National Policy Statement for Freshwater Management. These methods will complement regional rules that are included elsewhere in this Plan and the Regional Coastal Environment Plan. Significant values of wetlands can include nutrient filtering, flood flow attenuation, sediment trapping, habitats for flora and fauna, recreation, cultural values and educational value.

⁴ **Priority wetlands for works and services** - Note that some of these wetland areas are located within the coastal marine area (and therefore fall under the provisions of the Regional Coastal Plan rather than this Plan). However, the full list of priority wetlands has been included for the sake of completeness.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
An increase in the area of significant indigenous vegetation under covenant	Area of land under protective covenant	Council records
No further loss of ecologically significant wetlands	Extent of wetlands in the region	Council GIS data
Improvements in environmental conditions of priority wetlands	Condition of priority wetlands in the region	Site monitoring

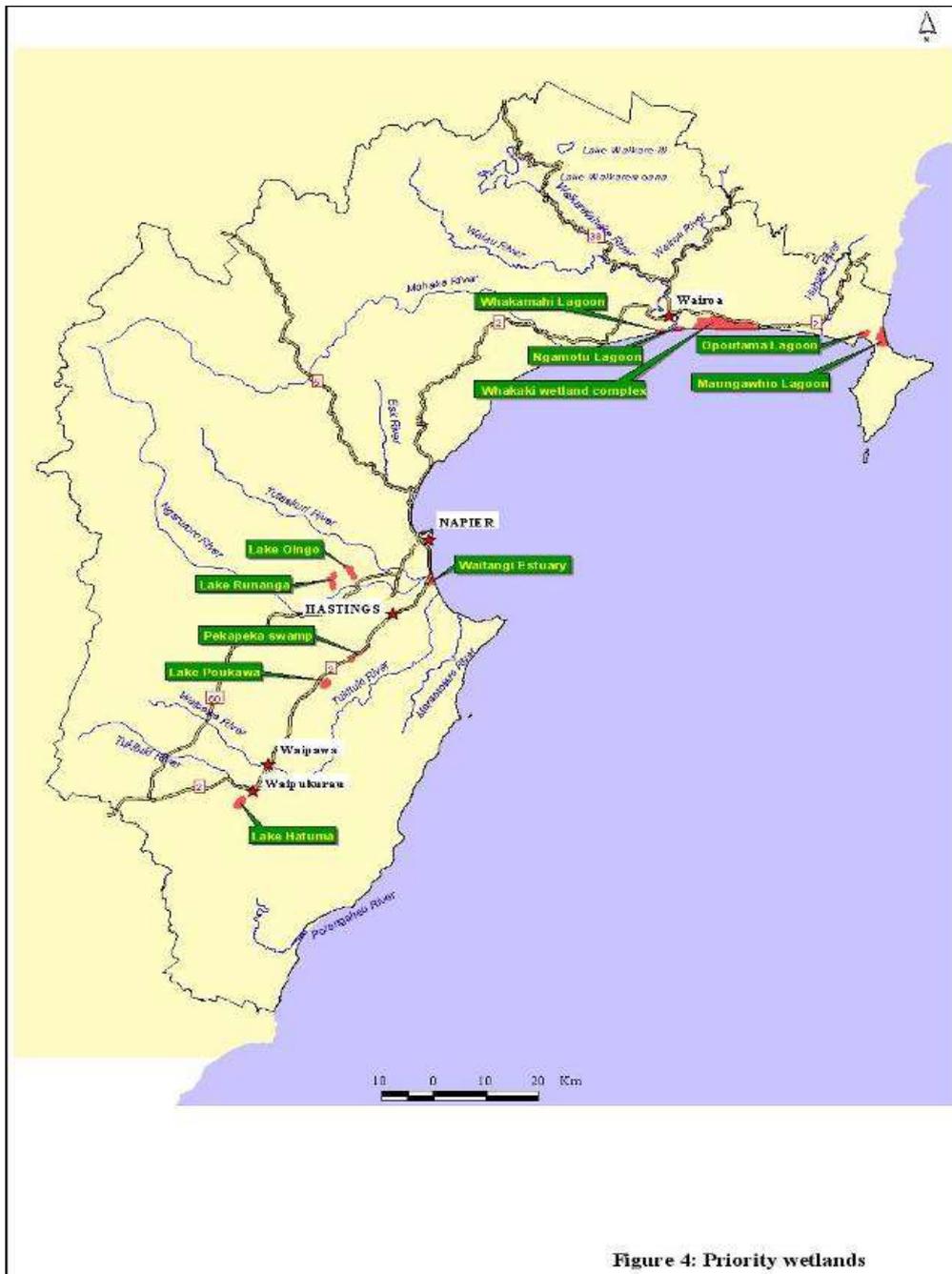


Figure 4: Priority wetlands

3.5 Effects of Conflicting Land Use Activities

ISSUE

- 3.5.1 **The occurrence of off site impacts or nuisance effects, especially odour, smoke, dust, noise, vibrations, agrichemical spray drift and increased traffic, caused by the location of conflicting land use activities.**

OBJECTIVES

- OBJ 16** For future activities, the avoidance or mitigation of off site impacts or nuisance effects arising from the location of conflicting land use activities.
- OBJ 17** For existing activities (including their expansion), the remedy or mitigation of the extent of off site impacts or nuisance effects arising from the present location of conflicting land use activities.
- OBJ 18** For the expansion of existing activities which are tied operationally to a specific location, the mitigation of off site impacts or nuisance effects arising from the location of conflicting land activities adjacent to, or in the vicinity of, areas required for current or future operational needs.

Explanation and Reasons

- 3.5.2 Where different land uses are located adjacent to each other there is always the potential for conflict. This is particularly the case where, for example, there is residential development adjacent to industrial or rural activities, or the use or disposal of organic material associated with rural activities. The proximity of these land uses to one another can cause conflict, predominantly in relation to odour, smoke, dust, noise and agrichemical spray drift (note that the issue of agrichemical use is discussed more fully in section 3.6).
- 3.5.3 The RMA, through the specification of functions of regional councils and territorial local authorities, has created an overlap in functions which complicates the issue. Section 30 of the RMA sets out regional council functions, including the control of the discharge of contaminants into or onto land, air, or water. Intimately related to this are the section 31 land use functions of territorial local authorities. Section 31 accords these organisations the responsibility of controlling the actual and potential effects of the use, development, or subdivision of land. Given that the effects of the land use activity are controlled by the territorial local authority, and any discharge associated with that activity by the regional council, there is often the situation where responsibility shifts from territorial local authority to regional council in terms of function. The control of the emission of noise and the mitigation of the effects of noise are a function of territorial authorities (except in the Coastal Marine Area). In the Coastal Marine Area this has been transferred to the territorial authorities from the regional council.
- 3.5.4 Coupled with this is the need to recognise that the effects of an activity vary according to its location and the surrounding land use activities, e.g. an orchard may not cause any adverse effects to neighbouring orchards and farms, but may cause adverse effects to neighbouring residential areas. Regional Council staff respond to a large number of complaints related to discharges from activities sited in incompatible locations.
- 3.5.5 It is important that local authorities work together to resolve present issues and to ensure that predicaments surrounding conflicting land use activities do not arise from inappropriate planning decisions. This can be most efficiently and effectively achieved through the District Plan development process through techniques involving regulation such as zoning and buffering or the use of separation distances; or the use of non-regulatory methods such as information provision about the potential nuisances likely to arise.
- 3.5.6 Of particular concern to industries and rural businesses are complaints about existing activities made by new neighbours. The viability of existing business activities may be threatened as a result of effects which were not perceived as a problem when the activities were first established. Commonly this occurs when rural lifestyle subdivisions are allowed in traditional farming areas. Odours, noise, agrichemical and fertiliser applications, and dust may be considered to be incompatible with the new adjacent activity. Similar situations arise when residential areas encroach onto industrial areas.
- 3.5.6A Similar concerns are held by the regions infrastructure providers, given that some types of infrastructure can, by their very nature, produce adverse effects which are considered unacceptable by existing activities and the community. For example, infrastructure can cause emissions or vibrations which go beyond the boundaries of the site; or activities associated with the land use may create adverse effects on nearby land, such increased traffic or noise.
- 3.5.6B Such effects need to be planned and managed in an effective manner to ensure established infrastructure is not compromised by the location of sensitive activities nearby, and that existing land uses are not adversely affected by the use and development of new infrastructure.
- 3.5.7 These issues form the justification for management on the basis of “reverse sensitivity”. The Environment Court has defined the term “reverse sensitivity” as the effects of the existence of sensitive activities on other activities in their vicinity, particularly by leading to restraints in the carrying on of those activities. The crux of this principle is that where an existing activity produces a situation that a new activity would likely regard as noxious, dangerous, offensive or objectionable, then the new activity should not be sited next to the existing one. Alternatively, safeguards should be put in place to ensure that the new activity does not curtail the existing one.

- 3.5.8 The principle of reverse sensitivity is receiving increasing recognition in RMA case law, e.g. *McQueen v Waikato District Council* (A045/94), *Auckland Regional Council v Auckland City Council* (A10/97), *RDM Consultants Limited v Manawatu Wanganui Regional Council* (W91/98), and *Coeur Gold NZ and Others v Waikato Regional Council* (A97/98).

POLICIES

POL 5 ROLE OF NON-REGULATORY METHODS

- 3.5.9 To use non-regulatory methods as set out in Chapter 4, in particular **liaison with territorial authorities**, as the primary means of preventing or resolving problems arising from incompatible land use activities and implementing the problem-solving approaches set out below.

Explanation and Reasons

- 3.5.10 Policy 5 recognises that while the issues that arise (e.g. dust, smoke and odour nuisance) are controlled by the HBRC, the conflict between incompatible land uses has generally arisen as a result of past land use planning decisions, and a legal inability to consider the likely effects of conflicting land uses. This policy recognises the need for a collaborative approach as the primary means of preventing and resolving problems that arise from incompatible land uses.

POL 6 PROBLEM-SOLVING APPROACH – FUTURE LAND USE CONFLICTS

- 3.5.11 To recognise that the future establishment of potentially conflicting land use activities adjacent to, or within the vicinity of each other is appropriate provided no existing land use activity (which adopts the best practicable option or is otherwise environmentally sound⁵) is restricted or compromised. This will be primarily achieved through liaison with territorial authorities and the use of mechanisms available to territorial authorities, which recognise and protect the ongoing functioning and operation of those existing activities.

Explanation and Reasons

- 3.5.12 Policy 6 sets out an approach to avoid the existing level of problems arising from incompatible land uses becoming worse as a result of future decisions. In particular, this policy seeks to encompass the notion of “reverse sensitivity”, recognising the rights of existing lawfully established activities.

POL 7 PROBLEM-SOLVING APPROACH – EXISTING LAND USE CONFLICTS

- 3.5.13 To adopt the following approach for addressing existing problems arising from conflicting land use activities that are adjacent to, or within the vicinity of each other:
- (a) Recognise existing lawfully established resource use activities that are operated in a manner that adopts the best practicable option, or which is otherwise environmentally sound.
 - (b) The HBRC will place emphasis on holding discussions and providing information as the primary means of conflict resolution.
 - (c) In the event that further action is necessary, the HBRC may adopt a range of methods to seek to address the problem, including one or more of the following:
 - (i) Working with organisations representing resource users, if such organisations exist
 - (ii) Promoting the use of community working groups which bring affected people together in order to discuss the problem
 - (iii) Using an independent facilitator to mediate between disputing parties
 - (iv) Using the services of independent experts to carry out investigations and for Council to use that information to guide resource user/parties in dispute.

⁵ “Environmentally sound activities” are considered to be those which comply with the Environmental Guidelines set out in Chapter 5; any relevant rules of this Plan; any effects-based environmental guidelines, standards or rules of the relevant territorial authority; and any resource consents required for the activity.

Explanation and Reasons

- 3.5.14 Policy 7 sets out the approach to be taken to address existing problems that arise because of incompatible land uses. Again, this policy expressly recognises the rights of existing lawfully established activities that adopt the “best practicable option” or which are otherwise environmentally sound. Notwithstanding the recognition of existing lawfully established activities, the HBRC will endeavour to resolve any issues by facilitating discussions between affected parties.

POL 8 DECISION-MAKING CRITERIA – ODOUR EFFECTS

- 3.5.15 To have regard to the following factors when considering conditions on resource consents where a discharge of odour to air occurs:
- (a) the likely frequency and duration of odour events
 - (b) the nature of the odour
 - (c) the nature of the local environment where odour may be experienced and the reasonable expectation of amenity within that environment given its zoning
 - (d) any antecedent or contributing factors, including climatic or topographical features
 - (e) the extent to which lawfully established resource use activities operate in a manner that adopts the best practical option, or which is otherwise environmentally sound.

Explanation and Reasons

- 3.5.16 The issue of odour is one of the more frequent complaints which arises as a result of land use effects conflicts. The HBRC assesses each resource consent application on its circumstances and likewise deals with each complaint on a case by case basis. Policy 8 is intended to give some guidance to HBRC when determining resource consent conditions to take into account such factors as the frequency, intensity, duration, offensiveness and location of the odour event. These factors will also be taken into account in assessing any complaint, and the policy acknowledges the unique set of circumstances of each situation.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Minimisation of conflict of effects between existing activities	Compliance with rules and consent conditions	Compliance monitoring Incident response monitoring
Reduction in adverse effects of incompatible activities on one another	Consideration given to effects in district plans	District Plans HBRC statutory advocacy records
Avoidance or mitigation of effects between future incompatible activities	Compliance with rules and consent conditions Compliance registers	District Plans Regional Plans

3.6 Agrichemical Use

ISSUE

- 3.6.1 **The potential adverse effects on human health, property and the environment from agrichemical use.**

OBJECTIVE

- OBJ 19** The avoidance of any significant adverse effects on human health, property or the environment from agrichemical use.

Explanation and Reasons

- 3.6.2 Agrichemical use is an issue of considerable concern in the Hawke's Bay region. At present, most primary producers and other organisations such as road and rail authorities, councils and contractors in Hawke's Bay use agrichemicals for plant and animal pest and disease control. Indeed, many primary producers are required to use agrichemicals in accordance with schedules set for export markets. However, problems occur because of conflict between this reliance on chemicals and the concerns of others that may be adversely affected by them. Horticulture is an intensive land use over the Heretaunga Plains, and a major concern to the Council is agrichemical use associated with this activity. Over the year 1998-1999 agrichemical complaints represented 15% of air related incidents in the region.
- 3.6.3 Agrichemicals may adversely affect human health if mismanaged. Effects often take time to manifest themselves and difficulties in undertaking studies to assess health effects mean that the extent of the problem is often unclear. However, this potential for health problems means that particular care is required when agrichemicals are used within close proximity of residential buildings, schools, other areas where people congregate, and public roads. It also indicates the importance of taking a precautionary approach, and notifying people of when agrichemicals are to be used and the levels of risk involved.
- 3.6.4 Agrichemicals may also have other effects if mismanaged. For example, they may affect water quality, sensitive ecosystems and beneficial organisms such as bees and predatory insects. They may also affect the viability of adjacent land uses, particularly organic farming. Organic farming is increasing in the Hawke's Bay region, as the demand for organic produce rises. There is also the potential to create offensive odours when spraying some agrichemicals.
- 3.6.5 People have the right to use agrichemicals safely and responsibly, within legal constraints. Equally, others who may be affected have a right to know what agrichemicals are to be used, or have been used. As there is likely to be a reliance on agrichemicals for some time yet, there is a need to:
- (a) ensure that they are not causing adverse effects on people's health or the environment
 - (b) ensure that they are not being used irresponsibly
 - (c) improve the methods of application, including avoiding excessive or non-target application
 - (d) look for ways of reducing the use of agrichemicals over time where alternatives exist or can be developed, and
 - (e) adequately inform people about agrichemical use.
- 3.6.6 Industry is taking steps towards addressing concerns with agrichemical use. For example, a number of GROWSAFE® training programmes are offered by the New Zealand Agrichemical Education Trust (NZAET) through the Agriculture Industry Training Organisation, and are linked with the National Qualifications framework. These are based on the requirements of the Code of Practice for the Management of Agrichemicals (NZS 8409:2004, NZAET 1999). In addition, Heinz-Wattie Ltd and ENZA operate successful programmes for produce growers, aimed at reducing their reliance on, and use of, agrichemicals.
- 3.6.7 The issue of agrichemical use was thoroughly discussed and addressed during development of the Regional Air Plan (HBRC, 1998). Owing to the relatively recent development of that Plan, and the level of agreement reached on how to manage agrichemical use, this Plan adopts an approach very similar to that contained in the Regional Air Plan.

POLICIES

POL 9 ROLE OF NON-REGULATORY METHODS

3.6.8 To use non-regulatory methods, as set out in Chapter 4, in support of regulatory methods for avoiding adverse effects on human health and the environment from agrichemical use, in particular **education and co-ordination** as follows:

- (a) Advocating to relevant industry and other organisations that, in liaison with the HBRC, they:
 - Provide information and advice to agrichemical users about the safe and responsible use of agrichemicals.
 - Provide general information to the public about agrichemical use in Hawke's Bay, including the types of agrichemicals used, and when, how and why they are used.
- (b) Promoting the safe and responsible use of agrichemicals, including through adherence to the Code of Practice for the Management of Agrichemicals (NZS 8409:2004, NZAET 1999) or other recognised codes of practice.
- (c) Encouraging the use of a decision-making process that takes into account all other practicable alternatives before an agrichemical is used in response to an identified need.
- (d) Promoting the use of suitable mitigation methods to minimise spray drift, such as the planting of shelter belts.

Explanation and Reasons

3.6.9 Policy 9 reflects the importance of ongoing liaison between the HBRC and agrichemical users and the public, so that all parties are working together in managing agrichemical spray drift. It is important for the HBRC to be aware of industry initiatives for the management of agrichemical use, and to discuss its requirements and any public concerns about agrichemical use with the key stakeholders. This policy reflects the Regional Council's belief that the responsibility for educating users and informing the public about agrichemical use also rests with the industries and organisations that represent the users. It also acknowledges the status of the "Code of Practice for the Management of Agrichemicals" as providing valuable information on the use of agrichemicals and the avoidance of spray drift. Policy 9 recognises the importance of educating agrichemical users in other methods that will assist in the reduction of spray drift, such as the planting of shelterbelts.

POL 10 REGULATION – DISCHARGES OF AGRICHEMICALS

3.6.10 To provide for discharges of agrichemicals into air, onto land or into water, in circumstances where the following requirements are met:

- (a) The agrichemicals to be discharged are approved for their intended use.
- (b) The proposed method of application, including the type of spray equipment to be used, the spray volume and droplet size, the direction of spraying and the height of release above the ground, is appropriate for the types of agrichemicals to be used and for the minimisation of spray drift.
- (c) The agrichemical user has appropriate training in respect of agrichemical use.
- (d) The discharge does not cause any adverse effect on human health.
- (e) The discharge does not cause any adverse effects on dwellinghouses, public land, or other areas where people reside or congregate.
- (f) The discharge does not cause any adverse effects on sensitive neighbouring land uses.
- (g) The discharge does not cause any adverse effects on non-target flora and fauna.

- (h) The discharge does not adversely affect the water quality of any water body.
- (i) The discharge does not result in any spray drift being deposited on any roof or other structure used as a catchment for water supply.

Explanation and Reasons

3.6.11 Policy 10 sets out the circumstances when the HBRC will provide for the discharge of agrichemicals into the environment. These circumstances are consistent with the matters prescribed in the New Zealand Standard for the Management of Agrichemicals (NZS 8409:2004) and the safe and responsible use of agrichemicals referred to in Policy 9. Policy 10 is a regulation policy and, as such, its purpose is to set out the parameters whereby the discharge of agrichemicals will be permitted (and, consequentially, when it will be regulated).

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Reduction in receipt of legitimate complaints about agrichemical spray drift	Number of complaints received	Council records Incident Monitoring
Minimisation of adverse effects of agrichemical sprays on water bodies, and non-target flora and fauna	Number of complaints received	Council records Incident Monitoring

3.7 Management of Organic Material⁶

ISSUE

- 3.7.1 **The actual and potential nuisance and adverse effects on humans, property and the environment due to the poor management and utilisation of organic material derived from primary processing industries.**

OBJECTIVE

- OBJ 20** The management and use of organic material derived from industries processing primary products in a manner that does not result in any adverse effects on humans or the environment.

Explanation and Reasons

- 3.6.12 The Hawke's Bay regional economy is based on primary production activities such as pastoral farming, dairying, forestry, horticulture, orcharding, viticulture and fishing. Most of the produce from these activities is then processed in the region, generating organic by-products such as:

- (a) by-products from the fruit and vegetable processing industries
- (b) apex meal, paunch grass, and stock yard waste from the animal processing plants
- (c) grape marc from wineries
- (d) fish waste from fish processors
- (e) bark and sawdust from timber processing plants
- (f) wool scour waste from wool scourers.

(Note that liquid animal effluent that is collected and managed, such as that from dairy, piggery or poultry sheds, is not included in this issue.)

- 3.7.2 The materials listed above can be used for a variety of purposes such as stock feed, soil conditioners, and composting. The alternative to such beneficial use is disposal as waste, onto or into land. To categorise the use of organic material for beneficial purposes it must be clearly shown that the organic material:

- (a) can and will safely be eaten by stock before it becomes indigestible (where material is used as stock feed)
- (b) will not enter waterways
- (c) will result in a nutrient loading onto land that does not exceed the natural uptake by grass or crops, and
- (d) is not contaminated with non-organic material.

- 3.7.3 The HBRC supports the re-use of organic material, rather than the disposal of it into landfills (or any unauthorised site). However, when organic material decomposes it can produce odours, leachate and other contaminants that may affect neighbouring properties and the environment. Therefore the use of this organic material has to be managed in such a way that these effects are minimised. This can involve a number of management practices such as:

- (a) storing material that might generate leachate on an impervious surface to avoid groundwater contamination
- (b) using fresh material for stock feed to prevent decomposition odours being generated
- (c) only feeding out what the stock will eat, to avoid surplus residual material lying in paddocks
- (d) keeping material covered to avoid flies or other pests, and
- (e) storing and using organic material in locations away from adjoining incompatible activities.

⁶ Section 3.7 of the Regional Resource Management Plan applies only to organic material derived from primary processing industries.

POLICIES

POL 11 ROLE OF NON-REGULATORY METHODS

3.7.4 To use non-regulatory methods, as set out in Chapter 4, in support of regulatory methods for avoiding nuisance and adverse effects on humans and the environment from the use of organic matter, in particular:

- (a) **Advocating** that the industrial and trade premises, which generate organic material, promote the use of this material in such a manner that it will avoid adverse effects.
- (b) **Promoting the composting of suitable organic material**, rather than disposal to landfill.
- (c) **Encouragement for self-regulation** – Promote and support self-regulation by resource users, including the preparation and adoption of guidelines and codes of practice by resource user groups.

Explanation and Reasons

3.7.5 Policy 11 aims to encourage industrial and trade premises, which generate organic material, to take an interest in the use and ultimate disposal of their material once it has left their premises. This policy also notes that the HBRC promotes composting of suitable organic material rather than disposal as waste, and advocates education of appropriate uses and management practices.

POL 12 REGULATION – DISCHARGES FROM THE USE OF ORGANIC MATERIAL

3.7.6 To provide for the discharge of contaminants into air, into land or onto land, from the use of organic material, in such a manner that any adverse effects on the environment are avoided or minimised.

3.7.7 The HBRC may request that a management plan is prepared where the circumstances are such that:

- (a) organic material is sourced from industrial or trade premises
- (b) there are residential properties in close proximity to the activity
- (c) large volumes of organic material are being stored and/or used
- (d) the organic material is likely to be malodorous in nature
- (e) nutrient loadings may exceed the natural uptake rate by grass or crops
- (f) the groundwater resource is particularly susceptible to contamination e.g. on the Heretaunga Plains unconfined aquifer, or on highly permeable soils
- (g) when organic material is stored in a position where it can potentially enter a surface water body.

Explanation and Reasons

3.7.8 Policy 12 provides for the regulation of the discharge of contaminants into the air, and into and onto land, as a result of using organic material. This policy recognises that the use of organic material may produce adverse effects on the environment, particularly where the activity is undertaken in close proximity to residential properties, is malodorous or where it has the potential to contaminate water bodies.

POL 13 REGULATION - COMPOSTING

3.7.9 To require a resource consent to be obtained for the discharge of contaminants into air arising from the composting of more than 100 m³ of compost and raw material per industrial or trade premise.

Explanation and Reasons

3.7.10 Policy 13 provides for the regulation of the composting of over 100 m³ of organic material per industrial or trade premise at any one time (see Rule 28), owing to the potentially malodorous nature of this activity. The composting of up to 100 m³ is permitted in accordance with Rule 29 provided the conditions of this rule are met.

POL 14 DECISION-MAKING CRITERIA – SEPARATION DISTANCES

3.7.11 To require the establishment and maintenance of separation distances in relation to the storage, use or disposal of organic material to ensure that:

- (a) there is no direct runoff of leachate into surface water
- (b) there is adequate vertical separation from groundwater, such that the activity is consistent with Objectives 21 and 22, and
- (c) there are no offensive or objectionable odours imposed on neighbouring properties.

Explanation and Reasons

3.7.12 Policy 14 provides guidance to resource consent applicants and decision-makers when assessing activities that store, use or dispose of organic materials. This policy recognises the importance of buffer zones. A buffer zone is a physical separation of the activity from neighbouring properties or resources and may be either a vertical separation or a horizontal separation.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Reduction in adverse effects arising from the use of organic material	Number of complaints received	Council records Incident Monitoring
An increase in composting of organic material	Amount of organic material disposed to landfills	Landfill records

3.8 Groundwater Quality

ISSUE

3.8.1 The risk of contamination of groundwater arising from

- (a) horticultural, agricultural and industrial land use practices
- (b) discharges of contaminants, including the cumulative effects of domestic sewage discharges from unsewered communities
- (c) spills

particularly in the Heretaunga Plains and Ruataniwha Plains aquifer systems, and coastal aquifers.

OBJECTIVES

OBJ 21 No degradation of existing groundwater quality in the Heretaunga Plains and Ruataniwha Plains aquifer systems.^{6A}

OBJ 22 The maintenance or enhancement of groundwater quality in aquifers⁷ in order that it is suitable for human consumption and irrigation without treatment, or after treatment where this is necessary because of the natural water quality.

Explanation and Reasons

Heretaunga Plains

3.8.2 The most significant groundwater resource in Hawke's Bay is the Heretaunga Plains aquifer system. During the past 20 years there has been an intensification of rural land use activities, and expansion of urban areas, on the Heretaunga Plains. In the area of the unconfined aquifer there is the potential for adverse effects on groundwater by infiltration of contaminants such as bacteria, nutrients and chemicals through the highly permeable gravels. The risk of contamination arises from a number of activities, including:

- (a) on-site sewage disposal (particularly septic tanks)
- (b) the use, transport and storage of hazardous substances, including hydrocarbon fuels and agrichemicals
- (c) industrial discharges
- (d) intensive horticultural and agricultural land uses
- (e) stormwater discharges
- (f) landfills and offal holes, and
- (g) mining and quarrying.

3.8.3 The groundwater quality in the Heretaunga Plains aquifer system has been investigated and documented in Dravid and Brown (1997). Investigations are continuing. Overall, present groundwater quality is high. Indeed, the quality is such that groundwater is used for domestic supply in Napier and Hastings without treatment. However, as early as 1974 it was recommended that urban development and the storage of hazardous substances be prohibited from the unconfined aquifer area, and that a precautionary approach be taken with respect to future development.

3.8.4 The HBRC has been systematically monitoring groundwater quality on an ongoing basis since 1994. The results show:

- (a) Groundwater quality is high, with only minor contamination evident as a result of identifiable sources, notably the Roys Hill landfill and septic tanks, and diffuse nitrate pollution from intensive land use activities.
- (b) There is a high risk of groundwater contamination from infiltration of contaminants into the unconfined aquifer.

^{6A} Subject to the Ruataniwha Plains being removed by Plan Change 6.

⁷ **Productive aquifers** – For the purposes of this Regional Plan, a “productive aquifer” means an aquifer that has a sufficient quality, quantity and flow of water that it can be used for water supply purposes.

- (c) A number of areas in the shallow unconfined aquifer area have high nitrate contamination (for example, during 2000 groundwater samples collected from a well near Bridge Pa exceeded the drinking water standard for nitrate levels. Council's State of the Environment annual updates may be referenced to identify other affected areas over the life of the Plan).
- (d) The high rate of groundwater flow (up to 1.5 km/y) means that any contamination is rapidly transported through the groundwater system, and therefore dispersed.
- (e) The most likely threat to groundwater quality in shallow confined aquifers is the entry of contaminated water from the unconfined aquifer area.
- (f) Contamination of groundwater in deeper confined aquifers, which have limited hydraulic connection with the unconfined aquifer, is unlikely.

Ruataniwha Plains

- 3.8.5 The Ruataniwha Plains comprise a productive agricultural basin in central Hawke's Bay where more than 60% of all water utilised is derived from groundwater.
- 3.8.6 Most groundwater is extracted at a relatively shallow depth (less than about 70 metres) with the greatest density of bores located near Ongaonga, the Waipawa River, and between Takapau and Maharakeke. Nearly all groundwater originates from a number of highly mixed (heterogeneous) alluvial aquifers. Underlying these aquifers is a layer of mudstone, sandstone and limestone at a depth of about 150 metres.
- 3.8.7 A number of unconfined and confined aquifers have been identified within the Ruataniwha Plains. About 25% of all groundwater extracted from within the Ruataniwha Plains is derived from the unconfined Central Plains Aquifer. This aquifer lies within the east central portion of the plains and consists of clean sands and gravels with minor silt-bound layers. The aquifer is up to about 25 metres thick.
- 3.8.8 In general, the quality of groundwater within the Ruataniwha Plains alluvial aquifers is high. This quality is predominately in response to clean surface water recharging the alluvial aquifer system.
- 3.8.9 The issues relating to the quality of the Ruataniwha Plains groundwater resource can be summarised as follows:
- (a) Recharge to the deeper confined aquifer is believed to occur from within the Ruahine Ranges, whereas the Recent Terrace and Old Terrace Aquifers are recharged from rivers and streams of the Plains.
 - (b) Unconfined aquifers are vulnerable to contamination.
 - (c) Chief sources of contamination are attributed to agriculture and meat processing industries. Specific sources of contamination include land disposal of wastes, sewage disposal via septic tanks, irrigation, pesticide application, fertiliser application and animal feeding operations.
 - (d) Groundwater contamination of deeper confined aquifers appears unlikely.

Unsewered communities

- 3.8.10 Over recent years the cumulative effects of septic tank discharges from unsewered settlements have created potential health risks. Contamination of groundwater from septic tank discharges occurs not only in the main aquifer systems, but also in coastal settlements. Discussions between the HBRC, territorial authorities, and the community health authority have signalled the need to specifically target problems arising from domestic sewage discharges in these areas.

POLICIES

POL 15 ROLE OF NON-REGULATORY METHODS

- 3.8.11 To use non-regulatory methods, as set out in Chapter 4, in support of regulatory methods for avoiding adverse effects on groundwater quality, including:
- (a) **Liaison with territorial authorities - future development** - Advocating that any future urban residential or urban industrial development in areas of high groundwater contamination vulnerability (particularly within the Heretaunga Plains unconfined aquifer system as shown in Schedule Va) should include reticulated water, sewerage and stormwater systems.
 - (b) **Liaison with territorial authorities – existing on-site sewage problems** – Where existing on-site sewage treatment systems are found to cause degradation of groundwater quality, advocating the introduction of community reticulation and treatment systems as the preferred means of addressing the problem.

- (c) **Liaison with territorial authorities – provision of services** – Advocating that when considering water supply reticulation in small communities, the ability of existing wastewater disposal systems to cope with the increased loadings that will result be taken into account and the need for a reticulated sewerage system to be introduced to be considered.
- (d) **Liaison with territorial authorities – connection to services** – Advocating that where a reticulated sewerage system is readily available, to require future development to connect to it.
- (e) **Liaison with territorial authorities – contaminated sites** - Providing information to territorial authorities regarding sites within their respective area that have been confirmed as being contaminated and advocating that land use activities on such sites be managed appropriately for environmental and health reasons.
- (f) **Education and co-ordination** - Providing education and information regarding sound land use and waste management practices.
- (g) **Encouragement for self-regulation** – Promote and support self-regulation by resource users, including the preparation and adoption of guidelines and codes of practice by resource user groups.

Explanation and Reasons

- 3.8.12 Policy 15 recognises the effects of urban and industrial development, and on-site sewage disposal, on the quality of groundwater in those areas of high contamination vulnerability. This policy seeks to ensure that, where appropriate, future developments are provided with reticulated water, sewerage and stormwater systems, and existing problems are remedied. Policy 15 also recognises the importance of informing landowners and occupiers that some land use activities can adversely affect groundwater quality.

POL 16 REGULATION – DISCHARGES OVER HERETAUNGA PLAINS AND RUATANIWHA PLAINS AQUIFER SYSTEMS

- 3.8.13 To regulate the following activities involving the discharges of contaminants onto or into land over the Heretaunga Plains unconfined aquifer area (as shown in Schedule Va) or Ruataniwha Plains unconfined aquifer area (as shown in Schedule IV) at a rate that may cause contamination of the aquifer systems:
- the storage of stock feed
 - the use of compost, biosolids, and other soil conditioners
 - animal effluent discharge
 - management of solid waste
 - existing domestic sewage disposal systems
 - new domestic sewage disposal systems
 - stormwater discharges
 - discharges to land that may enter water.

Explanation and Reasons

- 3.8.14 Policy 16 provides for the regulation of activities over the Heretaunga Plains and Ruataniwha Plains unconfined aquifers, owing to the very high value of this groundwater and the risk of groundwater contamination. Discharges to land in areas other than the Heretaunga Plains and Ruataniwha Plains unconfined aquifers are permitted in the Plan, subject to compliance with relevant standards/conditions/terms.

POL 17 DECISION-MAKING CRITERIA – ACTIVITIES AFFECTING GROUNDWATER QUALITY

- 3.8.15 To manage the effects of activities that may affect the quality of groundwater in accordance with the following approach:
- (a) To ensure that all activities, particularly discharges of contaminants onto or into land, comply with the environmental guidelines for groundwater quality, and the associated implementation approach, set out in Policies 75 and 76.
 - (b) To encourage discharges of contaminants onto or into land where these are likely to have less adverse effect than discharges into water.

- (c) To consider the effects of the taking of groundwater on the quality of groundwater, including the potential for salt water intrusion.
- (d) To prevent or minimise spills or other breaches of resource consent conditions causing contamination of groundwater, particularly in those areas of high contamination vulnerability for the Heretaunga Plains aquifer system as shown in the DRASTIC map in Schedule V, by requiring the preparation and implementation of site management plans and spill contingency measures for relevant activities.
- (e) To disallow any discharge activity which presents a significant risk of groundwater contamination in those areas of high contamination vulnerability for the Heretaunga Plains aquifer system as shown in the DRASTIC map in Schedule V.

Explanation and Reasons

3.8.16 Policy 17 sets out the overall approach for the management of all activities which may adversely affect groundwater quality.

POL 18 DECISION-MAKING CRITERIA – ON-SITE SEWAGE DISCHARGES

(a) Discharges over the Heretaunga Plains Unconfined Aquifer

3.8.17 For consent applications for on-site sewage discharges over the Heretaunga Plains unconfined aquifer area, to require a treatment and disposal system that meets the following criteria:

- (i) A filtration system which reduces the level of suspended solids to a maximum of 10 g/m³.
- (ii) A land application method which achieves even distribution over the entire field.
- (iii) For discharges of greater than 2 m³/d and/or irregular use, a land application method which has been demonstrated to function with the required discharge volume and/or irregular loading.

3.8.18 For any systems existing at the date of public notification of this Plan which are unable to meet the conditions set out in the rules, compliance with the conditions must be achieved within five years of this Plan provision becoming operative, or this particular provision being beyond legal challenge.

(b) Discharges in areas with a high water table

3.8.19 For consent applications for on-site sewage discharges where the water table is likely to be within 600 mm of the point of discharge at any time, to require a level of treatment and disposal at the point of discharge such that the effluent meets the following criteria:

- (i) A treatment system which reduces the level of faecal coliform bacteria to a maximum of 1000 cfu/100 mls.
- (ii) Where the groundwater is used as a potable water supply, a treatment system which reduces the level of nitrate-nitrogen to a maximum of 30 g/m³.
- (iii) A land application method which achieves both an even distribution and provides at least 450 mm of soil adsorption and absorption processes over the entire field.

3.8.20 For any systems existing at the date of public notification of this Plan which are unable to meet the conditions set out in the rules, compliance with the conditions must be achieved within five years of this Plan provision becoming operative, or this particular provision being beyond legal challenge.

(c) Use of low maintenance systems

3.8.21 To generally encourage the use of low maintenance on-site sewage disposal systems using physical methods of treatment in combination with shallow land application fields achieving even distribution.

(d) **Connections to reticulated systems**

- (i) To require any existing on-site sewage discharge which fails to meet the conditions specified in any rule for existing effluent disposal systems to discharge into a reticulation system in the following situations:
- where the building from which the discharge occurs is connected to a public water supply, or
 - where the property on which the discharge is occurring is zoned for residential activity in an operative District Plan, and
 - a community reticulated sewerage scheme is available.
- (ii) To require any new sewage discharge from a property which is zoned for residential activity to be serviced by a community reticulated sewerage scheme, provided a community scheme is available or can economically be made available, unless it can be demonstrated that individual on-site disposal is the best practicable option.

(e) **Sewage disposal by long-drop method**

- 3.8.22 For on-site sewage discharges using the long-drop method of disposal, to allow these only where the soil infiltration rate is low, groundwater quality will not be affected, and the discharge is of a short-term or temporary nature.

(f) **Assessment of treatment and land application methods**

- 3.8.23 To use the flow chart set out as Figure 6 (in Section 6.6.4) of this Plan as a general guide for assessing the types of treatment and land application methods that may be acceptable for minor discharges that may be permitted under Rules 35 and 37.

Explanation and Reasons

- 3.8.24 Policy 18 sets out additional decision-making criteria specifically in relation to on-site sewage disposal, which establish performance standards that must be met. While the use of on-site systems is preferable to discharging such contaminants directly to surface water, such use may nevertheless result in adverse effects on ground and surface water quality if the treatment systems are not designed or operated properly.
- 3.8.25 In areas where public sewerage systems are available the HBRC advocates connection of properties to those systems to avoid the cumulative adverse effects of wastewater discharges. The policy recognises that land zoned for residential use should not be developed until it is serviced by a community sewerage scheme as opposed to individual on-site systems on small sized properties. Community sewerage schemes may include those provided by the territorial local authority or a communal system set up to cater for a residential subdivision. However, there may be circumstances where a residential property is of sufficient size that deferring development until a connection to a community reticulation scheme becomes available is not warranted. In addition, there may also be circumstances in the region where residential growth is limited so that on-site systems may be able to provide the necessary environmental protection.

POL 19 DECISION-MAKING CRITERIA – EFFECTS OF FRESHWATER PASTURE IRRIGATION ON AGRICULTURAL EFFLUENT DISPOSAL AREAS

- 3.8.26 To minimise the leaching of nutrients to groundwater by ensuring that the combined hydraulic loading rates from agricultural effluent disposal and freshwater pasture irrigation do not exceed the capacity of the soil.

Explanation and Reasons

- 3.8.27 The effect of pasture irrigation can be managed through the resource consent process. Policy 19 indicates HBRC's preferred approach to managing this effect as part of the integrated management of the agricultural effluent disposal process. For the purposes of this policy the capacity of the soil encompasses the soil moisture holding capacity, the infiltration rate and the nutrient absorbing capacity of the pasture.

POL 20 DECISION-MAKING CRITERIA – AGRICULTURAL EFFLUENT DISCHARGES IN SENSITIVE CATCHMENTS

3.8.28 To manage the effects of discharges of agricultural effluent, particularly dairy shed effluent, onto land in sensitive catchments as shown in Schedule VIb in a manner that is in accordance with the objectives and policies of this Plan, and which:

- (a) Takes into account the cumulative effects of the discharges, from all agricultural activity carried out on the same land, by requiring the provision with any resource consent application of a total farm balance of the nutrient inputs, transfers and outputs which demonstrates that the nitrogen leaching potential is minimised.
- (b) Integrates the management of other activities which may have an impact on the effects of the agricultural effluent discharge.

Explanation and Reasons

3.8.29 Policy 20 sets out additional decision-making criteria for discharges of agricultural effluent onto land. This policy recognises the need for integrated management of agricultural effluent in a manner that takes into account not only the effects of the discharge, but also the effects of other activities such as pasture irrigation, stock feeding, and stocking densities.

3.8.30 The policy recognises also that while leaching of nitrogen through the soil to shallow groundwater is not a significant issue in many areas, there are a number of highly sensitive catchments within the region, for which even minor changes in nitrate levels may impact significantly on the state of the resource.

POL 21 DECISION-MAKING CRITERIA - BORE CONSTRUCTION

3.8.31 To ensure that bores are drilled, constructed and maintained in a manner which avoids any contamination or cross-contamination of groundwater aquifers, and which does not allow any seepage or backflow of contaminants into groundwater.

Explanation and Reasons

3.8.32 Policy 21 sets out additional decision-making criteria for bore construction, addressing the need to avoid aquifer cross-contamination, and the ingress of contaminants down the bore.

POL 22 DECISION-MAKING CRITERIA – RISK ASSESSMENT OF CONTAMINATED SITES

- (a) When assessing the risks to environmental and public health through the effects of contaminated sites on groundwater quality the following factors shall be taken into account:
 - (i) the level of contamination in soil and water at the site and the characteristics of the contaminants, such as their mobility
 - (ii) any numerical standards provided by relevant national guidelines
 - (iii) in the absence of relevant national guidelines, numerical standards determined in other internationally recognised guidelines
 - (iv) the current or proposed land use and any restrictions on future land uses of the site
 - (v) the proximity of the site to sensitive ecosystems and the sensitivity of those ecosystems to the contaminants
 - (vi) the possible exposure pathways
 - (vii) the degree and nature of the discharges from the site

- (viii) the geological nature and history of the site.
- (b) Remediation and/or containment of any existing contaminated site will be required to ensure that the final level of contamination is appropriate for the current, proposed or any permitted use of that land.

Explanation and Reasons

3.8.33 Policy 22 sets out additional decision-making criteria for assessing the risk of existing contaminated sites. Any discharges occurring from existing contaminated sites will be controlled through the resource consent process by the HBRC. Where there are no discharges from the site, the territorial authority will address the actual and potential adverse effects of soil contamination through its environmental and public health responsibilities, with assistance from HBRC in terms of information provision.

ANTICIPATED ENVIRONMENTAL RESULT

Anticipated Environmental Result	Indicator	Data Source
No degradation of existing groundwater quality in confined productive aquifers	Nitrate-nitrogen levels Organic and inorganic determinands of significance in NZ Drinking Water Standards <i>E.coli</i> levels Pesticides and herbicides	Ministry of Health Council monitoring

3.9 Groundwater Quantity

ISSUE

- 3.9.1 **The significant adverse effects of groundwater takes on the overall groundwater and surface water resource and existing groundwater users.**

OBJECTIVES

- OBJ 23** The avoidance of any significant adverse effects of water takes on the long-term quantity of groundwater in aquifers and on surface water resources.
- OBJ 24** The avoidance or remedy of any significant adverse effects of water takes on the operation of existing lawful efficient groundwater takes⁸.

Explanation and Reasons

- 3.9.2 Groundwater is a critical resource in Hawke's Bay. Groundwater is the main source of water for Napier, Hastings and the Heretaunga Plains, as well as areas of the Ruataniwha Plains in Central Hawke's Bay. Plentiful supplies of good quality groundwater are therefore essential to sustain irrigation, industrial and domestic water supplies in the region.
- 3.9.3 The Heretaunga Plains aquifer system is the most important groundwater resource in Hawke's Bay. Studies to date have concluded that the overall rate of groundwater abstraction does not exceed the rate of recharge (Dravid and Brown, 1997). Recharge to the main aquifer system is from the Ngaruroro and Tutaekuri Rivers, and direct infiltration of rainfall on the unconfined aquifer. At the time of writing this Plan, the annual volume of water abstracted from the main aquifer system was estimated to be between 60 and 70 million cubic metres, with much more water used during summer than winter (as a result of irrigation). On the basis of existing information the present abstraction rate appears sustainable. Overall piezometric pressures in the confined aquifer have not shown any decline in recent decades, although levels in the unconfined aquifer may have declined slightly over the past 20 years in accordance with climatic trends.
- 3.9.4 However, groundwater use is likely to rise in future, particularly during summer. The main effects of this are likely to be:
- (a) An increase in the amplitude of seasonal fluctuations in aquifer levels, in particular lowering groundwater levels during summer and autumn periods.
 - (b) Greater conflict between groundwater users, where the pumping from one bore lowers groundwater levels in adjacent bores, and
 - (c) A possible reduction in spring flows (i.e. less groundwater would emerge as springs) and consequential potential reduction in water quantities within wetlands, rivers and lakes.
- 3.9.5 The aquifer system largely adjusts through a re-equilibration, rather than a significant, permanent lowering of groundwater levels. Indeed, the groundwater system has adjusted in this way to accommodate past increases in groundwater use. Groundwater level data suggest that the range of seasonal fluctuations in the unconfined aquifer has increased from about 1 m in 1975 to about 2-2.5 m in 1995. Groundwater use is estimated to have increased by 150% in that time. However, the range of seasonal fluctuations in the confined aquifer has not changed as markedly over this time (Dravid and Brown, 1997).
- 3.9.6 While the availability of groundwater is sufficient at present in the main aquifer system, problems are apparent in fringe areas. In the southern and eastern margins of the main aquifer system the availability of groundwater is restricted by a combination of factors: the thinness of aquifers, the variable permeability of aquifers, and the limited hydraulic connection to main recharge channels. As a consequence, seasonal fluctuations in groundwater levels in these areas are in the order of 3 to 5 m (Dravid and Brown, 1997). In recent years, a large number of wells have been drilled along the southern margin of the Heretaunga Plains due to land subdivision and increased need for irrigation water supply. Many old domestic and stock water supply wells along this margin are relatively shallow, and can dry up during summer.
- 3.9.7 Demand for groundwater from the Ruataniwha Plains aquifer system is increasing, particularly as a result of increasing dairying and process cropping in this area. Less is known about the available groundwater resources in this area.

⁸ For the purposes of this Plan "efficient taking" of groundwater means abstraction by a bore which penetrates the aquifer from which water is being drawn at a depth sufficient to enable water to be drawn all year (i.e. the bore depth is below the range of seasonal fluctuations in groundwater level), with the bore being adequately maintained, of sufficient diameter and is screened to minimise drawdown, with a pump capable of drawing water from the base of the bore to the land surface.

POLICIES

POL 23 ROLE OF NON-REGULATORY METHODS

3.9.8 To use non-regulatory methods, as set out in Chapter 4, in support of regulatory methods for avoiding significant adverse effects arising from groundwater takes, in particular:

- (a) **Education and co-ordination** for encouraging efficient use of water, and avoiding wastage of water. Efficient use of water for irrigation purposes will be encouraged by promoting best irrigation management practices that:
- prevent excessive application or drainage
 - prevent conveyance losses
 - accurately schedule irrigation, and
 - minimise evaporation loss.
- (b) **Advocacy with territorial authorities** – Advocating to territorial authorities that, prior to allowing land use activities or subdivisions by way of district plan provisions or the granting of resource consents, they require the assessment of water supply availability from groundwater particularly where the land is located near the fringes of groundwater aquifers, or where aquifers are small in size.
- (c) **Research and investigation** – Subject to funding and technical practicalities the HBRC will undertake investigations into individual water management zones, and any other areas identified as potential water management zones; and to supplement the information gained from water measuring devices in order to recommend the preferred management approach. Any such investigations will include the collation of existing data obtained through resource consent applications and the identification of additional data requirements.

Explanation and Reasons

3.9.9 Policy 23 sets out the role of the HBRC in educating resource users about efficient use of groundwater. It also establishes the importance of territorial authorities considering water availability before allowing land use activities, in particular subdivisions, to establish. The HBRC, with primary responsibility for managing the use of groundwater will provide on-going investigations into the water management zones. In addition it is envisaged that a series of research meters will be used by Council to supplement the information derived from the analysis of data from water measuring devices.

POL 24 REGULATION – WATER ALLOCATION

3.9.10 To manage the taking of groundwater where the adverse effects of that take may be more than minor, and to manage the cumulative adverse effects of small takes where there is concern that demand may put pressure on the groundwater resource.

Explanation and Reasons

3.9.11 Policy 24 does not restrict the abstraction of any water taken for an individual's reasonable domestic needs, nor for stock watering provided such taking does not have adverse effects on the environment, in which case a resource consent will be required. The policy does not restrict the taking and use of water for fire fighting purposes.

POL 25 REGULATION - TRANSFER OF WATER PERMITS

3.9.12 To allow the transferring of water permits between sites within the same aquifer, where the environmental effects of the transfer are minor and where the transfer:

- (a) Will not cause any significant interference with existing lawful takes that make efficient use of the resource.
- (b) Is to a location at which the aquifer has the same or greater aquifer transmissivity and storage characteristics, and

- (c) Will not cause any adverse effects on springs or other surface water resources.

Explanation and Reasons

- 3.9.13 The transfer of water permits enables greater flexibility and efficiency in managing and allocating water resources, and can be an effective way of ensuring water is used where it is most needed. The principal advantage of transferable water permits is that the allocations are not wasted by a permit holder keeping an allocation but not using it, while another user is forced to apply for a new permit.

POL 26 DECISION-MAKING CRITERIA – LOCATION OF NEW BORES

- 3.9.14 To ensure that new bores are located in a position that minimises any interference effects on existing lawful efficient users and HBRC monitoring bores, taking into account:

- (a) The proposed aquifer the new bore is to be completed in.
- (b) The characteristics of the aquifer (such as transmissivity and storativity) which influence the amount and extent of drawdown that may occur as a result of pumping from the proposed bore.
- (c) The depth and purpose of the new bore in relation to existing bores.

Explanation and Reasons

- 3.9.15 Policy 26 aims to minimise, if not prevent, interference with existing lawful efficient uses. The amount and extent of the lowering of the groundwater levels is determined by how fast the water is able to move through the aquifer (the transmissivity), how much water is held within the aquifer (storativity) and how fast the water is to be pumped out of the bore. Consideration needs to be given to these effects at the time the bore is to be drilled. HBRC is also seeking to protect the integrity of its monitoring bores so that groundwater level records are not unnecessarily compromised by interference effects.

POL 27 DECISION-MAKING CRITERIA – WELL AND BORE CONSTRUCTION

- 3.9.16 To encourage the maximisation of well efficiency of water supply wells by managing the following features of well construction:

- depth of well
- well diameter
- screen slot size
- screen length, depth and diameter
- well efficiency.

Explanation and Reasons

- 3.9.17 Well construction and subsequent well maintenance affects water yield. The management of well construction will assist in the sustainable management of the groundwater resource. Through HBRC knowledge of the hydrogeology of a particular geographic area optimal well depth and construction characteristics may be imparted as either technical advice or as a condition on a consent.

POL 28 DECISION-MAKING CRITERIA – EFFECTS ON EXISTING USERS

- 3.9.18 To require applicants to avoid, remedy or mitigate any significant interference of new takes of groundwater on existing lawfully established efficient groundwater takes, including existing efficient takes and uses of groundwater for an individual's reasonable domestic needs⁹ or the reasonable needs of an individual's animals for drinking water or takes for firefighting.

Explanation and Reasons

- 3.9.19 Policy 28 establishes an approach for recognising the rights of existing groundwater users. This policy will only be implemented at the time a resource consent application to take groundwater is made and does not apply retrospectively to any existing consent.

POL 29 DECISION-MAKING CRITERIA – AQUIFER DEWATERING & SALT WATER INTRUSION

⁹ "Reasonable domestic needs" refers to needs associated with occupation of a dwellinghouse. With respect to the taking and use of water for an individual's reasonable domestic needs, as a guideline this should involve the taking and use of up to 15 m³ over any 7 day period per dwellinghouse.

3.9.20 To avoid any significant long-term reduction in the groundwater level or piezometric pressure in aquifers, and any landward movement of the seawater/groundwater interface, as a result of groundwater takes.

Explanation and Reasons

3.9.21 Policy 29 recognises the importance of avoiding a long-term lowering of groundwater levels, and saltwater intrusion in aquifers near the coastal margin.

POL 30 DECISION-MAKING CRITERIA – MEASUREMENT OF GROUNDWATER ABSTRACTION

3.9.22 As a means of assessing compliance with the allocated amount of water, to require the measurement of the amount of water abstracted as a condition of resource consent for the abstraction of groundwater in the following situations:

- (a) All consents for new takes will be required to measure the actual amount of water where the allocation exceeds 2,500 m³/week.
- (b) Upon renewal of a consent for an existing water take, the consent holder will be required to measure the actual amount of water abstracted where the allocation exceeds 5000 m³/week, but in any event will be granted a minimum lead-in time of three years from the date this Plan becomes operative, or this particular provision is beyond legal challenge.
- (c) Where the potential effects of the abstraction include significant interference on other groundwater users within the vicinity, which were identified before that consent was granted, or where there is insufficient information on the source of abstraction to ensure that cumulative effects are addressed.
- (d) Where the water is taken for industrial purposes and provides an indication of the rate of wastewater discharge a water meter is required.

3.9.23 The following criteria shall apply to the measurement of abstracted groundwater:

- (a) The method of measurement shall measure the water taken to an accuracy of within plus or minus five per cent; and shall be capable of displaying the amount of water abstracted in units no greater than one cubic metre to enable appropriate records to be kept.
- (b) The method of measurement shall be capable of providing an instantaneous rate of abstraction when abstraction is occurring (this would be met by being able to time a known quantity of water passing through the measuring device).
- (c) Any measurement of the water being abstracted must be capable of having the accuracy assessed, or method certified, by the supplier at the time of installation or commencement of use and evidence of this shall be submitted to the Council prior to the first abstraction.

3.9.24 The consent holder or applicant must satisfy the Council that the above criteria can be met through the proposed method of measurement. If this cannot be demonstrated the Council will require the installation of a water meter in order to meet the requirements of this policy.

Any costs of determination of criteria will be borne by the consent holder.

3.9.25 Conditions imposed on resource consents will specify the information to be recorded, the frequency of recording and of submitting that information to the Council, and the frequency of accuracy checks. These frequencies will be no more than can be justified for groundwater management purposes.

Explanation and Reasons

3.9.26 Policy 30 establishes the circumstances under which consent holders will be required to measure the amount of groundwater taken in the exercising of a consent. While the preferred means of compliance is by way of a water meter the policy is designed to allow for

flexibility of means of measurement in accordance with the set criteria. However the policy also clearly sets out the criteria for the measurement of water abstraction.

3.9.27 In addition to ensuring compliance with resource consents the measurement of groundwater abstraction provides information to assist in the overall management of the groundwater resource. It will increase HBRC's ability to manage the groundwater resource by identifying to both HBRC and the consent holder the level of compliance with the consented take amount. In turn, this will give HBRC a clearer picture of the actual level of abstraction and the impact of abstractions on long-term resource trends. The measurement of water abstraction will not be used as a basis for the charging of water and the HBRC does not have the legal ability to charge for water.

3.9.28 As a general guide only 2,500 m³/week will meet the water requirements of 8 ha of pasture, 11 ha of grapes or stone fruit, 9 ha of apples and 6.5 ha of processed crops. Actual water requirements also depend on location and soil type.

POL 31 DECISION-MAKING CRITERIA - WELL HEAD CONSTRUCTION

3.9.29 To ensure that well head construction on new bores (other than for domestic or stock water supply) provides for the installation of a water measuring device, and/or a backflow prevention device, where necessary.

Explanation and Reasons

3.9.30 Policy 31 aims to minimise the costs of installing a water measuring device by encouraging installation at the time of well head construction.

POL 32 TECHNICAL PROCEDURE - IRRIGATION TAKES

3.9.31 To allocate groundwater for irrigation purposes on the basis of actual crop water requirements up to a maximum equal to that required during a one in ten year drought. The allocation assessment will take into account information on crop type, rainfall, potential evapotranspiration rates, and best irrigation management practices. The allocation assessment may also have regard to soil type and soil moisture capacity.

Explanation and Reasons

3.9.32 Policy 32 sets out the technical procedure that the HBRC will use for the allocation of groundwater for irrigation purposes. In essence, the HBRC will allocate groundwater based on crop water requirements during a specific probability of rainfall, adjusted according to local data for rainfall and evapotranspiration rates. For planning purposes it is necessary to establish a level of risk. A 10% risk that actual water needs will exceed the authorised volume in any year (i.e. 1:10 year return period) is reasonable. The one in ten year level of risk means that the groundwater allocated will meet crop water requirements for a one in ten year drought and will exceed the crop requirements in the other nine years on average. The policy notes that the water will also be allocated on the basis of best irrigation management practices, rather than, for example, the amount of water required for an inefficient irrigation system.

POL 33 TECHNICAL PROCEDURES - GROUNDWATER TAKES WITHIN THE VICINITY OF SURFACE WATER BODIES

3.9.33 To manage the effects of groundwater takes from unconfined or semi-confined aquifers on nearby surface water bodies in the following manner:

(a) Any taking of shallow groundwater within 400 m of a river, lake or wetland as measured from the edge of the bed will be treated as if it were a direct take unless the extent to which the groundwater will deplete water in the surface water body has been assessed using an appropriate scientific procedure in which case the effects on surface water will be assessed on that basis.

(b) Any taking of shallow groundwater beyond 400 m may require an assessment of effects in the river, lake or wetland if the scale of the take, the groundwater flow direction, and the transmissivity and storativity characteristics of the aquifer indicate interaction is likely to occur; in which case it may be treated as if it were a direct take.

Explanation and Reasons

3.9.34 Policy 33 sets out the technical procedure for managing groundwater takes within the vicinity of surface water bodies, recognising that these takes can adversely affect the amount of water in the surface water body. The selected procedure must involve consideration of factors such as the proposed rate, location and depth of the groundwater take, the connection between the aquifer with the surface water body, the groundwater flow direction relative to the surface water body, and the transmission and storage characteristics of the

aquifer. The consequence of identification as a direct surface water take is that the groundwater take may also be subject to cut-off when the surface water body meets its recognised minimum flow.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Availability of groundwater for domestic, industrial and primary uses without it being taken at a rate that depletes the resource beyond a sustainable level	Aquifer levels	Council monitoring of groundwater sites
Avoidance of localised interference with other users and of salt water intrusion into groundwater	Number of complaints	Complaints register
Avoidance of adverse effects on surface water bodies	Flow levels in surface water bodies	Minimum flow monitoring

3.10 Surface Water Resources

ISSUE

- 3.10.1 **The potential degradation of the values and uses of rivers, lakes and wetlands in Hawke's Bay as a result of:**
- (a) **The taking, use, damming and diversion of water, which may adversely affect aquatic ecosystems and existing lawfully established resource users, especially during droughts.**
 - (b) **stock access to water bodies and non-point source discharges, which cause contamination of rivers, lakes and wetlands, and degrade their margins.**
 - (c) **Point source discharges which cause contamination of rivers, lakes and wetlands.**

OBJECTIVES - SURFACE WATER QUANTITY

- OBJ 25** The quantity of water in wetlands, rivers and lakes is suitable for sustaining aquatic ecosystems, for achieving other freshwater objectives, and ensuring resource availability for a variety of purposes across the region, while recognising the impact caused by climatic fluctuations in Hawke's Bay.
- OBJ 26** The avoidance of any significant adverse effects of water takes, uses, damming or diversion on lawfully established activities in surface water bodies.

OBJECTIVE - SURFACE WATER QUALITY

- OBJ 27** The water quality in rivers, lakes and wetlands is suitable for sustaining or improving aquatic ecosystems, and for other freshwater objectives identified in accordance with a catchment-based process set out in Policy LW1 and Policy LW2, including contact recreation purposes where appropriate.
- OBJ 27A** Riparian vegetation on the margins of rivers, lakes and wetlands is maintained or enhanced in order to:
- a) maintain biological diversity;
 - b) maintain and enhance water quality and aquatic ecosystems; and
 - c) support the use of surface water resources in accordance with tikanga Māori.

Explanation and Reasons

- 3.10.2 River flows vary continuously, and aquatic biota and human demands on water can cope with this variability most of the time. However, droughts are common in Hawke's Bay owing to the climate of the area (see also Issue 3.12), and can have immense impacts. At the time of writing this Plan, there were approximately 390 resource consents to take and use surface water from rivers and streams in the Hawke's Bay region. In almost all cases the consent holder is subject to a minimum flow restriction. This means that the consent holder must cease taking water from the river or stream once a pre-established minimum flow is reached. The prescribed minimum flow is the flow at which adequate habitat is available for existing aquatic ecosystems under natural conditions. Controlling takes so that flow is not reduced artificially below minimum flow ensures habitat availability is maintained while acknowledging that habitat availability will reduce as a river naturally falls below the minimum flow.
- 3.10.3 The demand for water is rising, particularly as a result of increasing crop and pasture irrigation. If water is taken and used inefficiently, problems during summer droughts are exacerbated. The demand for surface water needs to be managed in a manner which ensures that water availability is maintained and water is allocated fairly, the impact of droughts is minimised, and economic development is not unnecessarily curtailed.
- 3.10.4 With respect to water quality, non-point source discharges are thought to cause a greater impact on water quality than point source discharges. However, isolated problems from point source discharges can arise from activities such as wastewater discharges, sewage outflows and stormwater discharges in urban areas and coastal communities.
- 3.10.5 Non-point source discharges are those discharges that are derived from a non-discrete source, including diffuse run-off from agricultural land use activities and sedimentation from erosion. However, surface water quality in Hawke's Bay is generally good, and the impacts of agricultural land use on water quality are not as pronounced as in many other regions of New Zealand. One exception to this is in relation to bacterial contamination, which is evident in the middle and lower reaches of intensively farmed catchments, and has probably resulted from the runoff of stock faecal matter.

- 3.10.6 The management of riparian margins is one way of addressing non-point source discharges. Riparian management provides shade for waterways, thereby reducing algal growth and maintaining cool water temperatures, which are generally more favourable for aquatic fauna. Riparian vegetation also intercepts sediment and other contaminants, before they enter a waterway. These benefits are most marked for narrow streams, becoming much less significant for wide braided rivers where the path of river flow changes frequently. In addition, fenced riparian margins prevent stock access, thereby limiting bank erosion and direct contamination of waterways from stock. Riparian margins can also provide important areas of indigenous habitat, although if not carefully managed they are at risk from animal pests and weeds. Fencing, planting, and pest and weed control for riparian management require time, money, and an ongoing commitment from landowners.

POLICIES – SURFACE WATER QUANTITY

POL 34 ROLE OF NON-REGULATORY METHODS

- 3.10.7 To use non-regulatory methods, as set out in Chapter 4, in support of regulatory methods for avoiding adverse effects arising from surface water takes, in particular:
- (a) **Education and co-ordination** for encouraging efficient use of water, for example water harvesting, use of storage and consideration of alternative water supply, and avoiding wastage of water (see also Policy 23 with respect to efficient use of water for irrigation purposes). This will include encouraging the establishment of water user groups to facilitate voluntary scheduling or rationing of water takes, particularly during low flow periods.
 - (b) **Advocacy with territorial authorities** – Advocating to territorial authorities that, prior to allowing land use activities or subdivisions by way of district plan provisions or the granting of resource consents, they require an assessment of water supply availability for surface water particularly where the land is located within a small catchment with low annual rainfall and where the geology has a low storage capacity.
 - (c) **Encouragement for self-regulation** – Promote and support self-regulation by resource users, including the preparation and adoption of guidelines and codes of practice by resource user groups.

Explanation and Reasons

- 3.10.8 Policy 34 sets out the role of the HBRC in the education and co-ordination of resource users in respect of encouraging the efficient use of surface water and ways to avoid water wastage. In particular, Policy 34 refers to the potential value of facilitating “water user groups” to enable a degree of self-regulation of their water takes. In keeping with Policy 23, this Policy also establishes the importance of territorial authorities requiring an assessment of water availability before allowing land use activities, in particular subdivisions, especially in water management zones.

POL 35 REGULATION - WATER ALLOCATION

- (a) To manage the taking of water where the effects of that take may be more than minor.
- (b) To manage the cumulative adverse effects of small takes, particularly in catchments:
 - (i) that are located in an area of low annual rainfall
 - (ii) where the geology has a low storage capacity
 - (iii) for which the location is such that there is a high potential for increased use.

Explanation and Reasons

- 3.10.9 This Policy indicates that water takes in these circumstances will be managed and controlled through the resource consent process. Takes which have less than minor adverse effects will be permitted. The catchments described in Policy 35 (b) have been given the term “surface management zones” and are shown in Schedule VIa. Takes for an individual’s reasonable domestic needs and the reasonable needs of an individual’s animals for drinking water are not restricted by the RMA and are therefore not controlled by this policy or the associated rules. However “reasonable domestic needs” is quantified in the Glossary.

POL 36 REGULATION - TRANSFER OF WATER PERMITS FOR RIVERS AND LAKES

- 3.10.10 To encourage the transferring of water permits between sites where the environmental effects of the transfer are minor, particularly in fully allocated stream management zones.

Explanation and Reasons

- 3.10.11 Policy 36 recognises the benefits of transferring water permits and that in many cases there are no adverse effects of the transfer. As noted in relation to Policy 25, the transfer of water permits enables greater flexibility and efficiency in managing and allocating water resources, and can be an effective way of ensuring water is used where it is most needed. The principal advantage of transferable water permits is that the allocations are not wasted by a permit holder keeping an allocation but not using it, while another user is forced to apply for a new permit (or precluded from gaining access to water because the catchment is already fully allocated). Enabling the transfer of permits to take surface water is considered particularly important for catchments that are fully allocated.

POL 37 RESOURCE ALLOCATION - MINIMUM FLOWS & ALLOCATABLE VOLUMES

- (a) To manage takes from those rivers listed in Table 9 of this Plan in accordance with the minimum flows and associated allocatable volumes set out in that table.
- (b) To establish minimum flows and allocatable volumes for additional rivers in accordance with the approach set out in Table 9 or as a result of research demonstrating that lower minimum flows or higher allocatable volumes are sustainable. Council will use the Plan Change procedure of the First Schedule of the RMA to introduce or change these.
- (c) To ensure the protection of aquifer recharge from the effects of minimum flows.

Explanation and Reasons

- 3.10.12 Policy 37 establishes that takes from rivers will be managed in accordance with prescribed minimum flows and upper minimum flows and allocatable volumes. At the time of writing this Plan, the HBRC was in the process of reviewing the minimum flows set out in the former Proposed Regional Water Resources Plan, and establishing new minimum flows and allocatable volumes. Table 9 sets out the established minimum flows and allocatable volumes, and explains the methodology used to establish these. Any new minimum flows, and allocatable volumes established after this Plan has become operative will be added to Table 9 by way of notified changes to this Plan.

POL 38 DECISION-MAKING CRITERIA – EFFECTS OF NEW TAKES

- 3.10.13 To avoid any significant adverse effects of new takes, uses, damming or diversion of water on lawfully established activities in surface water bodies, including any significant adverse effects on takes and uses of water for an individual's reasonable domestic needs¹⁰ or the reasonable needs of an individual's animals for drinking water or takes for firefighting.

Explanation and Reasons

- 3.10.14 Policy 38 recognises that lawfully established resource users have a reasonable expectation that their activity will not be adversely affected by new activities

¹⁰ "Reasonable domestic needs" refers to needs associated with occupation of a dwellinghouse. With respect to the taking and use of water for an individual's reasonable domestic needs, as a guideline this should involve the taking and use of up to 15 m³ over any 7 day period per dwellinghouse.

POL 39 DECISION-MAKING CRITERIA – WATER ALLOCATION

3.10.15 To allocate water from rivers in accordance with the following approach:

- (a) The water requirement for each resource consent applicant will be determined on the basis of reasonable needs and the efficiency of end use, requiring an applicant to determine how much water is required for their activity (for irrigation takes, see also Policy 42).
- (b) Where the demand for water within a stream management zone¹¹ is greater than the allocatable volume as a result of a consent application for a new activity, a consent will not be issued except where it can be considered under (d).
- (c) Where the demand for water within a stream management zone is greater than the allocatable volume as a result of a change to the minimum flow for that stream management zone the HBRC will adopt any or all of the following approaches:
 - (i) Review all consented takes from that water body at the same time.
 - (ii) Give preference to the renewal of existing resource consents, over the granting of new consents where it can be demonstrated that the allocation is still required.
 - (iii) To encourage the establishment of user groups or the seasonal or long-term transfer of water permits in accordance with Policy 34.
 - (iv) Where over-allocation still exists, to reduce the allocation on a pro-rata basis except that where the consent holder has been advised (e.g. in the consent document) that the water allocated may no longer be available for allocation at the time of consent renewal, in which case the consent may not be renewed.
 - (v) To encourage the use of alternative water sources.
- (d) Water may be allocated over and above the allocatable volume, subject to a substantially higher cut-off level than that specified in Table 9 provided that any such additional allocations will not have any adverse effect on other lawfully established activities, nor any other significant adverse environmental effect and assuming allocation is subject to the implementation and/or consideration of (a), (b) and (c).

3.10.16 Applicants seeking water over and above the allocatable volumes will be required to provide a comprehensive assessment of environmental effects to demonstrate that no such effects will occur, including the justification for any other minimum flow that may be proposed as a mitigation measure.

Explanation and Reasons

3.10.17 Policy 39 establishes the overall approach for the allocation of surface water. This policy recognises that the type of water management required for the region's surface water bodies is variable. As such, Policy 39 sets out how the HBRC will manage the allocation of water from rivers under the following scenarios:

- (a) Where the demand for water within the catchment is less than or equal to the allocatable volumes available.
- (b) Where the demand for the water within the catchment is greater than the allocatable volumes available.
- (c) Those periods when water can be allocated over the allocatable volumes (e.g. for water harvesting purposes). The ecological protection of the river, including the maintenance of a natural "flushing" effect is the baseline consideration for any allocations which are made under this scenario.

¹¹ "Stream management zone" refers to the reaches of a river and/or its tributaries governed by a single minimum flow site.

POL 40 TECHNICAL PROCEDURE - MINIMUM FLOWS

3.10.18 For catchments with prescribed minimum flows, to adopt the following strategy:

- (a) Prior to 1 November each year the HBRC will provide public information on the state of surface water resources for the subsequent irrigation season.
- (b) At times when a river is dropping towards its minimum flow, the HBRC will provide information regularly about this fact.
- (c) Thereafter, the HBRC will regularly provide information about the state of the river until it returns to a level at which a breach of the minimum flow is unlikely to occur.
- (d) The HBRC will encourage resource users to voluntarily schedule or ration water takes, where this is feasible to try and prevent the minimum flow being breached.
- (e) The HBRC may apportion, restrict or suspend the taking, use, damming or diversion of water to the extent and in the manner required to ensure that these activities do not cause a breach of the minimum flow.

Explanation and Reasons

3.10.19 Policy 40 sets out the strategy to be used by the HBRC during periods when a river is dropping toward its minimum flow level. The HBRC will provide regular information to resource users on the state of surface water resources, thereby enabling water users to make their own decisions, either individually or collectively, taking responsibility for water use and the management of the surface water body. The HBRC will also encourage resource users to take voluntary measures to reduce, schedule or ration the rate of take. If the water level of the river drops towards its minimum flow, the HBRC may apportion, suspend or restrict takes to ensure that they do not cause a breach in the minimum flow.

POL 41 DECISION-MAKING CRITERIA – MEASUREMENT OF SURFACE WATER ABSTRACTION

3.10.20 As a means of assessing compliance with the allocated amount of water, and of measuring the total volume of water being taken from a river, to require water measuring devices for all resource consents to take water where:

- (a) the river has a defined allocatable volume (as set out in Table 9)
- (b) there is evidence of increasing demand for water from a surface water body for which there is insufficient information to set a minimum flow or allocatable volume, or
- (c) the water is taken for industrial purposes and provides an indication of the rate of wastewater discharge.

3.10.21 The following criteria shall apply to the measurement of abstracted surface water:

- (a) The method of measurement shall measure the water abstracted to an accuracy of within plus or minus five percent; and shall be capable of displaying the amount of water abstracted in units no greater than one cubic metre to enable appropriate records to be kept.
- (b) The method of measurement shall be capable of providing an instantaneous rate of abstraction when abstraction is occurring (this would be met by being able to time a known quantity of water passing through the measuring device).
- (c) Any measurement of the water being abstracted must be capable of having the accuracy assessed, or the method certified, by the supplier at the time of installation or commencement of use and evidence of this shall be submitted to the Council prior to the first abstraction.
- (d) Where the take is from a river listed in Table 9, and the river is approaching minimum flow, Council will require more frequent measurement and provision of information than specified in 3.10.21 (potentially as often as daily).

The consent holder or applicant must satisfy the Council that the above criteria can be met through the proposed method of measurement. If this cannot be demonstrated the Council will require the installation of a water meter in order to meet the requirements of this policy.

Any costs of determination of criteria will be borne by the consent holder.

- 3.10.22 Conditions imposed on resource consents will specify the information to be recorded, the frequency of recording and of submitting that information to the Council, and the frequency of accuracy checks. These frequencies will be no more than can be justified for surface water management purposes, although the frequency can be altered when the river is approaching its minimum flow as specified in 3.10.21 (d).
- 3.10.23 For existing surface water takes this policy will be implemented upon renewal of the consent or within three years of the Plan becoming operative, whichever occurs sooner.

Explanation and Reasons

- 3.10.24 Policy 41 establishes the circumstances under which the measuring of the total volume of water being abstracted is required in relation to surface water takes. It will increase the Council's ability to manage the surface water resources by identifying to both Council and the consent holder the level of compliance with the consented take amount. In turn this will give Council a clearer picture of the actual level of abstraction and the impact of abstractions on long-term resource trends. Telemetry is one option for the submission of information to Council.

POL 42 TECHNICAL PROCEDURE - IRRIGATION TAKES

- 3.10.25 To allocate surface water for irrigation purposes on the basis of actual crop water requirements up to a maximum equal to that required during a one in five year drought. The allocation assessment will take into account information on crop type, rainfall, potential evapotranspiration rates, and best irrigation management practices. The allocation assessment may also have regard to soil type and moisture holding capacity.

Explanation and Reasons

- 3.10.26 Policy 42 sets out the technical procedure that the HBRC will use for the allocation of surface water for irrigation purposes. In essence, the HBRC will allocate water based on crop water requirements during a one in five year drought, adjusted according to local data for rainfall and evapotranspiration rates. For planning purposes it is necessary to establish a level of risk. A 20% risk that actual water needs will exceed the authorised volume in any one year (i.e.) 1:5 year return period) recognises the need to balance crop water needs against the ability of the surface water body to maintain a flow above the minimum flow and its ability to recover from a low flow situation. The policy notes that the water will also be allocated on the basis of best irrigation management practices, rather than, for example, the amount of water required for an inefficient irrigation system.

POL 43 TECHNICAL PROCEDURES - GROUNDWATER TAKES WITHIN THE VICINITY OF SURFACE WATER BODIES

- 3.10.27 To manage the effects of groundwater takes from unconfined or semi-confined aquifers on nearby surface water bodies in the following manner:
- (a) Any taking of shallow groundwater within 400 m of a river, lake or wetland as measured from the edge of the bed will be treated as if it were a direct take unless the extent to which the groundwater will deplete water in the surface water body has been assessed using an appropriate scientific procedure in which case the effects on surface water will be assessed on that basis.
- (b) Any taking of shallow groundwater beyond 400 m may require an assessment of effects in the river, lake or wetland if the scale of the take, the groundwater flow direction, and the transmissivity and storativity characteristics of the aquifer indicate interaction is likely to occur; in which case it may be treated as if it were a direct take.

Explanation and Reasons

- 3.10.28 Policy 43 sets out the technical procedure for managing groundwater takes within the vicinity of surface water bodies, recognising that these takes can adversely affect the amount of water in the surface water body. The selected procedure must involve consideration of factors such as the proposed rate, location and depth of the groundwater take, the connection between the aquifer with the surface water body, the groundwater flow direction relative to the surface water body, and the transmission and storage characteristics of the aquifer.

The consequence of identification as a direct surface water take is that the groundwater take may also be subject to cut-off when the surface water body meets its recognised minimum flow.

POL 44 DECISION-MAKING CRITERIA – AQUIFER RECHARGE

3.10.29 To protect the Heretaunga Plains Aquifer recharge in order to maintain the long-term viability of the aquifers.

Explanation and Reasons

3.10.30 Policy 44 recognises the importance of aquifer recharge to the sustainable management of the Heretaunga Plains aquifer. The establishment of minimum flows on contributing rivers must take into account the need to adequately provide for the recharge of groundwater.

POLICIES – SURFACE WATER QUALITY

DIFFUSE SOURCE DISCHARGES & STOCK ACCESS

POL 45 ROLE OF NON-REGULATORY METHODS

3.10.31 To use non-regulatory methods, as set out in Chapter 4, as well as rules, for addressing the adverse effects of non-point source discharges and stock access to waterways, including:

- (a) **Research and investigation** – In consultation with landowners undertake the identification of priority areas along the margins of rivers, lakes and wetlands, which should be retired in order to provide a buffer against the effects of runoff from land use activities. Priority areas established at the time that this Plan was prepared are set out in Schedule VIII.
- (b) **Economic instruments** - The provision of financial incentives to facilitate the retirement of these riparian areas.
- (c) **Education and co-ordination** - The preparation and distribution of educational material regarding the benefits of retaining, establishing and enhancing appropriate riparian vegetation.

Explanation and Reasons

3.10.32 Policy 45 sets out the role of the HBRC in undertaking research, providing financial incentives and educating resource users as the principal means for addressing the adverse effects of non-point source discharges and stock access to waterways. Policy 45 includes recognition of the importance of providing a buffer along the margins of water bodies against the effects of runoff from land use activities.

POINT SOURCE DISCHARGES

POL 46 ROLE OF NON-REGULATORY METHODS

3.10.33 To use non-regulatory methods, as set out in Chapter 4, in support of regulatory methods for avoiding adverse effects of point source discharges, in particular, providing **education and co-ordination** regarding sound waste management practices.

Explanation and Reasons

3.10.34 Policy 46 recognises the importance of educating resource users as to the effects of point source discharges on the water quality of the region's waterways and encouraging sound waste management practices. This non-regulatory method will be used in conjunction with regulating point source discharges of contaminants in the region.

POL 47 DECISION-MAKING CRITERIA - DISCHARGES

3.10.35 To manage activities affecting the quality of water in wetlands, rivers and lakes in accordance with the environmental guidelines and implementation approaches set out in Chapter 5 of this Plan.

POL 47A Decision-making criteria - Land-based disposal of contaminants

Promote land-based disposal of wastewater, solid waste and other waste products so that:

- a) the adverse effects of contaminants entering surface waterbodies or coastal water are avoided as far as practicable;
- aA) where it is not practicable to avoid any adverse effects of contaminants entering surface waterbodies or coastal water, then adverse effects are remedied or mitigated; and
- b) any disposal of wastewater, solid waste or other waste products to a surface waterbody or coastal water occurs only when it is the best practicable option.

Explanation and Reasons

3.10.36 Policy 47 notes that point source discharges will be managed in accordance with the environmental guidelines for surface water quality previously established in Chapter 5 of this Plan.

POL 48 DECISION-MAKING CRITERIA – BUFFER ZONES: ANIMAL EFFLUENT DISPOSAL

3.10.37 To have regard to the following factors when considering conditions on resource consents for appropriate buffer zone distances between animal effluent disposal areas and surface water bodies or property boundaries:

- (a) The availability of vegetation adjacent to the surface water body to trap any nutrients or other contaminants.
- (b) Values of the receiving water body and downstream water bodies, including wetlands.
- (c) The land use of the adjoining property and the location of any dwellings.
- (d) The slope of the land adjoining the surface water bodies.
- (e) The permeability of the soil in the effluent disposal area.
- (f) The cumulative effects of the discharges, from all agricultural activity carried out on the same land.

Explanation and Reasons

3.10.38 Policy 48 sets out the factors which the Council will have regard to when determining conditions on appropriate buffer zone distances between animal effluent disposal areas and surface water bodies or property boundaries. It acknowledges that there are a range of variable factors which may influence the extent of environmental effects from effluent disposal areas and that minimum buffer zone distances set out as standards and terms may not be the most appropriate means of dealing with such effects.

POL 49 DIVERSION AND DISCHARGE OF STORMWATER

- (a) To permit the diversion and discharge of stormwater from constructed open drainage systems or piped stormwater drainage systems into surface water without the need for a resource consent, subject to conditions in this Plan which are intended to adequately avoid, remedy or mitigate any significant adverse effects.
- (b) To promote mitigation of the cumulative effects of stormwater discharges on water quality where appropriate.

Explanation and Reasons

3.10.39 Policy 49 (a) recognises that the majority of stormwater discharges will only have minor adverse effects and can therefore be allowed as a permitted activity. Policy 49 (b) recognises that practical mitigation measures need to be considered to avoid, remedy or mitigate any cumulative adverse effects of contaminants in stormwater discharges.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Maintenance and enhancement of surface water quality at a level which sustains or improves the aquatic ecosystems in the relevant surface water bodies, including wetlands	Physical and biological parameters	Council SER monitoring
Allocation of water at a rate which avoids degradation of the resource, while providing for the needs of the regional community	Flow monitoring	Minimum flow monitoring

3.11 River Bed Gravel Extraction

ISSUE

- 3.11.1 River gravels provide a supply of a valuable resource utilised in a multiplicity of ways by the community. In extracting from rivers the risk of an imbalance between the natural supply of and the rate at which gravel is extracted, and of adverse effects as a consequence of extraction in the river bed needs to be managed.

OBJECTIVES

- OBJ 28** The avoidance of any gravel extraction at a rate which exceeds the rate of natural supply, except in areas where there are stored reserves which may be removed in a controlled manner such that flood protection and river control assets are not compromised.
- OBJ 29** The facilitation of gravel extraction from areas where it is desirable to extract excess gravel for river management purposes and the minimisation of flood risk, or to maintain or protect the functional integrity of existing structures, whilst ensuring that any adverse effects of gravel extraction activities are avoided, remedied or mitigated.
- OBJ 30** The maintenance of the use and values of the beds of rivers and the avoidance of any significant adverse effects on the river bed resulting from the extraction of gravel.

Explanation and Reasons

- 3.11.2 Lowland areas in the Hawke's Bay region have been built up from fluvial deposits and material eroded from the surrounding hill country. This geomorphological process is ongoing and is the principal reason why there is a presence of gravel material within the river beds and banks of Hawke's Bay river systems. The gravel resource is seen as a valuable commodity in the region, particularly for uses such as road construction and maintenance.
- 3.11.3 The gravel resource utilised for extraction exists both within water courses and on adjacent river banks. The volume of the available resource varies considerably over time, and along river systems, as a consequence of flood-induced river bed movements.
- 3.11.4 A review of the current extraction and natural replenishment rates indicates that there is a long-term deficiency of gravel available for use in the Heretaunga Plains area. Gravel from this area is in demand because of its proximity to Napier and Hastings. In areas of lower demand (including sections of the Waipawa and upper Tukituki Rivers, and their tributaries), there is a surplus of gravel. This surplus can contribute to problems in terms of river flood management by elevating river bed levels, thereby reducing the capacity of stopbanks to accommodate flood flows.
- 3.11.5 Gravel availability in the northern part of the Hawke's Bay region is limited by three factors: the remoteness of the source from the areas of high demand, the difficulties of access for extraction, and for the area north of the Mohaka River, the quality of the gravel.
- 3.11.6 The extraction of gravel from a river bed may cause adverse effects on the natural character, river ecology and recreational values of a river. Riffle, pool, and run sequences in rivers may be altered by gravel extraction activities, thereby changing the habitat composition and the relative quality and quantity of different habitat types in a river system. Conversely, natural river processes can return a river bed environment to equilibrium following extraction. In addition dust can be a problem. It can be generated from both the extraction activity, and the movement of vehicles to and from the extraction site. Significant problems can arise where dust blows onto adjacent properties, causing both a nuisance and a potential for economic loss.

POLICIES

POL 50 RESOURCE ALLOCATION - GRAVEL ALLOCATION ASSESSMENT

- 3.11.7 To assess the availability of river bed gravel by:
- (a) Defining both annual and long-term extraction rates for the regional gravel resource for each river bed within the region where major extraction takes place. These rates will be based on regular monitoring of the rate of extraction, and an assessment of the river design profile, supply of gravel to the coast, and supply of gravel from upstream sources (including land use activities).

- (b) Ensuring that as far as practicable, long-term gravel extraction is undertaken at a level consistent with maintaining the rivers close to their design profiles, while maintaining compatibility with other resource management and environmental values, particularly any values and uses identified in accordance with a catchment-based process as set out in Policy LW1 and Policy LW2.

Explanation and Reasons

- 3.11.8 Policy 50 establishes the approach to be taken by the HBRC when assessing the availability of river bed gravel for extraction and determining both annual and longer term levels of gravel allocation. This policy recognises that the quantity of gravel available for extraction from within the region's rivers may fluctuate depending on the rates of supply and the qualities of the individual river. This policy also seeks to ensure that, as far as practicable, long term gravel extraction is undertaken at a level that enables the natural flow and path of the river to be maintained.

POL 51 RESOURCE ALLOCATION - GRAVEL ALLOCATION PROCESS

- 3.11.9 To allocate gravel from river beds in Hawke's Bay generally on an annual basis, in accordance with the following approach:
- (a) Determining by 15 April each year the likely demand for river bed gravel. Gravel extractors will be contacted at the beginning of March each year, and required to provide notice of their requirements for gravel by 15 April. Requests for gravel allocation will be required to specify the proposed end use of the gravel.
 - (b) Carrying out an assessment and allocation process between 15 April and 30 June each year, in accordance with Policy 50.
 - (c) Notifying gravel extractors of their annual allocation by 1 July each year.

Explanation and Reasons

- 3.11.10 Policy 51 establishes the approach to be taken by the HBRC when allocating the gravel reserves of the region's rivers. The HBRC will allocate gravel to resource users on an annual basis, based on the gravel extractors' requirements, the gravel resource determined to be available in accordance with Policy 50, the proposed end use of the gravel, and an assessment of the effects of extraction. Council will determine the appropriate location for sourcing the gravel especially where demand for gravel in a particular location exceeds supply and alternative locations are required.

POL 52 RIVER BED GRAVEL EXTRACTION – MOHAKA RIVER

- 3.11.11 In relation to the Mohaka River, the:
- (a) annual total volume of extraction for the Mohaka River below the Te Hoe junction
 - (b) the location of any extraction sites, and
 - (c) the periods and rates of extraction at each site
- are to be negotiated and agreed to prior to 30 June each year between the Hawke's Bay Regional Council and nominated representatives of Ngati Pahauwera.

Explanation and Reasons

- 3.11.12 Policy 52 implements a recommendation of the Waitangi Tribunal.

POL 53 DECISION-MAKING CRITERIA - RIVER BED GRAVEL EXTRACTION

- 3.11.13 In considering consent applications for the extraction of river bed gravel, to have regard to the following criteria:
- (a) The capability to restore the extraction site upon completion of the extraction operation, and to repair any damage caused to any banks, access roads, fences, gates, or other structures.
 - (b) The avoidance of any contaminants from machinery use entering water bodies.

- (c) The avoidance of any increases in sediment discharge or water turbidity, particularly during the fish spawning period of May to October.
- (d) The continuation of existing fish passage.
- (e) The avoidance of any adverse effects on flood control assets or river protection works.
- (f) The avoidance of any activity that would cause flood control measures or river protection works to be required.
- (g) The avoidance of any offensive or objectionable discharge of dust.
- (h) The end uses of the gravel, in order that high quality gravel is allocated to uses which require such gravel.
- (i) The location of, and potential effect on, any downstream water takes/users.
- (j) The effect on the ecology of the river.
- (k) The extent to and the time over which natural processes will be capable of returning the river bed to a state of equilibrium following extractive activity.

Explanation and Reasons

3.11.14 Policy 53 provides guidance to resource consent applicants and decision makers in respect of applications to undertake gravel extraction within the region's rivers. This policy establishes criteria which the resource consent application will be assessed against. In addition any resource consent application to extract river bed gravel should have regard to Objective 45 and Policy 79 when assessing the adverse effects of any proposed extraction activity.

POL 54 PROBLEM SOLVING APPROACH - INTEGRATION WITH RIVER CONTROL WORKS

3.11.15 To integrate the management of gravel extraction with river control works by:

- (a) Encouraging gravel extraction where there is the potential to minimise flooding or the risk of damage to protection works or essential structures.
- (b) Undertaking specific works to control erosion and encourage gravel movement where appropriate.

Explanation and Reasons

3.11.16 Policy 54 sets out the approach to be taken to integrate the management of gravel extraction with river control works in order to minimise flooding, erosion and the risk of damage to works and essential structures (e.g. bridges). This policy recognises the positive influence that the managed extraction of gravel can have on minimising flood risk and assisting with the overall management of the river.

ANTICIPATED ENVIRONMENTAL RESULT

Anticipated Environmental Result	Indicator	Data Source
Extraction of river bed gravel at a rate that does not exceed its natural replenishment (unless there is an environmental benefit in doing so)	River cross sections	Council data on river profiles

3.12 Natural Hazards

ISSUE

- 3.12.1 **The susceptibility of the region to flooding, droughts, earthquakes, volcanic ash falls, and tsunami, and the potential impact of these on people's safety, property, and economic livelihood.**

OBJECTIVE

- OBJ 31** The avoidance or mitigation of the adverse effects of natural hazards on people's safety, property, and economic livelihood.

Explanation and Reasons

- 3.12.2 Flooding and droughts are the most recurrent natural hazards in Hawke's Bay, but the region also has a history of earthquakes, volcanic ash falls and tsunami. Each of these is briefly discussed below.

Flooding

- 3.12.3 Within Hawke's Bay, there is widespread potential for flooding. Individual rainfall events causing flooding that can range from localised downpours affecting particular catchments, to cyclonic storms causing general flooding over large parts of the region. Considerable flood protection works have been carried out in the region, particularly on the Heretaunga and Ruataniwha Plains. These works have significantly reduced the risk from most flood events. However, very large events exceeding flood protection design standards can be devastating to normally protected areas. Indeed, measures taken to reduce the flood risk, such as river control works and post-disaster relief, can actually increase the catastrophic potential of large floods because they enable an increased occupancy and level of development within flood plains. To be truly effective flood protection works must be undertaken in conjunction with better land use planning, and adequate and timely flood forecasting.

Droughts

- 3.12.4 Droughts are a common occurrence in Hawke's Bay, particularly during El Nino weather patterns, which bring predominantly westerly winds. The orographic effect of the mountain ranges west of Hawke's Bay means that the region receives little rainfall during these times. Hawke's Bay experienced three major droughts during the 1980's - in 1982/83, 1984-86 and 1988/89. These have been followed by two major droughts during the 1990's - in 1994/95 and 1997/98. The regularity of droughts, and the severity of their effects on agriculture, water supplies and aquatic ecosystems, mean that they are a natural phenomenon which must be recognised in the management of land use activities and the environment.

Earthquakes

- 3.12.5 Earthquakes are a significant risk to the Hawke's Bay region, given the regular occurrence of tectonic movement in the area. Although large earthquakes such as the 1931 event occur infrequently, they have a high potential to impact on people and their livelihood. Development in Hawke's Bay has continued with little or no regard to the effects that earthquakes have on different ground conditions. The HBRC has commissioned studies into the risk posed by earthquakes, and the effect of earthquakes on different areas, particularly in relation to liquefaction, ground shaking, subsidence and uplift. This information has been provided to territorial local authorities, in order that they use it in the production of district plans and the establishment of building design standards.

Volcanic Ash

- 3.12.6 There are no volcanoes in Hawke's Bay, but the region is at risk of being blanketed with ash from volcanoes in the Okataina and Taupo volcanic centres. While volcanic eruptions are a relatively infrequent phenomenon, their effects can be devastating, on waterways (affecting quality and channel processes), land use activities, and health.

Tsunami

- 3.12.7 Tsunami (tidal waves) are also a potential natural hazard. A recent tsunami hazard study of the Hawke's Bay region identified three potential types of tsunami that pose a threat to Hawke's Bay:
- (a) Immediate waves generated locally by horizontal ground movements.
 - (b) Seismic seiches generated locally by vertical ground movements.
 - (c) Classical tsunami generated as a local response to a distant major seabed disturbance (sources of seabed disturbances can be submarine slumps, volcanic eruptions and earthquakes).
- 3.12.8 The main threat in Hawke's Bay is from classical tsunami for which an existing international warning agency is likely to give ample warning. Such warning is valuable, however it does little to quantify the scale of impending waves in this region.
- 3.12.9 The information delivered in this study has been used by HBRC to assist with its emergency management planning, and has also been provided to territorial local authorities in the region to assist them with their own civil defence and natural hazard planning initiatives.

POLICIES

POL 55 ROLE OF NON-REGULATORY METHODS

3.12.10 To use non-regulatory methods set out in Chapter 4, as the principal means of addressing hazard avoidance and mitigation, in particular:

- (a) **Liaison with territorial authorities**¹² - To provide information on natural hazard risk to territorial authorities, and advocate that future development is managed in such a way that the risk of exposure to natural hazards is avoided, remedied or mitigated.
- (b) **Works and services** - To provide hazard mitigation measures, in particular flood mitigation measures, where the benefits can be shown to outweigh the costs and the identified beneficiaries can meet the costs.
- (c) **Natural hazard priorities** - To focus both hazard avoidance and mitigation on areas of high human population density as a first priority.

Explanation and Reasons

3.12.11 Policy 55 sets out the role of the HBRC in providing information to territorial authorities, providing works and services where these are cost-effective, and prioritising natural hazard responses as the principal means of addressing natural hazard avoidance and mitigation. This policy recognises the need for an integrated approach by territorial authorities and the HBRC to address land use planning and service provision with the view of minimising the risk and impact of natural hazards. The HBRC will provide hazard mitigation measures (e.g. stopbanks for flooding) where the benefits outweigh the costs, and the costs can be recovered from those who will benefit from the works. Furthermore, the HBRC will, as a first priority, focus hazard avoidance and mitigation on the areas of high human population density (e.g. cities and towns) as these areas are likely to experience significant effects on people's safety and economic livelihood as a result of a natural hazard event.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Natural hazard mitigation measures in place to minimise the risk to human safety and the environment from natural hazards	Loss of life and property in a natural hazard event	Emergency services records

¹² Refer to Chapter 8 in this Regional Plan for a description of the respective roles of the HBRC and territorial authorities for the avoidance or mitigation of natural hazards.

3.13 Maintenance and Enhancement of Physical Infrastructure

ISSUE

- 3.13.1 **The sustainable management, including further development, of the physical infrastructure of the region that underpins the economic, cultural, and social wellbeing of the region's people and communities, and provides for their health and safety.**

OBJECTIVES

- OBJ 32** The ongoing operation, maintenance and development of physical infrastructure that supports the economic, social and/or cultural wellbeing of the region's people and communities and provides for their health and safety.
- OBJ 33** Recognition that some infrastructure which is regionally significant has specific locational requirements.
- OBJ 33A** Adverse effects on existing physical infrastructure arising from the location and proximity of sensitive land use activities are avoided or mitigated.
- OBJ 33B** Adverse effects on existing landuse activities arising from the development of physical infrastructure are avoided or mitigated in a manner consistent with Objectives 16, 17, 18, 32 and 33.

Explanation and Reasons

- 3.13.2 Hawke's Bay region had a population of 146,109 people on Census night 2001. The economic, and to some extent social and cultural well being, health and safety of these people, relies on the region being interlinked with the rest of New Zealand and the world. This is achieved through transport and communications systems and through supply of services such as energy which transcends regional boundaries.
- 3.13.3 Land transport integrates different parts of the region, and provides for the movement of goods and people. The region is linked into national road and rail systems. Other important transport infrastructure, the airport and port, are both in the coastal environment and have specific locational requirements. The region does not have any natural harbours, so the port's physical resources, developed over more than a century, are regionally significant. An efficient and convenient location in relation to the region's population and commercial and industrial activity is also essential for the port and airport.
- 3.13.4 Most of this infrastructure relies on the use of the land resource, although the air and sea are also involved. Thus the management of its environmental effect is not directly the responsibility of the Regional Council but is generally a district council matter. However, the regional importance of the physical infrastructure and that its networks frequently cross district boundaries; or, in the case of the region's port that it is located on, the land sea interface; means that there is a regional role in ensuring that it is able to be maintained and enhanced.
- 3.13.5 Energy infrastructure, at regional level, primarily involves the generation and distribution of electricity, but increasingly may involve gas. The ability to maintain and develop the region's energy resources, and to distribute energy to areas within and outside the region, is essential in supporting the region's economic well being.
- 3.13.6 Communication facilities are of growing importance in the 21st century. Communication and the transfer of information is essential in allowing all communities within the region to provide for their individual and collective well being. These facilities can rely less on land-based infrastructure as technology develops, but where land-based infrastructure is required, it may have very specific locational requirements. As a result, it must be recognised that it will not be possible in every situation to avoid or mitigate all adverse effects without affecting the efficiency and effectiveness of the infrastructure.
- 3.13.7 Other infrastructure, such as sewerage systems, water supply and landfills, may involve a regional perspective and joint funding and management by several territorial authorities or other agencies.
- 3.13.8 The region's major industries are largely dependent on production from the region's natural and physical resources, and are integrated economically and physically with transport, energy and communications systems. They represent large investments in physical resources, and can be regarded as part of the region's physical infrastructure.
- 3.13.9 A range of environmental effects may be associated with physical infrastructure. This may include direct use of land and coastal areas and the consequent exclusion of people and other activities from such areas. As much of the infrastructure involves physically connected networks, structures may need to cross rivers and sometimes lakes, wetlands and the sea.
- 3.13.9A Physical infrastructure can often give rise to off-site impacts or nuisance elements which affects surrounding land. It can cause emissions or vibrations which go beyond the boundaries of the site; or activities associated with the land use may create adverse effects on nearby land, such as increased noise or traffic.

- 3.13.9B Reverse sensitivity effects can arise when sensitive activities are introduced near major infrastructure, or new infrastructure is placed near a certain existing land use. For example, a new residential development in close proximity to an airport, or the location of a new highway route through an existing urban area can both cause adverse effects that require careful management to reduce conflict between the activities. This conflict needs to be carefully managed in accordance with Section 3.5 of the Plan.
- 3.13.9C In relation to specific types of strategic infrastructure, National Policy Statements may exist which direct local authorities to deal with reverse sensitivity effects in a certain way when making decisions on regional plans, district plans, and resource consent applications. For example, the NPS on Electricity Transmission requires local authorities to manage activities to avoid reverse sensitivity effects on the National Grid, to the extent reasonably possible. RPS provisions need to be applied in conjunction with any relevant National Policy Statement when considering new activities.

POLICIES

POL 56 ROLE OF NON-REGULATORY METHODS

- 3.13.10 To use non-regulatory methods, as set out in Chapter 4, as the primary means of enabling the development of regionally significant physical infrastructure, in particular through the following:
- (a) **Provision of Information** – Recognising the regional importance of significant infrastructure, and assisting territorial authorities and the regional population, in understanding the importance of this infrastructure and its environmental effects. The Council will hold and, as provided for in the annual Plan, investigate aspects of regional infrastructure, including beneficial and adverse effects, so that common information is available to enable decision-makers under the RMA to make decisions in accordance with the promotion of sustainable management.
 - (b) **Liaison with Territorial Authorities** - Facilitating liaison between territorial authorities, the community and infrastructure agencies, to address and resolve issues that arise in the maintenance and development of infrastructure.

Explanation and Reasons

- 3.10.11 The HBRC is at times the consent authority for activities associated with regional infrastructure, but the primary responsibility is generally with the territorial authority. Thus the role of the Council in achieving objectives is primarily as a source of information and a facilitator of liaison. In some situations HBRC may wish to take an advocacy role to promote regional development on the basis of regional infrastructure. When this is likely, decisions for advocacy will be made on a one off basis and any potential conflicts of interest will be identified and avoided.
- 3.10.11A Also refer to Policies in Chapter 3.5 of the Plan.

3.14 Recognition of Matters of Significance to Iwi/Hapu

- 3.14.1 These objectives and policies are developed from the issues of significance to iwi/hapu identified in sections 1.5 and 1.6 of this Plan.

OBJECTIVE

- OBJ 34** To recognise tikanga Maori values and the contribution they make to sustainable development and the fulfilment of HBRC's role as guardians, as established under the RMA, and tangata whenua roles as kaitiaki, in keeping with Maori culture and traditions.

POLICIES

- POL 57** Where policy is being developed for the management of natural and physical resources the following matters shall be had regard to:

- (a) Where the effects of an activity have minimal or no measurable impact on the state of mauri, the life sustaining capacity of a resource – no or minimal regulation (noa).
- (b) Where the actual or potential effects of an activity on the state of mauri are significant – the activity shall be dealt with on a case-by-case basis according to those effects (rahui).
- (c) Where the impacts of an activity have a severe and irreversible impact upon the state of mauri that activity shall be prohibited (tapu).

- POL 58** To share information on matters of resource management significance to Maori and on processes to address them.

Explanation and Reasons

- 3.14.2 To carry out its obligations under the Act HBRC needs to understand and respect the concept of kaitiakitanga. To achieve this it may be necessary for tangata whenua to share their understanding, knowledge and beliefs as they relate to natural and physical resources. In turn HBRC will undertake to assist Maori in enhancing their knowledge of the resource management process.

OBJECTIVE

- OBJ 35** To consult with Maori in a manner that creates effective resource management outcomes.

POLICIES

- POL 59** Consultation with tangata whenua should be undertaken in a manner that acknowledges Maori values, with the fundamental approach in consultation being "kanohi ki te kanohi" (face to face) or personal contact. Other matters necessary to be exercised are:

- (a) consideration of a consent application not yet finally decided upon
- (b) listening to what others have to say
- (c) considering their responses
- (d) deciding what will be done
- (e) appropriate timing.

POL 60 To encourage hapu to develop resource management plans, and to use the plan, when recognised by an iwi authority, to assess the incorporation of Maori values in the planning process.

POL 61 Resource management decisions made subsequent to consultation shall show regard for that consultation.

POL 62 The following is the recommended approach for consultation with tangata whenua:

- (a) Where the issue is at a macro, region-wide level consultation be with iwi.
- (b) Where the issue is localised, yet non site-specific, consultation be with hapu.
- (c) Where the issue is site-specific consultation be with whanau.

POL 63 Consultation involving iwi or hapu is expected generally to be undertaken on a marae. The place of consultation should be determined as a result of agreement between both parties.

Explanation and Reasons

3.14.3 Effective consultation is the best way to determine the relationship between Maori and their taonga and how kaitiakitanga is to be exercised. The policies set out the interpretation by Ngati Kahungunu of what effective consultation means to them. These policies provide applicants with a guide on some of the practical aspects of consultation.

OBJECTIVE

OBJ 36 To protect and where necessary aid the preservation of waahi tapu (sacred places), and tauranga waka (landings for waka).

OBJ 37 To protect and where necessary aid the preservation of mahinga kai (food cultivation areas), mahinga mataitai (sea-food gathering places), taonga raranga (plants used for weaving and resources used for traditional crafts) and taonga rongoa (medicinal plants, herbs and resource).

POLICIES

POL 64 Activities should not have any significant adverse effects on waahi tapu, or tauranga waka.

POL 65 Activities should not have any significant adverse effects on taonga raranga, mahinga kai or mahinga mataitai.

POL 66 The importance of coastal, lake, wetlands and river environments and their associated resources to Maori should be recognised in the management of those resources.

Explanation and Reasons

3.14.4 These policies require the active consideration of the impacts of proposed activities on the taonga of tangata whenua.

4 NON-REGULATORY METHODS

4.1 Introduction

4.1.1 This chapter contains the non-regulatory methods used by the HBRC to implement the policies set out in previous chapters of this Plan, and to achieve the purpose of the RMA. The non-regulatory methods are categorised under the following headings:

- Environmental Education and Co-ordination
- Liaison with territorial authorities
- Economic instruments
- Works and services
- Research and investigation, and
- Monitoring.

4.1.2 Sections 4.2 to 4.7 describe each of these methods in turn. Section 4.8 then provides a brief summary of which non-regulatory methods will be used in relation to each of the regionally significant issues as noted in Chapter 3.

4.2 Environmental Education and Co-ordination

4.2.1 The HBRC is placing increasing emphasis on environmental education and co-ordination as a tool for achieving its functions under the RMA. As a result, the HBRC has developed an Environmental Education Strategy which sets the direction for the Council's education activities, thereby ensuring the Council moves down the path of environmental education in a co-ordinated and cost-effective manner.

4.2.2 The Environmental Education Strategy focuses on four target sectors:

- resource user groups
- the formal education sector
- care groups, and
- the regional community.

4.2.3 The aims of the Environmental Education Strategy are as follows:

- (a) **Knowledge** – To help people gain experience in, and a basic understanding of, the environment and human interaction within it.
- (b) **Skills** – To help people acquire the skills to participate effectively in respect of environmental issues and to be involved in identifying and solving environmental problems.
- (c) **Awareness** – To promote and help people acquire an awareness of, and sensitivity to, the whole environment and environmental issues.
- (d) **Participation** – To promote public participation and provide people with the capacity to be actively involved in helping resolve environmental problems.
- (e) **Attitudes and values** – To help people acquire values of concern and responsibility for the environment and be motivated to care for the environment.

4.2.4 In order to meet these aims the HBRC has encouraged the co-ordination of resource users and has developed a number of environmental education programmes all of which will continue to be implemented, including:

- (a) **Promotion of landcare groups** – These are community self-help groups formed to take action on local environmental issues.

- (b) **Preparation of farm plans and erosion control plans** – The HBRC works with land owners to prepare farm plans and erosion control plans to help improve land management practices.
- (c) **Production of “Environment Topics” and “Groundwork” newsletter** – The HBRC has prepared a series of pamphlets (“Environment Topics”) regarding environmental management, and adds to this series on an ongoing basis. In addition, the Council produces “Groundwork”, a newsletter for communicating information to the rural sector.
- (d) **Co-ordination and involvement in field days and seminars** – The HBRC regularly organises field days and seminars, or participates in events organised by others, as an interactive means of providing information and advice.
- (e) **Waste minimisation** – The HBRC, together with the Napier City Council and Hastings District Council, funds a waste minimisation officer, whose work focuses on initiatives to reduce, reuse and recycle waste.
- (f) **Self-regulation** – The HBRC actively promotes and supports self-regulation by resource users, including the preparation of guidelines and codes of practice by resource user groups. Council promotion and support for self-regulation is undertaken by the following means:
 - Support (through the development of this Plan and through plan changes) for activities which comply with relevant codes of practice or environmental guidelines to be permitted or controlled activities.
 - The establishment and maintenance of a register of codes of practices and guidelines that meet the relevant provisions of this Plan.
- (g) **Resource user group liaison** – The Council has a programme of regular liaison with key stakeholder groups, as a means of sharing views and information regarding resource use and environmental management.

4.3 Liaison with Territorial Authorities

- 4.3.1 The HBRC recognises that in order to promote the sustainable management of the environment it must integrate its responsibilities with those of other authorities who also have responsibilities under the RMA. For example, the six territorial authorities in the region - Napier City, and Wairoa, Taupo, Hastings, Rangitikei and Central Hawke's Bay Districts - manage the effects of the use, development and protection of land, while the HBRC controls land use for the purposes of soil conservation, water quality and water quantity. Because of the inter-linkages between their responsibilities and decisions it is important that the HBRC and territorial authorities adopt a consistent and co-ordinated approach to resource management issues.
- 4.3.2 There are several ways that the HBRC has been achieving this, all of which will continue to be implemented:
- (a) **Statutory advocacy** – The HBRC will continue to advocate to the territorial authorities, where appropriate, that the provisions included in district plans should not be inconsistent with the objectives and policies set out in the Regional Resource Management Plan.

In addition, the HBRC will continue to develop a process for ensuring that resource consent applications that are received by territorial authorities that require joint processing between the territorial authority and the HBRC have complete details of the proposal and full assessments of environmental effects pertaining to all district and regional council matters. This process will continue to be monitored and refined to ensure its appropriateness and effectiveness. In particular statutory advocacy will be used in recognition of the collaborative approach required to prevent and resolve problems arising from the effects of conflicting land use activities.

- (b) **Joint hearings** – The HBRC promotes and facilitates, where appropriate, joint and combined hearings of resource consent applications with cross-boundary issues with the view of encouraging consistency and integration within the decision-making process.
- (c) **Communication** – The HBRC, in conjunction with other resource management agencies (e.g. DOC, territorial authorities) has established working groups to facilitate discussions on topics such as policy development, information requirements and monitoring programmes. The HBRC recognises the importance of continued communication between parties in developing effective policy development and policy implementation techniques.
- (d) **Transfer of powers** – The HBRC recognises that for the sake of efficiency and effectiveness the responsibility for certain actions and decision-making may be more appropriately transferred to other organisations, usually the territorial authorities. The RMA provides for this through the transfer of powers or the delegation of functions.
- (e) **Protocols** – The HBRC has sought to encourage the development and implementation of protocols and systems to aid all of Hawke's Bay's territorial authorities in the day to day administration of functions under the RMA. The objective is to set up protocols and systems for information gathering and sharing, joint hearing opportunities, natural hazard planning, contaminated sites issues, and possibly waste water treatment and stormwater control issues. Other issues where protocols would enhance relations will be dealt with as they arise.

The HBRC will also implement the following new initiatives:

- (f) **Contacts database** – A database will be developed of contact persons, their positions and areas of specialty, covering staff from all territorial authorities in the region. This database will be administered by the HBRC, and will be updated frequently to ensure its continual accuracy and usefulness.
- (g) **Overlap issues** – The HBRC believes that there are potential overlaps with territorial authorities in the regulation of earthworks, tracking, air discharges, the control of people on beaches, and navigation and safety on rivers which it would be beneficial to resolve. The HBRC will endeavour to set a clear demarcation of responsibility relating to these issues in consultation with the territorial authorities, with the aim of reaching agreement.
- (h) **Liaison with tangata whenua** – HBRC will liaise with Ngati Kahungunu Iwi, Whanau-Hapu-Marae and task dedicated work groups (roopu) to ensure a comprehensive understanding of the underlying resource management principles and values of Ngati Kahungunu.
- (i) **Contaminated Sites Database** – A contaminated sites database will be maintained by HBRC for use by territorial authorities in providing appropriate information on sites through the PIM and LIM process. Such a database will distinguish between known contaminated sites and those that have an historical association with hazardous substances. Appropriate remediation for known contaminated sites will be determined by the territorial and regional councils on a case-by-case basis with the landowner.

4.4 Economic Instruments

4.4.1 The HBRC uses a number of economic instruments to promote sustainable management. To be effective, incentives should:

- be targeted to achieve specific resource management objectives
- result in tangible benefits to the environment
- not reward behaviour which would occur anyway in the absence of the incentive, and
- be monitored to assess their effectiveness.

- 4.4.2 Examples of economic instruments used by the HBRC, that will continue to be implemented include:
- (a) **Regional Land Care Scheme** – The provision of funding for soil conservation, riparian protection, native bush protection and research projects.
 - (b) **Financial contributions** – The RMA allows financial contributions to be applied as a condition of a resource consent. However the HBRC will only require financial contributions in regard to resource consents for gravel extraction, and will use the contributions to offset the adverse effects that arise from gravel removal.
 - (c) **Bonds** – The RMA also allows the HBRC to require a bond to be paid as a condition of a resource consent. Bonds are payable to ensure the satisfactory completion or compliance with the conditions of the resource consent granted.

4.5 Provision of Works and Services

- 4.5.1 The HBRC also undertakes works and provides services as methods of implementation. 'Works' are actual physical developments, such as river and flood control works, where as 'services' include such things as making staff available to provide planning or technical assistance.
- 4.5.2 The scope of works and services able to be provided is limited by the terms of the Local Government Act 1974. Examples of works and services undertaken by the HBRC, that will continue to be implemented where appropriate, include:
- (a) **Wetlands enhancement scheme** – An ongoing wetlands enhancement programme for identified priority wetlands of the region. As a first priority, the HBRC will ensure that further degradation of a wetland does not occur; as a second priority the HBRC will seek to enhance the values of a wetland where there are significant biodiversity benefits in doing so and where it is economically feasible.
 - (b) **Service delivery under other legislation** – including:
 - (i) **Animal pest control** – The surveillance of pest populations, particularly possums and rabbits, on land in the region. The HBRC has also undertaken animal pest control programmes where necessary.
 - (ii) **Plant pest control** – The HBRC provides information to the public on the identification and control of plant pests in the region. The HBRC has also undertaken measures to control biological plant pests in the region through the application of a management programme.
 - (iii) **Flood protection schemes** – The HBRC has undertaken flood protection schemes and works within areas of the region's major rivers. Examples of these schemes are the Heretaunga Plains and Upper Tukituki flood control schemes, for which asset management plans have been developed.
 - (c) **Civil emergency programme** – The HBRC undertakes the administration of a civil emergency programme which involves the provision of leadership, support and co-ordination for other territorial authorities within the region relating to civil defence. The HBRC assumes a primary role in the management of flood events.

4.6 Research and Investigation

- 4.6.1 The HBRC gathers and provides information of a technical nature to assist resource users and decision makers. There are a number of key areas where the HBRC collects information to expand its own knowledge of the resources it manages and/or to share its knowledge with other resource management agencies.
- 4.6.2 Research and investigations and projects undertaken by the HBRC include:
- (a) **Heretaunga Plains Groundwater Study** – A study of the groundwater resources of the Heretaunga Plains aquifer system.
 - (b) **Ruataniwha Plains Groundwater Study** – A study of the groundwater resources of the Ruataniwha Plains aquifer system.
 - (c) **Inventory of regionally significant wetlands** – A study identifying regionally significant wetlands within the region and prioritising them for enhancement.
 - (d) **Priority riparian areas** – A study identifying priority riparian areas which should be retired.
 - (e) **Earthquake hazards in Hawke's Bay** – Four reports detailing the risk of earthquakes to the Hawke's Bay region, and the implications for hazard management and the Emergency Management Strategy.
 - (f) **Tsunami hazard for Hawke's Bay** – A study detailing the risk of tsunami to the Hawke's Bay region, and the implications for hazard management and the Emergency Management Strategy.
 - (g) **Agrichemical collection report** – A report on how to safely use, and handle agrichemicals, and an analysis of the unwanted agrichemicals collected by the HBRC in a collection scheme.
 - (h) **Hawke's Bay Catchments: Minimum Water Yields** – A study into the minimum flows in rivers and lakes of the region, and the effects from adjacent land use practices and seasonal variations.
 - (i) **HBRC Contaminated Site Management Strategy** – A report detailing the extent of contaminated sites within the region, the degree of contamination and the appropriate strategy to deal with the site investigation, the effects of contamination, clean-up procedures, and guidelines to avoid future contamination.
 - (j) **Pakuratahi Stream Catchment Study** – A study to ascertain the effects of pastoral and forestry operations in the Pakuratahi Stream catchment, focusing on the effects of land use changes within the catchment.

4.7 Monitoring

- 4.7.1 The HBRC's role of managing Hawke's Bay's natural and physical resources necessitates an awareness of the state of the region's environment and of changes that occur over time. Regular monitoring of key resources using a range of environmental indicators enables trends in the environmental quality to be identified, and the effects of activities to be assessed. Trend monitoring also serves as a means to measure the performance of the Council's environmental policy, and where changes are seen in the environment, amendments can be made to policy as necessary.
- 4.7.2 The HBRC undertakes a regional monitoring strategy comprising three essential components. These are:
- (a) **State of the Environment Monitoring** – State of the Environment monitoring monitors key environmental indicators to enable the HBRC to understand the nature of the region's resources and

trends in the quality and quantity of those resources. State of the Environment monitoring culminates in the production of Annual State of the Environment Updates and a comprehensive "State of the Environment" report every five years.

- (b) **Compliance monitoring** – Compliance monitoring monitors the extent to which resource users are complying with the provisions of the Regional Resource Management Plan and requirements of resource consents.
- (c) **Effects based monitoring** – Effects based monitoring uses both the State of the Environment monitoring and compliance monitoring to ascertain the effects of individual and groups of activities on Hawke's Bay's resources.

4.7.3 All three of these elements can contribute towards monitoring the effectiveness of this Plan.

4.7.4 STATE OF THE ENVIRONMENT MONITORING

4.7.4.1 State of the Environment Monitoring programmes relating to the regionally significant issues identified in the Regional Plan are set out in Table 3 below.

Table 3. State of the Environment Monitoring Programmes

Monitoring	Regionally Significant Issue
Land cover mapping (derived from SPOT satellite imagery)	<ul style="list-style-type: none"> ▪ Loss and degradation of soil ▪ Indigenous vegetation and wetlands
Aerial photography	<ul style="list-style-type: none"> ▪ Loss and degradation of soil ▪ Indigenous vegetation and wetlands
Rainfall and climatic pattern	<ul style="list-style-type: none"> ▪ Loss and degradation of soil ▪ Groundwater quantity ▪ Surface water resources ▪ Natural hazards
Air quality	<ul style="list-style-type: none"> ▪ Agrichemical use ▪ Conflicting land use activities ▪ Management of organic material ▪ Loss and degradation of soil ▪ Natural hazards
Surface water quality measurements	<ul style="list-style-type: none"> ▪ Water quality of surface water resources ▪ Agrichemical use
Surface water flow monitoring	<ul style="list-style-type: none"> ▪ Availability of surface water resources
Groundwater levels measurements	<ul style="list-style-type: none"> ▪ Availability of groundwater
Groundwater quality	<ul style="list-style-type: none"> ▪ Groundwater contamination ▪ Management of organic material ▪ Agrichemical use
River cross-section monitoring	<ul style="list-style-type: none"> ▪ River bed gravel extraction

4.7.5 COMPLIANCE MONITORING

4.7.5.1 Compliance monitoring is undertaken in accordance with the HBRC's duty to monitor the exercise of resource consents. In order to effectively and efficiently undertake this duty the HBRC employs a number of compliance monitoring methods. These are:

- (a) **Monitoring programme** – The HBRC prepares an appropriate monitoring programme to be placed on a resource consent as a condition of consent. The monitoring programme identifies what the consent holder is required to monitor, when monitoring must take place and how often.
- (b) **Compliance Officers** – The HBRC dedicates staff to monitoring the compliance of resource use activities with the provisions of the Regional Resource Management Plan and consent conditions.
- (c) **Field inspections and sampling** – The HBRC undertakes field inspections during the duration of the consent to measure, for example, contaminants discharged and water abstraction rates.
- (d) **Self monitoring** – The HBRC encourages self monitoring by consent holders as a means of increasing the consent holders awareness of complying with conditions, the effects of their activities, and helping to reduce costs to consent holders.

4.7.6 OTHER MONITORING

4.7.6.1 The HBRC also uses other monitoring methods, including:

- (a) **Complaints register** – The HBRC maintains a register that records complaints from the public regarding resource use activities.
- (b) **Other organisations** – The HBRC encourages the sharing of both regional and territorial monitoring information between other organisations, particularly territorial authorities.
- (c) **Hazard management** – Checking the accuracy of existing flood models against data from recent flood events, and maintaining a telemetered flood warning and river level monitoring system.

4.8 Methods Used to Address Regionally Significant Issues

4.8.1 Table 4 below contains a summary of the non-regulatory methods used to implement the various policies of the Regional Resource Management Plan, as set out in Chapter 3.

Table 4. Summary of Non-Regulatory Methods

Non Regulatory Method	Regionally Significant Issue
Environmental education and co-ordination	<ul style="list-style-type: none"> ▪ All issues
Liaison with territorial authorities	<ul style="list-style-type: none"> ▪ All issues, except loss and degradation of soil
Economic instruments	<ul style="list-style-type: none"> ▪ Loss and degradation of soil ▪ Indigenous vegetation and wetlands ▪ River bed gravel extraction
Provision of works and services	<ul style="list-style-type: none"> ▪ Loss and degradation of soil ▪ Indigenous vegetation and wetlands ▪ Natural hazards
Research and investigation	<ul style="list-style-type: none"> ▪ All issues
Monitoring	<ul style="list-style-type: none"> ▪ All issues

5 REGIONAL PLAN OBJECTIVES AND POLICIES

5.1 Environmental Objectives and Policies

- 5.1.1 This Chapter establishes the resource management direction for the functions for which the Council has chosen to exercise its management responsibility through the preparation of a regional plan (other than a Regional Coastal Environment Plan).
- 5.1.2 The environmental objectives and policies in sections 5.1A to 5.8 form the framework of environmental management for the Regional Plan (excluding areas within the coastal environment). In order to achieve the objectives for each resource – land, air, surface water, groundwater and the use of river and lake beds - there is a policy in the form of a guideline, followed by a policy stating how implementation of the guideline will occur. Because the nature and use of each resource varies, the type and form of guideline for each resource will also vary, from the general to the specific. There is no “across the board” means of implementation of environmental guidelines.
- 5.1.3 The important factor, from HBRC’s point of view, is that the guidelines add value to Part II of the RMA by specifying the general direction for the HBRC and resource users to work towards, rather than relying on the RMA.
- 5.1.4 The environmental guidelines will be implemented in a variety of ways including through the following means:
- (a) **Regional rules** – The environmental policies have been incorporated in specific regional rules (contained in Chapter 6) as appropriate, especially those rules regulating discharges of contaminants into air and activities affecting river and lake beds. This means that they must be complied with for an activity to be classified in accordance with any such rule. For example, if they are used in a rule for a permitted activity, they must be complied with to avoid the need to obtain a resource consent. This is the most significant way in which the environmental policy for air quality will be used.
 - (b) **Resource consent decision making** – For those activities requiring a resource consent, the consent authority must have regard to any relevant provisions of a regional policy statement or proposed regional policy statement and any plan or proposed plan. The environmental policies would therefore be an important factor considered by a consent authority in making decisions on resource consent applications. This is the most significant way in which the environmental policies for surface water quality, ground water quality, and river and lake beds will be used.
 - (c) **Unregulated activities** – The environmental policies can also be used for activities that are unregulated. Under section 17(1) of the RMA, every person has “a duty to avoid, remedy, or mitigate any adverse effect on the environment arising from an activity carried on by or on behalf of that person, whether or not the activity is in accordance with a rule in a plan [or] a resource consent ...”. Enforcement orders and abatement notices may be issued in accordance with this general duty (as set out in section 17(3) of the RMA). HBRC will use the environmental policies as a guide to implementing section 17 of the RMA for unregulated activities.
 - (d) **Non-regulatory methods** – The policies will be used to give direction to the implementation of non-regulatory methods, to prioritise activities and enable areas in most need to be addressed first. For example, financial incentives for land management or riparian enhancement will target those land areas or water bodies most in breach of the respective environmental guidelines. This is the most significant way in which the environmental guidelines for land will be used.
 - (e) **Territorial authorities** – District plans prepared by territorial authorities (district and city councils) must not be inconsistent with this Regional Plan. In addition, territorial authorities must have regard to this Regional Plan when considering consent applications. Hence, these policies will also form a part of the resource management framework used by territorial authorities, and will form the basis of HBRC submissions to territorial authorities on relevant resource management matters.

5.1A Consolidated regional plan provisions inserted by various national directions

Introduction

- 5.1A.1 From time to time, national directions (e.g. in national policy statements, national environmental standard or other forms of regulation direction issued by Central Government Ministers) directs councils to insert provisions or amend plan provisions as soon as practicable **without** using a Schedule 1 RMA process. This chapter consolidates the various objectives and policies that have been directed to be in regional plans. These objectives and policies are to be treated just like any other regional plan objective or policy included elsewhere in the RRMP.
- 5.1A.2 Consolidation is done for ease of reference and avoiding repetition throughout multiple chapters of the regional plan.

OBJECTIVES

OBJ 37A Fish passage ^a

The passage of fish is maintained, or is improved, by instream structures, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages, or their habitats.

POLICIES

POL 66A Natural inland wetlands ^b

The loss of extent of natural inland wetlands is avoided, their values are protected, and their restoration is promoted, except where:

- (a) the loss of extent or values arises from any of the following:
 - (i) the customary harvest of food or resources undertaken in accordance with tikanga Māori
 - (ii) restoration activities
 - (iii) scientific research
 - (iv) the sustainable harvest of sphagnum moss
 - (v) the construction or maintenance of wetland utility structures (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020)
 - (vi) the maintenance or operation of specified infrastructure, or other infrastructure (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020)
 - (vii) natural hazard works (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020); or
- (b) the regional council is satisfied that:
 - (i) the activity is necessary for the construction or upgrade of specified infrastructure; and
 - (ii) the specified infrastructure will provide significant national or regional benefits; and
 - (iii) there is a functional need for the specified infrastructure in that location; and
 - (iv) the effects of the activity are managed through applying the effects management hierarchy.

POL 66B Loss of river extent and values ^c

The loss of river extent and values is avoided, unless the council is satisfied:

- (a) that there is a functional need for the activity in that location; and
- (b) the effects of the activity are managed by applying the effects management hierarchy.

^a Objective 37A was inserted in accordance with the direction stated in Clause 1.7 and Clause 3.26(1) of the National Policy Statement for Freshwater Management 2020 and took effect from 3 September 2020.

NOTE: For meanings of some terms referenced in Policy 66A, refer to Clause 3.21 of NPSFM2020.

^b Policy 66A was inserted in accordance with the direction stated in Clause 1.7 and Clause 3.22(1) of the National Policy Statement for Freshwater Management 2020 and took effect from 3 September 2020.

^c Policy 66B was inserted in accordance with the direction stated in Clause 1.7 and Clause 3.24(1) of the National Policy Statement for Freshwater Management 2020 and took effect from 3 September 2020.

POL 66C DISCHARGE PERMITS – Matters for consideration in catchments other than Tukituki River catchment ^d

- (1) When considering any application for a discharge the consent authority must have regard to the following matters:
 - (a) the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh water including on any ecosystem associated with fresh water and
 - (b) the extent to which it is feasible and dependable that any more than minor adverse effect on fresh water, and on any ecosystem associated with fresh water, resulting from the discharge would be avoided.
- (2) When considering any application for a discharge the consent authority must have regard to the following matters:
 - (a) the extent to which the discharge would avoid contamination that will have an adverse effect on the health of the people and communities as affected by their contact with fresh water; and
 - (b) the extent to which it is feasible and dependable that any more than minor adverse effect on the health of the people and communities as affected by their contact with fresh water resulting from the discharge would be avoided.
- (3) This policy applies to the following discharges (including a diffuse discharge by any person or animal):
 - (a) a new discharge or
 - (b) a change or increase in any discharge –
of any contaminant into fresh water, or onto or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.
- (4) Policy 66C(1) does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2011 took effect on 1 July 2011.
- (5) Policy 66C(2) does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2014 took effect on 1 August 2014.
- (6) Policy 66C does not apply to any application for a discharge permit within the Tukituki River catchment (refer Schedule 14C).

POL 66D WATER PERMITS – Matters for consideration in catchments other than Tukituki River catchment ^e

- (1) When considering any application the consent authority must have regard to the following matters:
 - (a) the extent to which the change would adversely affect safeguarding the life-supporting capacity of fresh water and of any associated ecosystem and
 - (b) the extent to which it is feasible and dependable that any adverse effect on the life-supporting capacity of fresh water and of any associated ecosystem resulting from the change would be avoided.
- (2) This policy applies to:
 - (a) any new activity and
 - (b) any change in the character, intensity or scale of any established activity –
that involves any taking, using, damming or diverting of fresh water or draining of any wetland which is likely to result in any more than minor adverse change in the natural variability of flows or level of any fresh water, compared to that which immediately preceded the commencement of the new activity or the change in the established activity (or in the case of a change in an intermittent or seasonal activity, compared to that on the last occasion on which the activity was carried out).
- (3) Policy 66D does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management took effect on 1 July 2011.
- (4) Policy 66D does not apply to any application for a water permit within the Tukituki River catchment (refer Schedule 14C).

^d Policy 66C was inserted in accordance with the direction stated in Policy A4 of the National Policy Statement for Freshwater Management 2014 and took effect from 1 August 2014. It was amended further in accordance with the direction stated in amended Policy A4 of the National Policy Statement for Freshwater Management 2014 (amended 2017) and took further effect from 7 October 2017.

^e Policy 66D was inserted in accordance with the direction stated in Policy B7 of the National Policy Statement for Freshwater Management 2014 and took effect from 1 August 2014.

5.2 Land

OBJECTIVE

OBJ 38 The sustainable management of the land resource so as to avoid compromising future use and water quality.

Refer section 2.2 of this Plan

POLICY

POL 67 ENVIRONMENTAL GUIDELINES - LAND

5.2.1 To encourage landowners and occupiers to manage the effects of activities affecting soil (including both land use activities and discharges of contaminants onto or into land) in accordance with the environmental guidelines set out in Table 5 below and Table 7 following.

Table 5. Environmental Guidelines – Land

Issue	Guideline
1. Appropriate land use	Land use activities should not exceed the land use capability ¹³ of the subject land, as described in Schedule II to this Plan and assessed on-site.
2. Soils prone to wind erosion	Areas prone to wind erosion from land use activities should have preventative or remedial measures applied. The depth of soil should not be reduced at a rate that exceeds the natural rate of replenishment.
3. Soils prone to other types of erosion	Where vegetation is removed from areas prone to erosion, best management practices should be followed. These should include replanting the area within 18 months with vegetation that will provide equivalent or better land stabilisation, or other recognised methods that will stabilise land or prevent erosion.
4. Soil health	There should be no long-term degradation of the physical properties (including soil structure) or biological properties (including organic matter content) of soil.
5. Soil contamination	The discharge of contaminants into the soil, including hazardous substances, pathogens and diseases, should be at a level that will not cause acute or chronic toxic effects on humans or other non-target species, or have the potential to reduce long-term land use potential.
6. Earthworks, roading, tracking	In order to meet the surface water quality guidelines set out in section 5.4 where land is subject to earthworks, best practice should be adopted to mitigate or avoid the effects of runoff into water bodies (as necessary according to the erodibility of the soil).

Explanation and Reasons

5.2.2 Objective 38 establishes the overall objective for land management in Hawke's Bay. It is based on the principle that land outside that used for urban, commercial or industrial activities should be used in a sustainable manner such that future use options and water quality are not compromised. The policies, which support the objective, establish how the land resource may be sustainably managed and how Council's land management functions will be implemented. For example, highly fertile flat to rolling land is likely to be suitable for a wide range of uses, including intensive cropping, horticulture, pastoral farming and forestry. By comparison, much of the land in Hawke's Bay is suitable for significantly fewer land use activities. Some areas may not be suitable for pastoral farming or in very steep, erodible areas for forestry. Land use capability throughout the region has been mapped as part of the New Zealand Land Resource

¹³ "Land Use capability" refers to the assessed capability of an area of land to sustain a range of land use activities. The Hawke's Bay Regional Council has land use capability maps for the whole region – these are presented in Schedule II of the Planning Maps and should be read in conjunction with Schedule II of the text.

Inventory. This information is presented in Schedule II to this Plan. However the land use capability of specific sites requires individual on-site assessments.

5.2.3 Policy 67 establishes environmental guidelines for land. Guideline 1 continues the approach taken in the objective, that land should be used within its suite of sustainable land use activities. As noted above, Schedule II provides more detail on what this means in practice. Guidelines 2 to 6 address both physical parameters (soil erosion, vegetation removal, and earthworks) and chemical and biological parameters (soil health and soil contamination).

5.2.4 The visual soils assessment technique has been developed to provide soil health indicators for use by land users. A state of the environment monitoring framework is being developed for hill and flat land. Until this study is completed, a comparison of existing land use against land use capability will be the primary method of assessing the state of the soil resource in Hawke's Bay. This is shown in the maps in Schedule II to this plan, which are at a scale suitable for regional assessments. However the sustainable land use index of specific sites requires individual on-site assessments. Those areas identified as being used outside their capability can be assumed to be at most risk of soil loss or degradation.

POL 68 IMPLEMENTATION OF ENVIRONMENTAL GUIDELINES – LAND

5.2.5 To implement the environmental guidelines for land set out in Policy 67 in the following manner:

- (a) **Non-regulatory methods** – The environmental guidelines for land will be predominantly implemented through non-regulatory methods, including the provision of financial incentives, the preparation of farm plans, and the provision of information, field days and other educational services.
- (b) **Unregulated activities** – If necessary, the environmental guidelines will be used as a guide to ascertain whether the provisions of section 17 of the RMA have been breached (the duty of every person to avoid, remedy or mitigate any adverse effect on the environment).
- (c) **Regulatory methods** - In association with the above non-regulatory methods to regulate vegetation clearance in accordance with the rules set out in Chapter 6 where significant adverse effects occur as a result of the vegetation clearance activities.

Explanation and Reasons

5.2.6 The environmental guidelines for land will largely be used in association with non-regulatory methods, based on HBRC's overall stance to continue its approach of imposing very few rules regulating land use activities.

Rule 7 is intended to allow most vegetation clearance as permitted activities providing water quality is reasonably protected and the activities do not impact adversely off-site.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Land use activities not exceeding land use capability of subject land	% region being sustainably managed against land use capability	Land cover mapping (5 yearly)
Areas prone to wind erosion have remedial measures applied	% vulnerable land protected by shelterbelts or vegetative cover	Survey (5 yearly)
Areas prone to erosion are replanted within 18 months	Number of incidents reported/complaints received	Council records
No long term degradation of physical or biological properties	Flat land "500 soils" assessments Hill country – "Visual soil Assessment" technique	State of Environment monitoring
Reduction in number of sites with significant levels of contaminants in soils	Level of contamination below that which causes acute or toxic effects on humans, other non-target species, or reduces long term land use potential	Compliance monitoring
Surface water quality guidelines are met	<ul style="list-style-type: none"> ▪ Temperature not changed by more than 3°C, nor raised above 25°C ▪ Dissolved oxygen not exceeding guideline value ▪ Ammoniacal nitrogen levels not exceeding guideline values ▪ Soluble reactive phosphorous values not exceeding guideline values ▪ No loss of fish species or indigenous invertebrates 	Council surface water quality monitoring programme Annual SER Reporting

5.3 Air Quality

OBJECTIVE

- OBJ 39** A standard of ambient air quality is maintained at, or enhanced to, a level that is not detrimental to human health, amenity values or the life supporting capacity of air, and meets National Environmental Standards.
- OBJ 39a** A standard of local air quality is maintained that is not detrimental to human health, amenity values or the life supporting capacity of air.
- OBJ 39b** In the Napier, Hastings, Awatoto and Whirinaki Airsheds, improve ambient air quality so that by 1 September 2020 the concentration of PM₁₀ does not exceed 50 µg/m³ (24 hour average), more than once in any 12 month period^{13a}.
- OBJ 39c** In the balance of the region outside the Napier, Hastings, Awatoto and Whirinaki Airsheds, the ambient air quality shall be managed to ensure the concentration of PM₁₀ does not exceed 50 µg/m³ (24 hour average), more than once in any 12 month period.

Refer section 2.2 of this Plan

POLICY

POL 69 ENVIRONMENTAL GUIDELINES & STANDARDS – AIR QUALITY

- 5.3.1 To manage the effects of activities affecting air quality in accordance with the environmental guidelines and standards set out in Table 6 below.

Table 6. Environmental Guidelines & Standards – Air Quality

Issue	Guideline
1. Odour	There should be no offensive or objectionable odour beyond the boundary of the subject property ¹⁴ .
2. Gases, airborne liquid & other noxious or dangerous contaminants	There should be no noxious or dangerous levels of gases or airborne liquid or other airborne contaminants beyond the boundary of the subject property, in concentrations and at locations that are likely to cause adverse effects on human health, ecosystems or property.
3. Smoke & water vapour	The discharge should not result in any smoke, water vapour or other contaminant that adversely affects traffic safety, or reduces horizontal visibility within 5m of ground level beyond the boundary of the subject property.
4. Dust	Any dust deposition should not raise the ambient dust deposition rate by more than 4 g/m ² per 30 days at any point beyond the boundary of the subject property.
5. Particulate matter	There should be no objectionable deposition of particulate matter on any land or structure beyond the boundary of the subject property.

^{13a} Objective 39b predates the 2011 amendments to the Resource Management (National Environmental Standards for Air Quality) Regulations 2004. The amended regulations changed the timeframe for compliance with the ambient PM₁₀ standard specified in Objective 39b, to 1 September 2016 for the Napier Airshed and 1 September 2020 for the Hastings, Awatoto and Whirinaki Airsheds.

¹⁴ “**Subject property**” means the legally defined property, whether private land or public land, within which the subject activity occurs and includes all land that is under common ownership.

<p>6. Ambient air quality</p>	<p>a. The ambient air quality must remain within the standards stated within the Resource Management (National Environmental Standards for Air Quality) Regulations 2004¹⁵.</p> <p>b. Where no national environmental standards exist the ambient air quality should remain within the New Zealand Ambient Air Quality Guidelines MfE 2002.^{15a}</p> <p>c. Where the existing ambient air quality is better than the concentrations specified in the standards and guidelines in (a) and (b), there should be no significant degradation of ambient air quality.</p>
<p>7. Decision making - Offsets</p>	<p>The matters to be taken into account when assessing offsets in accordance with Policy 69a - 5.3.1A(iii), shall include, but not be limited to:</p> <p>a. The amount of offset required shall be estimated in kilograms of PM₁₀ per day based on the likely worst case daily PM₁₀ emissions from the new activity during the months May to August. If there is no discharge from the new activity during the months May to August then no offset is required.</p> <p>b. The measurement of the “offset” discharge must take place at the same time of day as the new discharge or occur at a time of the day when meteorological conditions are more conducive to elevated PM₁₀. The onus is on the applicant to demonstrate this.</p> <p>c. The “offset” discharge must be similar to the new discharge in terms of particle mode (fine or coarse) and composition except that it may differ if the applicant demonstrates that the “offset” discharge is more harmful.</p> <p>d. The “offset” discharge must not already be accounted for in air quality improvement programmes. In the Hastings and Napier Airsheds the following activities cannot be used for offsets:</p> <ul style="list-style-type: none"> - Removal of open fires - Removal of solid fuel burners not complying with the requirements of schedule XII^{15b} - Outdoor burning <p>e. The “offset” must be legally binding and must be effective from the first day of discharge from the new activity and for the duration of the consent for the new activity.</p> <p>f. The “offset” can be from a discharge within the same site. For example, an applicant may choose to install control technology such as a bagfilter on an existing discharge to “make room” for a new discharge.</p> <p>g. If the new discharge point is at a lower height than the “offset” discharge the applicant must demonstrate that the “offset” results in an equal or greater reduction in the maximum ground level concentrations of PM₁₀ (24-hour average).</p> <p>h. The applicant must demonstrate that the location of the “offset” discharge/s will have an equal or no greater impact on concentrations of PM₁₀ under meteorological conditions most conducive to elevated concentrations.</p> <p>i. The National Environmental Standards for Air Quality must be considered in relation to all ‘offsets’ as in some situations the National Environmental Standards for Air Quality may restrict their use.</p> <p>Note: For clarification, the “offset” discharge is the one that is being removed and the “new” discharge is the one that is new. The offset discharge must be therefore equal or “worse than the new discharge so there is an environmental improvement.</p>

POL 69a PARTICULATE MATTER - PM₁₀ LEVELS

5.3.1A Concentrations of PM₁₀ in the Hastings Airshed and Napier Airshed shall be reduced using the following strategies:

- (i) control discharges to air from dwelling houses, and industrial or trade premises producing particulate matter

¹⁵ Ministry for the Environment (2011) Resource Management (National Environmental Standards for Air Quality) Regulations 2004.

^{15a} Ministry for the Environment (2002) Ambient Air Quality Guidelines,

^{15b} An exception to this could occur if the “offset” were only required for a short duration which does not extend beyond the period for which the appliance group is prohibited as per Rule 18g.

- (ii) prevent outdoor burning practices contributing any significant PM₁₀ during the time when Objective 39b and 39c might not be met
- (iii) minimise an overall increase in PM₁₀ emissions from other discharge sources, including large scale fuel burning equipment, unless:
 1. the PM₁₀ emissions are offset by reductions from other sources of similar emissions, beyond the reductions achieved through the implementation of this Policy; or
 2. the PM₁₀ emissions will not contribute to the ambient PM₁₀ concentrations during the time when an ambient air quality concentration of PM₁₀ is likely to exceed 50 µg/m³ (24 hour average) in any airshed.
- (iv) ensure a reduction in emissions from small scale solid fuel burners by the amount that is sufficient to achieve the National Environmental Standard for PM₁₀
- (v) ensure that the concentration of PM₁₀ emissions in the Napier Airshed and Hastings Airshed do not increase, and are reduced over time.

Explanation and Reasons

- 5.3.2 Prior to this Plan being prepared, the Hawke's Bay Regional Council had already established an approach for air management in its former Regional Air Plan. Objective 39 and 39a continue the direction set by the objectives of this former Plan. In particular, they recognise the need to focus on both ambient air quality and local air quality. Similarly, the environmental guidelines set out in Policy 69 follow the direction set in the former Regional Air Plan for regulating discharges of contaminants into air. This policy seeks to manage the range of effects that can be caused by discharges of contaminants into air, drawing on common conditions contained in rules in the former Regional Air Plan and in resource consents granted by the Hawke's Bay Regional Council.
- 5.3.3 Guidelines 1 to 5 largely address localised effects, recognising that these are the most common air quality problems. By comparison, Guideline/Standard 6 addresses ambient air quality. The Ministry for the Environment has produced Ambient Air Quality Guidelines for a range of key air contaminants, which detail the minimum requirements that outdoor air quality should meet in order to protect human health and the environment. Five of these guidelines have been implemented as mandatory standards in the form of National Environmental Standards, which are regulations under the Resource Management Act. The guideline and standard values are applied as a 'bottom line', and where existing air quality is better than the Ambient Air Quality Guidelines and Standards (which is the case for most areas in Hawke's Bay), the present air quality should be maintained. In other words, the existing air quality should not be allowed to degrade to the level of contamination specified in the New Zealand Ambient Air Quality Guidelines and National Environmental Standards for Air Quality (NESAQ).
- 5.3.3A PM₁₀ Ambient air quality in Hastings and Napier can be poor in winter and in 2008 did not meet the National Environmental Standards for PM₁₀, with the main contribution coming from domestic heating sources; air quality within the Whirinaki and Awatoto Airsheds is also poor. However, the main contributor within these relatively small and focussed airsheds is industry. Excessive concentrations of PM₁₀ are associated with numerous health problems ranging from minor irritation of the eyes and nose to exacerbating existing respiratory problems among small children and the elderly in particular.
- 5.3.3B Objective 39b defines the ambient air quality PM₁₀ concentration to be achieved in the Napier, Hastings, Awatoto and Whirinaki Airsheds. Objective 39c covers the rest of the region and ensures the existing ambient air quality PM₁₀ concentration remains less than 50 µg/m³ (24 hour average), with no more than one annual exceedance. Policy 69a outlines strategies to reduce particulate matter concentrations in the Hastings and Napier Airsheds to a level which complies with the NESAQ for PM₁₀.
- 5.3.3C Objectives 39b, 39c and Policy 69a have been adopted in response to the National Environmental Standards for Air Quality set by the Ministry for the Environment in 2004. Objective 39b predates the 2011 amendments to the National Environmental Standards for Air Quality, which revised the timeframes for compliance with the ambient PM₁₀ standard from 2013 to either 2016 or 2020, depending on the number of times the ambient PM₁₀ standard was exceeded in an Airshed at 1 September 2011. The amended regulations require the National Environmental Standard for PM₁₀ to be met in the Napier Airshed by 1 September 2016, and in the Hastings, Awatoto and Whirinaki Airsheds by 1 September 2020.
- 5.3.3D The Hawke's Bay Regional Council will monitor changes in PM₁₀ concentrations in these airsheds. If monitoring indicates that Objective 39b will not be met, or that Objective 39c is at risk of being compromised, the Hawke's Bay Regional Council will initiate further measures, in addition to those outlined in the Plan. These measures may be regulatory, non-regulatory, or a combination of both.

POL 70 IMPLEMENTATION OF ENVIRONMENTAL GUIDELINES AND STANDARDS – AIR QUALITY

- 5.3.4 To implement Policies 69, and 69a predominantly in the following manner:
- (a) **Regional rules** – The environmental guidelines and standards for air quality have been incorporated primarily in conditions, standards and terms in the rules set out in Chapter 6 of this Plan as appropriate. The environmental guidelines for air quality that refer to 'noxious', 'dangerous', 'offensive' or 'objectionable' effects will be interpreted in the manner described in section 6.1.4 of this Plan, and in accordance with any relevant case law.

- (b) **Resource consents** – The environmental guidelines and standards for air quality will also be used in the process of making decisions on resource consents, in accordance with Resource Management Act.
- (c) **Enforcement** – Enforcement action will be used, where necessary, to aid in implementing the standards and terms of the rules set out in Chapter 6 of this Plan. Any enforcement action will be undertaken in accordance with the enforcement provisions of the Resource Management Act.
- (d) **Resource Management Regulations** – National Environmental Standards apply across New Zealand. Some of these national standards prohibit or restrict certain types of activities affecting air quality. The Hawke’s Bay Regional Council will enforce these standards in accordance with (c) above.
- (e) **Non-regulatory methods** – Non-regulatory methods will also be used, where appropriate, to assist in achieving the objectives and implementing policies within Section 5.3 of this Plan including:
 - i liaising with territorial authorities to seek the inclusion of appropriate land use policies, rules and methods within district plans, and building codes, as necessary to meet the objectives and policies within Section 5.3 of this Plan.
 - ii the Hawke’s Bay Regional Council will influence and inform the community through the development of an appropriate communications and marketing strategy. Information will be provided to assist the community (including industrial and horticultural operators) understand the types of effects that can occur as a result of discharges of contaminants into air and the overall effects of such discharges on ambient air quality. Information will be provided advising appropriate methods to avoid, remedy or mitigate any adverse effects of discharging contaminants into air.
 - iii the Hawke’s Bay Regional Council will encourage the use of dry wood through education.
 - iv the Hawke’s Bay Regional Council will develop a best practice guide for the sale of wood by accredited dry wood merchants.
 - v provision of financial incentives. The Hawke’s Bay Regional Council may choose to provide incentives and financial assistance to assist the Council in achieving Objective 39b and thereby comply with the NESAQ for PM₁₀.
 - vi development of a best practice guide for outdoor burning to ensure that those undertaking the activity are aware of what steps need to be taken to minimise the effects from outdoor burning.
 - vii encouraging people currently using open fires and small scale solid fuel burners that are not NESAQ compliant burners to install cleaner forms of heating.

Explanation and Reasons

- 5.3.5 Policy 70 establishes that, unlike the environmental guidelines for land (which will largely be used in a non-regulatory manner), the environmental guidelines for air quality have been used to guide regulation as the principal means of meeting the air quality objectives. The Guidelines have been used in rules, and will be used in resource consent processes. Policy 70 (a) cross-references section 6.1.4 of this Plan, which provides some guidance on interpretation of the terms ‘noxious’, ‘dangerous’, ‘offensive’ or ‘objectionable’. These terms are commonly used in the regulation of discharges of contaminants into air.
- 5.3.5A Regulatory and non regulatory methods will play a significant part in meeting Objective 39b. Policy 70 5.3.4(e)(i) will help integrate decision making under the Resource Management Act and Building Act and ensure that Regional Council and Territorial Authority requirements are considered at the same time; Policy 70 5.3.4(e)(ii),(iii),(iv) recognises that awareness about effects can lead to people adopting practices which can bring about changes in the quality of the air resource, and that information transfer can be an effective alternative to enforcement as a means of changing people’s behaviour. In particular, Policy 70 5.3.4(e)(ii),(iii),(iv) can focus on educating people about the adverse effects associated with the discharges from domestic fuel burners, open fires and outdoor rubbish burning. Many of the problems associated with domestic heating are caused or exacerbated by ongoing use of open fires and small scale solid fuel burners that do not meet the NESAQ emission standards, incorrect use of appliances, and the use of poor quality fuels. While the use of NESAQ compliant burners will improve environmental outcomes and assist the Council in meeting Objective 39b, it is acknowledged that the use of heating appliances which reduce or minimise incorrect operation and can only use clean energy sources or dry fuels, will further improve air quality within Napier and Hastings. Similarly, problems associated with vegetation burning often relate to when and how burning is undertaken. Both these issues can be addressed through education of the public about their burning and heating practices. Policy 70 5.3.4(e)(v) states that the Hawke’s Bay Regional Council may choose to provide financial packages to encourage the maximum uptake by households of NESAQ compliant burners and/or clean heating systems.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
No offensive or objectionable odour beyond the boundary of any subject property	Number, nature and type of resource consent, and reported incidents of odour	Compliance monitoring Incident monitoring
No noxious or dangerous gases or airborne liquid or other airborne contaminants beyond the boundary of any subject property	Number, nature, type and location of resource consent, and reported incidents of spray drift and other contaminants	Compliance monitoring Incident monitoring
Reduction in number of incidents where smoke, water vapour or other contaminants reduce visibility or affect traffic safety	Visibility monitoring	5 yearly monitoring for input into State of the Environment Report (SER) Incident monitoring
Reduction in occurrences of dust deposition which exceed guidelines beyond subject property boundary	Dust deposition should not exceed the guidelines value of 4 g/m ² per 30 days	Annual SER update reporting Incident monitoring
Reduction in occurrences of objectionable deposition of particulate matter beyond subject property boundary	The accumulation of particulate matter	Annual SER update reporting Incident monitoring
Ambient Air Quality	NO ₂ , SO ₂ , CO	Four yearly monitoring
By 1 September 2020 the concentration of PM ₁₀ in any airshed is not exceeding 50 µg/m ³ (24 hour average), more than once in any year ^{15c}	PM ₁₀	Compliance monitoring in accordance with Resource Management (National Environmental Standards for Air Quality) Regulations 2004

^{15c} The Anticipated Environmental Results predate the 2011 amendments to the Resource Management (National Environmental Standards for Air Quality) Regulations 2004. The amended regulations changed the timeframe for compliance with the ambient PM₁₀ standard to 1 September 2016 for the Napier Airshed and 1 September 2020 for the Hastings, Awatoto and Whirinaki Airsheds.

5.4 Surface Water Quality

The provisions of Chapter 5.4 do not apply within the Tukituki River catchment.

OBJECTIVE

- OBJ 40** The maintenance of the water quality of specific rivers in order that the existing species and natural character are sustained, while providing for resource availability for a variety of purposes, including groundwater recharge.

Refer section 2.2 of this Plan

Explanation and Reasons

- 5.4.1 Prior to this Plan being prepared, the HBRC had already established an approach of managing rivers, lakes and wetlands for the purposes of aquatic ecosystems in its former Regional Policy Statement and Regional Water Resources Plan. These documents had also signalled the need to manage water quality for the purpose of contact recreation where this was practicable and desirable. Objective 40 above continues this overall approach – it establishes that rivers, lakes and wetlands are to be managed for both aquatic ecosystems and contact recreation purposes, where appropriate. During the life of this Plan the Council will continue to work towards surface water management on a catchment by catchment basis. The goal of managing for contact recreation purposes does not pre-suppose that contact recreation will occur, but rather sets a guideline which is another stage in the overall attainment of better water quality. Those stretches of river near the coast which are influenced by the sea will have guidelines which reflect the water quality expectations of the coastal marine areas, as set out in the Regional Coastal Plan.

POLICIES

POL 71 ENVIRONMENTAL GUIDELINES - SURFACE WATER QUALITY

- 5.4.2 To manage the effects of activities affecting the quality of water in rivers, lakes and wetlands in accordance with the environmental guidelines set out in Tables 7 and 8¹⁶.

**Table 7. Environmental Guidelines – Surface Water Quality
Part I - Guidelines that apply across the entire Hawke's Bay region**

Issue	Guideline
1. Temperature	The temperature of the water should be suitable for sustaining the aquatic habitat.
2. Dissolved oxygen	The concentration of dissolved oxygen should exceed 80% of saturation concentration.
3. Ammoniacal nitrogen	The concentration of ammoniacal (N-NH ₄ ⁺) should not exceed 0.1 mg/l.
4. Soluble reactive phosphorus	The concentration of soluble reactive phosphorus should not exceed 0.015 mg/l.
5. Clarity	In areas used for contact recreation, the horizontal sighting range of a 200 mm black disk should exceed 1.6 m.

These guidelines apply after reasonable mixing and disregarding the effect of any natural perturbations that may affect the water body, as set out in Policy 72.

¹⁶ Comparison of guidelines with existing water quality – Schedule III gives detailed explanation and reasons for the environmental guidelines for surface water quality, and the annual State of the Environment Update Report (HBRC) provides information on existing water quality.

**Table 8. Environmental Guidelines – Surface Water Quality
Part II - Guidelines that Apply to Specific Catchments**

Catchment Area	Faecal Coliforms (cfu/100 ml)	Suspended Solids (mg/l)
Aropaoanui River	200	50
Clive Rivers and tributaries	200	10
Esk River	200	50
Ikanui Stream	200	50
Kopuawhara Stream	200	50
Mangakuri Stream	200	50
Maraetotara River	200	50
Mohaka River	50	10
Ngaruroro River upstream of Fernhill Bridge	50	10
Ngaruroro River between Fernhill Bridge and Expressway Bridge	100	25
Ngaruroro River downstream of the Expressway Bridge	150	25
Opoutama Stream	200	50
Porangahau River	200	50
Puhokio Stream	200	50
Taharua Stream	50	10
Tutaekuri River upstream of Redclyffe Bridge	50	10
Tutaekuri River between Redclyffe Bridge and SH50	100	25
Tutaekuri River downstream of the Expressway Bridge	150	25
Waingonoro Stream	200	50
Waipatiki Stream	200	50
Waipuka Stream	200	50
Wairoa River and tributaries upstream of Frasertown	100	25
Wairoa River at and downstream of Frasertown	200	25

These guidelines apply after reasonable mixing and disregarding the effect of any natural perturbations that may affect the water body, as set out in Policy 72.

* The figures in Table 8 represent concentrations of contaminants in the water body that should not be exceeded after reasonable mixing.

Explanation and Reasons

- 5.4.3 Policy 71 sets out the surface water quality guidelines. In most cases, existing water quality reaches the levels set. However in some cases, such as faecal coliforms, there is a need for improvement. Overall, the present water quality of rivers and lakes throughout the region is good. Indeed, some water quality parameters are at a level throughout the region that limits the onset of problems, e.g. soluble reactive phosphorus is at a sufficiently low level that it restricts the undesirable growth of green algal slimes.
- 5.4.4 The water quality guidelines set out in Policy 71 are likely to be refined in future. The Ministry for the Environment is currently undertaking a substantial amount of work that is likely to influence the resource management approaches of regional councils in future. In particular, the Ministry is developing a suite of environmental indicators, and a methodology classifying specific reaches of catchments for different management purposes. As this information becomes available, the HBRC is likely to build upon, and refine, its present overall direction for water quality management (rather than start afresh). This is likely to mean that, in future, more detailed water management objectives and standards will be developed on a reach-by-reach basis for surface water resources in the region.
- 5.4.5 The relevance of the specific water quality parameters chosen in Policy 71 is as follows (note that further explanation and reasons of the parameters used is provided in Schedule III while the State of the Environment Report and Annual Updates provide information on existing water quality for comparative purposes):
- (a) **Temperature** – Temperature changes have a significant effect on the functioning of aquatic ecosystems. Particular increases in temperature have adverse effects.
 - (b) **Dissolved oxygen** – An adequate concentration of dissolved oxygen is critical for sustaining aquatic life. An inadequate level is akin to ‘suffocating’ the aquatic ecosystem.

- (c) **Ammoniacal nitrogen** – Ammoniacal nitrogen is toxic to aquatic fauna and, in sufficient concentrations, can also be linked to adverse instream pH and hardness. High concentrations are generally as a result of animal faecal material and decomposing organic matter being carried into waterways.
- (d) **Soluble reactive phosphorus** – The presence of high concentrations of soluble reactive phosphorus can result in undesirable biological growths. It can also indicate that land use practices may not be appropriate, e.g. fertiliser application, grazing or cultivation of river margins. Soluble reactive phosphorus is naturally low in waterways in Hawke's Bay – maintaining these low levels will assist in the maintenance of instream habitat.
- (e) **Faecal coliforms** – Faecal coliform bacteria are a general indicator of mammalian contamination, including human sewage. In sufficient numbers, faecal coliform bacteria denote a significant health risk. Achieving low levels is thus critical for contact recreation purposes. High numbers can also restrict macroinvertebrate fauna, and increase the abundance of benthic slimes and macro flora.
- (f) **Suspended solids and clarity** – The presence of high levels of suspended solids or turbidity can inhibit the abundance of fish species, and reduce the diversity and abundance of instream life in general and restrict other uses. Poor clarity is likely to restrict contact recreation use.

POL 72 IMPLEMENTATION OF ENVIRONMENTAL GUIDELINES - SURFACE WATER QUALITY

5.4.6 To implement the environmental guidelines for surface water quality predominantly in the process of making decisions on resource consents in accordance with section 104 (1)(b) of the RMA, and in accordance with the following approach:

- (a) **After reasonable mixing** - The environmental guidelines apply to surface water bodies after reasonable mixing of contaminants¹⁷, and disregarding the effect of any natural perturbations that may affect the water body. The exception is where water diverted or discharged into water from a hydro-electric power scheme entrains sediment between the point of discharge and the point of reasonable mixing, causing a breach of the suspended sediments guidelines c (i) and (ii) below. In this case, the guidelines may apply at the point of discharge, disregarding the effect of any natural perturbations that may affect the water body.
- (b) **At or below median flows or levels for all guidelines except suspended solids** – All environmental guidelines, except those for suspended solids, apply to flowing surface water bodies when the flow of water is at or less than the median flow, or for non-flowing water bodies, the level of water is at or less than the median level.
- (c) **At all flows for suspended solids** – The guidelines for suspended solids apply as follows:
 - (i) At times when the suspended solids concentration is less than the specified guideline for a particular water body and location, an activity should not cause, or contribute to, a breach of the specified guideline. In no case should an activity cause more than a doubling of the suspended solids concentration or turbidity of the receiving water body.
 - (ii) At times when the suspended solids concentration is equal to or greater than the specified guideline, an individual activity should not cause the concentration of suspended solids or the turbidity in any river or lake to increase by more than 10%, as determined on a case by case basis.

[Note that the HBRC recognises that some resource users prefer to measure clarity, rather than concentrations of suspended solids or turbidity. While there is not a direct relationship between suspended solids and clarity that can be applied across the region, the HBRC is happy to work with any

¹⁷ For the purposes of this Regional Plan, “reasonable mixing in surface water” of contaminants in surface water will generally be considered to have occurred as follows:

- a) In relation to flowing surface water bodies, at whichever of the following is the least:
 - (i) a distance 200 metres downstream of the point of discharge
 - (ii) a distance equal to seven times the bed width of the surface water body, but which shall be not less than 50 metres, or
 - (iii) the distance downstream at which mixing of contaminants has occurred across the full width of the surface water body, but which shall not be less than 50 metres.
- b) In relation to lakes, at a distance 15 metres from the point of discharge.
Alternatively, for activities that are subject to resource consents, “reasonable mixing” may be determined on a case by case basis through the resource consent process.

such resource users to establish allowable changes in clarity corresponding to the suspended solids limits where this is required.]

- (d) **Existing good water quality** – Where existing water quality is better than the guidelines, no more than minor degradation of water quality will be allowed.
- (e) **Improvement of poor water quality** – Where existing water quality is poorer than the guidelines, the following approach will be adopted:
 - (i) **Regulated activities** – Where activities that are regulated by way of resource consents (e.g. discharges of contaminants into water) are the predominant cause of poor water quality, improvements will be sought at the time of granting, reviewing or renewing the consent while having regard to the following:
 - the degree to which the activity adversely affects aquatic ecosystems and contact recreation
 - the extent to which the activity causes the poor water quality relative to other activities
 - for existing activities, the need to allow time to achieve the required improvements.

Where activities that are regulated by way of resource consents are not the predominant cause of degraded water quality, conditions will be imposed on such consents to avoid further degradation of water quality unless the HBRC is satisfied that:

- the activity will not cause any significant adverse effects on aquatic ecosystems and contact recreation.
- exceptional circumstances justify allowing further degradation, or
- in the case of discharges, the discharge is of a temporary nature, or is associated with necessary maintenance work.

- (ii) **Unregulated activities** – Where activities that are unregulated are the predominant cause of poor water quality, non-regulatory methods (as set out in Chapter 4) will be used as the primary means for achieving an improvement in water quality, in particular:
 - the provision of financial incentives to facilitate improved land management practices, including the retirement of riparian margins, or to enhance wetlands
 - the provision of education and co-ordination.

Where no improvement or where further degradation is evident over time as a result of unregulated activities, the HBRC will consider the need for regulation of these activities.

- (f) **Recognition of variables** – Consideration of the environmental guidelines will take into account the measurement uncertainties associated with variables such as location, flows, seasonal variation and climatic events.
- (g) **Temporary / maintenance activities** (including those required for the management of a commercial forest) – Consideration of the environmental guidelines in relation to discharges will take into account the degree to which a discharge is of a temporary nature, or is associated with maintenance work.

Explanation and Reasons

- 5.4.7 Policy 72 sets out how the surface water quality guidelines are to be implemented. It specifies that the guidelines are to be implemented largely through resource consent processes, and then sets out the manner in which the guidelines will be used. This policy makes it clear that, where existing water quality is better than the guidelines, the present water quality should be maintained. By contrast, where existing water quality is worse than the guidelines, the Council will seek improvements by way of resource consents or non-regulatory methods as appropriate.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Surface water bodies suitable for sustaining aquatic ecosystems	<ol style="list-style-type: none"> 1. Temperature not changed by more than 3°C, nor raised above 25°C. 2. Dissolved oxygen not falling below guideline levels. 3. Ammoniacal nitrogen levels not exceeding guideline values. 4. Soluble reactive phosphorus values not exceeding guideline values. 5. Diversity and quantities of fish species or indigenous invertebrates is maintained. 	<p>Council Water Quality monitoring programme</p> <p>Annual SER monitoring</p>

5.5 Surface Water Quantity

The provisions of Chapter 5.5 do not apply within the Tukituki River catchment.

OBJECTIVE

OBJ 41 The maintenance of the water quantity of specific rivers in order that the existing aquatic species and the natural character¹⁸ are sustained, while providing for resource availability for a variety of purposes, including groundwater recharge.

Refer section 2.2 of this Plan

POL 73 ENVIRONMENTAL GUIDELINES - SURFACE WATER QUANTITY

- (a) To sustain aquatic ecosystems by establishing a minimum flow in a river as that level which will maintain the existing ecosystem.
- (b) On rivers (or water management zones) where minimum flows have been established, all takes for which a resource consent is required will be required to cease when the river is flowing at or below the minimum flow. Except that where the taking has, as a primary purpose, the provision of drinking water to people or animals taking could be restricted to the level necessary to maintain human or animal welfare.
- (c) To provide a known level of risk to resource users by ensuring that, for rivers with an established minimum flow, the total allocation authorised through the resource consent process does not result in authorised takes being apportioned, restricted or suspended for more than 5% of the time on average during November-April.
- (d) To sustain the natural character of the surface water body when determining the minimum flows and allocatable volumes for surface water bodies in Table 9.

Explanation and Reasons

5.5.1 Policy 73 recognises that Hawke's Bay is prone to extended dry periods when river flows can decrease dramatically. During these periods it is important to ensure, as far as possible, that aquatic ecosystems are not placed under additional stress over and above that which occurs naturally. In addition, the uses of water provided for as of right by the RMA (domestic use, stock water and fire fighting) need to be safeguarded.

POL 74 IMPLEMENTATION OF ENVIRONMENTAL GUIDELINES - SURFACE WATER QUANTITY

- (a) **Resource Allocation:** To define the allocatable volume as being the difference between the summer 7-day Q95 and the minimum flow.
- (b) To implement the environmental guidelines for surface water quantity predominantly in the process of making decisions on **resource consents** in accordance with section 104 (1)(b) of the RMA, through Table 9.

¹⁸ For the purposes of Section 5.5 "natural character" includes a range of qualities and features, which have been created and sustained by nature as distinct from those which have been constructed by people. The degree or level of natural character within an area depends to an extent to which natural elements, patterns and processes have occurred and the nature and extent of modifications to the natural environment.

Table 9. Minimum Flow and Allocatable Volumes for Specified Rivers

River name	Minimum Flow Site Name	Minimum Flow (l/s)	Allocatable Volume (m ³ /week)	Map Reference
Awanui Stream	At The Flume	120	0	V21:357613
Awanui Stream	At Paki Paki Culvert	35	0	V21:351608
Esk River	At Shingle Works	1,400	355,018	V20:432945
Esk River	At SH2	1,000		V20:438939
Irongate Stream	At Clarks Weir	100	0	V21:367666
Karamu River	At Floodgates	1,100	18,023	V21:427708
Karewarewa River	At Turamoe Road	75	-	V21:341622
Louisa Stream	At Te Aute Road	30	0	V21:410625
Mangateretere Stream	At Napier Road	100	0	V21:438659
Maraekakaho River	At Tait's Road	100	5,443	V21:170668
Maraetotara River	At Te Awanga Bridge	220	30,971	W21:520661
Ngaruroro River	At Fernhill Bridge	2,400	956,189	V21:330729
Nuhaka River	At Valley Road	80	41,731	X19:225329
Ongaru Drain	Wenley Road	5	0	V21:234653
Pouhokio Stream	At Allens Bridge	80	-	V22:498441
Poukawa Inflow	Site No. 1 (d/s dam)	10	0	V22:282504
Poukawa Inflow	Site No. 1a (u/s dam)	10	0	V22:285502
Poukawa Inflow	Site No. 6	3	0	V22:266478
Poukawa Stream	At Douglas Road	20	0	V22:298533
Raupare Stream	At Ormond Road	300	83,844	V21:398713
Te Waikaha Stream	At Mutiny Road	25	-	V22:361572
Trib. of Kauhauroa Stream	(Taylors)	5	0	X19:970397
Tutaekuri River	At Puketapu	2,000	928,972	V21:357812
Tutaekuri-Waimate	At Goods Bridge	1,200	367,114	V21:384751
Waimaunu Stream	At Duncans	10	15,304	X19:229300

Explanation and Reasons

- 5.5.2 Objective 41 recognises the need to manage specific rivers for a range of in-stream and out of stream values and uses. It provides guidance on surface water management where there is potential conflict between uses of the water. The requirement is that surface water quantity is maintained to the extent that existing species and natural character (excluding riparian vegetation in this context) are sustained, while providing for out of stream uses of the water including the recharge of aquifers.
- 5.5.3 Policy 74 recognises that Hawke's Bay is prone to extended dry periods when river flows can decrease dramatically. During these periods it is important to ensure, as far as possible, that aquatic ecosystems are not placed under additional stress over and above that which occurs naturally. In addition, the uses of water provided for as of right by the RMA (domestic use, stock water and fire fighting) need to be safeguarded.
- 5.5.4 The criteria for setting minimum flows are based on the following:
- identified or estimated habitat requirements for a range of species which currently exist in the river
 - the need to maintain water quality at low flows
 - the need to meet recreational requirements
 - Maori cultural and spiritual values
 - the application of consistent methodology when setting and reviewing minimum flows
 - the need to adequately provide for the recharge of groundwater.

- 5.5.5 Established minimum flows may be altered by Plan Change on the basis of new information and/or a review of the criteria in relation to the specific river or stream.
- 5.5.6 In order to determine the maximum amount of water that could be sustainably allocated from a river the HBRC has selected the 7-day average flow that is exceeded 95% of the time over the summer period November-April as the key statistic. This statistic (the 7-day Q95) was selected because:
- (a) It takes account of the natural availability of water within rivers.
 - (b) The November–April period is both the period of lowest flows and the time of greatest water demand in Hawke's Bay.
 - (c) The seven day averaged flow smooths out short-term variations that can skew low flow estimates.
 - (d) When a river is fully allocated and fully used the river should not drop below its minimum flow for more than 5% of the summer low flow period.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
The minimum flow is established and maintained at levels that provide for the sustaining of aquatic ecosystems and natural character in Hawke's Bay rivers	Measurement of river flow at minimum flow sites	Minimum flow monitoring and analysis
The maintenance of surface water quantity (other than by natural events) at a level which sustains the aquatic ecosystems in the relevant surface water bodies	Physical and biological parameters	Council SER monitoring

5.6 Groundwater Quality

The provisions of Chapter 5.6 do not apply within the Tukituki River catchment.

OBJECTIVES

- OBJ 42** No degradation of existing groundwater quality in aquifers in the Heretaunga Plains aquifer system.
- OBJ 43** The maintenance or enhancement of groundwater quality in unconfined or semi-confined productive aquifers¹⁹ in order that it is suitable for human consumption and irrigation without treatment, or after treatment where this is necessary because of the natural water quality.

Refer section 2.2 of this Plan

POLICIES

POL 75 ENVIRONMENTAL GUIDELINES - GROUNDWATER QUALITY

- 5.6.1 Other than in the productive aquifer systems in the Tukituki River catchment, to manage the effects of activities affecting the quality of groundwater in accordance with the environmental guidelines set out in Table 10.

Table 10. Environmental Guidelines – Groundwater Quality

Issue	Guideline
CONFINED, PRODUCTIVE AQUIFERS IN THE HERETAUNGA PLAINS AQUIFER SYSTEM (as shown in Schedule IV)	
1. No degradation	There should be no degradation of existing water quality.
OTHER PRODUCTIVE AQUIFERS	
1. Human consumption	The quality of groundwater should meet the “Drinking Water Quality Standards for New Zealand” (Ministry of Health, 1995) without treatment, or after treatment where this is necessary because of the natural water quality.
2. Irrigation	The quality of groundwater should meet the guidelines for irrigation water contained in the “Australian Water Quality Guidelines for Fresh and Marine Waters” (Australian and New Zealand Environment and Conservation Council, 1998) without treatment, or after filtration where this is necessary because of the natural water quality.

Explanation and Reasons

- 5.6.2 Policy 75 recognises the very high quality of groundwater in confined, productive aquifers in the Heretaunga Plains aquifer systems, and the strategic importance of these groundwater resources to the region. It therefore establishes a regime of not allowing any degradation of the quality of these aquifers. Groundwater in the Tukituki River catchment (including Ruataniwha Plains) is managed under Chapter 5.9.

¹⁹ For the purposes of this Plan a “productive aquifer” means an aquifer that has a sufficient quantity, quality and flow of water that it can be used for water supply purposes.

- 5.6.3 For other productive aquifers, the objectives and policies continue the approach established in the former Proposed Regional Water Resources Plan, of managing the water within these aquifers for the purposes of human consumption and irrigation. This may allow for some limited degradation of groundwater quality, provided the guidelines for human consumption and irrigation are met.

POL 76 IMPLEMENTATION OF ENVIRONMENTAL GUIDELINES – GROUNDWATER QUALITY

- 5.6.4 To implement the environmental guidelines for groundwater quality set out in Policy 75 predominantly in the following manner:

- (a) **Resource consents** – The environmental guidelines will primarily be used in the process of making decisions on resource consents, in accordance with section 104 (1)(b) of the RMA.
- (b) **Regional rules** – The environmental guidelines have also been incorporated in conditions, standards and terms in the rules set out in Chapter 6 of this Plan as appropriate.

And in accordance with the following approach:

- (c) **After reasonable mixing** - The environmental guidelines will apply after reasonable mixing²⁰ of contaminants, and disregarding the effect of any natural perturbations that may affect the water body.
- (d) **Heretaunga Plains confined aquifers** – To not permit any activity that is likely to cause any degradation of groundwater quality in confined productive aquifers in the Heretaunga Plains aquifer systems. This means that activities involving the discharge of contaminants over the recharge areas will be regulated.
- (e) **Other productive aquifers with good water quality** - For other productive aquifers where the existing groundwater quality is suitable for human consumption and irrigation (without treatment, or after filtration where this is necessary because of the natural water quality), to ensure that the groundwater quality remains within these guidelines.
- (f) **Other productive aquifers with poor water quality** – Where existing water quality is poorer than the guidelines for “other productive aquifers”, the following approach will be adopted:
 - (i) **Regulated activities** – Where activities that are regulated by way of resource consents (e.g. discharges of contaminants onto land) are the predominant cause of poor water quality, improvements will be sought at the time of granting, review or renewal of consent while having regard to the following:
 - the extent to which the activity causes the poor water quality relative to other activities
 - for existing activities, the need to allow time to achieve the required improvements.

Where activities that are regulated by way of resource consents are not the predominant cause of degraded water quality, conditions will be imposed on such consents to avoid further degradation of water quality unless the HBRC is satisfied that:

- exceptional circumstances justify allowing further degradation, or
- in the case of discharges, the discharge is of a temporary nature, or is associated with necessary maintenance work.

- (ii) **Unregulated activities** – Where activities that are unregulated are the predominant cause of poor water quality, non-regulatory methods (as set out in Chapter 4) will be used as the primary means for achieving an improvement in water quality, in particular the provision of education and co-ordination.

²⁰ For the purposes of this Regional Plan, “reasonable mixing” of contaminants in groundwater is considered to have occurred at whichever of the following is the lesser:

- a) a distance 100 metres from the point of discharge, or
- b) the boundary of the subject property.

Alternatively, for activities that are subject to resource consents, “reasonable mixing” may be determined on a case by case basis through the resource consent process.

Where no improvement or where further degradation is evident over time as a result of unregulated activities, the HBRC will consider the need for regulation of these activities.

- (g) **Interconnections between aquifers and other water bodies** – Aquifers (including unconfined, unproductive aquifers) that have hydraulic connections with other aquifers or surface water bodies will be managed in a manner which avoids a breach of the environmental guidelines for those other water bodies that are hydraulically connected.

Explanation and Reasons

- 5.6.5 Policy 76 sets out how the guidelines for groundwater quality will be implemented. It specifies that the guidelines have been applied through regional rules, and will be used in resource consent processes. It then sets out the manner in which the guidelines will be applied.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
No degradation of existing groundwater quality in confined productive aquifers	Nitrate levels Pesticides and herbicides	Ministry of Health Council SER monitoring
Groundwater quality in productive aquifers which meets the “Drinking Water Quality Standards for New Zealand” (MoH, 1995)	Nitrate levels Pesticides and herbicides	Ministry of Health Council SER monitoring
Groundwater quality in productive aquifers which meets irrigation guidelines contained in the “Australian Water Quality Guidelines for Fresh and Marine Waters” (Australian and NZ Environment and Conservation Council, 1998)	Nitrate levels Pesticides and herbicides	Ministry of Health Council SER monitoring

5.7 Groundwater Quantity

OBJECTIVE

OBJ 44 The maintenance of a sustainable groundwater resource.

Refer section 2.2 of this Plan

POLICIES

POL 77 ENVIRONMENTAL GUIDELINES - GROUNDWATER QUANTITY

- (a) To manage takes of groundwater to ensure abstraction does not exceed the rate of recharge.
- (b) To manage the available groundwater resource to ensure supplies of good quality groundwater.
- (c) To manage the groundwater resource in such a manner that existing efficient groundwater takes²¹ are not disadvantaged by new takes.
- (d) To manage takes of groundwater to ensure abstraction does not have an adverse effect on rivers, lakes, springs, or wetlands.

5.7.1 The guidelines to achieve this policy are set out in Table 11.

**Table 11. Environmental Guidelines – Groundwater Quantity
Guidelines that apply across the entire Hawke’s Bay region**

Issue	Guideline
1.Demand	The safe yield or groundwater allocation limit identified for an aquifer should not be exceeded.
2. Effects of takes on water quality	Takes should not contribute to the intrusion of salt water into fresh water aquifers.
3. Effects of takes on levels of rivers, lakes, springs and wetlands	Other than in the Tukituki River catchment, takes should not cause a reduction in the flow of rivers, levels of springs or lakes or ecologically significant wetlands. Takes in the Tukituki River catchment are managed under POL TT11.
4. Effects of new takes on existing authorised users	The take should not adversely impact on existing efficient groundwater or surface water takes unless written approval from affected persons is obtained.

Explanation and Reasons

5.7.2 Policy 77 recognises that groundwater is a critical resource in Hawke’s Bay, and in many areas is the main source of water. It is therefore necessary to ensure that the resource is managed in a sustainable manner to accommodate a variety of needs. It is also important to recognise that demand for the resource is high across a variety of sectors, in particular horticulture and agriculture. It is critical that there is a degree of protection for existing resource consent holders and permitted users whose takes are efficient, from adverse effects of new or proposed takes.

²¹ For the purposes of this Plan “**efficient taking**” of groundwater means abstraction by a bore which penetrates the aquifer from which water is being drawn at a depth sufficient to enable water to be drawn all year (i.e. the bore depth is below the range of seasonal fluctuations in groundwater level), with the bore being adequately maintained, of sufficient diameter and screened to minimise drawdown, with a pump capable of drawing water from the base of the bore to the land surface.

POL 78 IMPLEMENTATION OF ENVIRONMENTAL GUIDELINES – GROUNDWATER QUANTITY

5.7.3 To implement the environmental guidelines for groundwater quantity set out in Policy 77 predominantly in the following manner:

- (a) **Regional rules** – The environmental guidelines have been incorporated in conditions, standards and terms in the rules set out in Chapter 6 of this Plan, and to guide the level of regulation, as appropriate. In particular minor takes and uses of groundwater have been permitted provided adverse effects are managed in accordance with the environmental guidelines.
- (b) **Resource consents** – The environmental guidelines will also be used in the process of making decisions on resource consents, in accordance with section 104 (1)(b) of the RMA.

Explanation and Reasons

5.7.4 Policy 78 establishes how the environmental guidelines for groundwater quantity will be implemented. They will be used in rules, and in the resource consent process.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Avoid any significant adverse effects of water takes on the long term quantity of groundwater in the regions aquifers	Water level trends	Council SER monitoring
The availability of groundwater for use without it being taken at a rate that depletes the resource beyond a sustainable level	Water level trends	Council SER monitoring
Avoid or remedy significant adverse effects of groundwater takes on rivers, lakes, ecologically significant wetlands and springs	Flow or level data	Council surface water monitoring programme

5.8 Beds of Rivers and Lakes

OBJECTIVE

- OBJ 45** The maintenance or enhancement of the natural and physical resources, and use and values, of the beds of rivers and lakes within the region as a whole.

Refer section 2.2 of this Plan

POLICY

POL 79 ENVIRONMENTAL GUIDELINES – BEDS OF RIVERS AND LAKES

- 5.8.1 To manage the effects of activities affecting river beds and lake beds in accordance with the environmental guidelines set out in Table 12 below.

Table 12. Environmental Guidelines – Beds of Rivers and Lakes

Issue	Guideline
1. Fish passage	The activity should be undertaken in a manner that continues to provide for the existing passage of fish past the structure.
2. Fish spawning	In areas of fish spawning the activity should be undertaken in a manner that minimises adverse effects on overall fish spawning patterns.
3. Bed stability	No long term or ongoing acceleration of the rate of erosion or accretion of the bed of a river or lake as a result of any activity in a river bed or lake bed.
4. Habitat	Adverse effects on the habitat of aquatic and terrestrial flora and fauna within the bed of a river or lake should be avoided, remedied or mitigated.
5. Flow regimes	Adverse effects on natural flow regimes should be avoided where this is possible, or remedied or mitigated where avoidance is not possible.
6. Other structures & activities	There should be no significant adverse effects, including by way of destabilisation, on lawful existing structures or activities within the bed of a river or lake.
7. Flood & debris risk	There should be no reduction in the ability of the channel to convey flood flows, and no significant impedance to the passage of floating debris.
8. Damage to property	There should be no damage caused, and no increase in the risk of damage, to any property, including river control works, unless written approval is obtained from any affected parties.
9. Temporary activities	Upon completion of any temporary activity affecting the bed of a river or lake, the bed should as far as practicable be restored to no less than the state it was in prior to the activity taking place.
10. Outstanding natural features	Adverse effects on any outstanding natural features within river and lake beds should be avoided, remedied or mitigated.

Explanation and Reasons

- 5.8.2 Policy 79 sets out environmental guidelines for the management of activities affecting river beds and lake beds, including structures in, on, under or over river or lake beds, and bed disturbances. The environmental guidelines address the management of both natural and physical resources within river beds and lake beds.

POL 80 IMPLEMENTATION OF ENVIRONMENTAL GUIDELINES – RIVER BEDS & LAKE BEDS

5.8.3 To implement the environmental guidelines for river beds and lake beds set out in Policy 79 predominantly in the following manner:

- (a) **Regional rules** – The environmental guidelines have been incorporated in conditions, standards and terms in the rules set out in Chapter 6 of this Plan, and to guide the level of regulation, as appropriate. In particular, the use, maintenance and removal of structures have been allowed provided adverse effects are managed in accordance with the environmental guidelines.
- (b) **Resource consents** – The environmental guidelines will also be used in the process of making decisions on resource consents, in accordance with section 104 (1)(b) of the RMA.

Explanation and Reasons

5.8.4 Policy 80 establishes that the environmental guidelines for river and lake beds will be used to guide regulation. They have been used in rules, and will be used in resource consent processes.

ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
Fish passage and spawning are able to continue despite the erection or use of a structure or bed disturbance	Abundance of fish in selected locations	Department of Conservation Fish and Game HBRC
Avoidance, remedy or mitigation of adverse effects on natural flow regimes	Natural flow regimes	Flow monitoring programme
No significant adverse effects on existing structures or activities within the bed of a river or lake	Destabilisation of existing structures or activities	Compliance monitoring
No reduction in ability of channels to convey flood flows	River bed cross section profiles	Asset Management Plans and flow monitoring
No damage to property by works in river beds, without owners consent	Reports of damage from river control works	Occasional event reports
Restoration of river or lake bed following temporary activity	As far as practicable the bed is restored to at least its state prior to activity occurring	Compliance monitoring
Aquatic habitat is maintained at a sustainable level	<ol style="list-style-type: none"> 1. Temperature not changed by more than 3°C nor raised above 25°C; 2. dissolved oxygen not exceeding guideline values; 3. ammoniacal nitrogen levels not exceeding guideline values; 4. soluble reactive phosphorous values not exceeding guideline values; 5. no loss of fish species or indigenous invertebrates 	Council water quality monitoring programme

5.9 Tukituki River Catchment

5.9.1 FRESH WATER OBJECTIVES

- OBJ TT1** To sustainably manage the use and development of land, the discharge of contaminants including nutrients, and the taking, using, damming, or diverting of fresh water in the Tukituki River catchment so that:
- (a) Groundwater levels, river flows, lake and wetland levels and water quality maintain or enhance the habitat and health of aquatic ecosystems, macroinvertebrates, native fish and trout;
 - (b) Water quality enables safe contact recreation and food gathering;
 - (ba) Water quality and quantity enables safe and reliable human drinking water supplies;
 - (c) The frequency and duration of excessive periphyton growths¹¹ that adversely affect recreational and cultural uses and amenity are reduced;
 - (d) The significant values of wetlands are protected;
 - (e) The mauri of surface water bodies and groundwater is recognised and adverse effects on aspects of water quality and quantity that contribute to healthy mauri are avoided, remedied or mitigated; and
 - (f) The taking and use of water for primary production and the processing of beverages, food and fibre is provided for.
- OBJ TT2** Where the quality of fresh water has been degraded by human activities to such an extent that Objective TT1 is not being achieved, water quality shall not be allowed to degrade further and it shall be improved progressively over time so that OBJ TT1 is achieved by 2030.
- OBJ TT4** To manage the abstraction of surface water and groundwater within a minimum flow regime and allocation limits that achieve OBJ TT1 while recognising that existing takes support significant investment.
- OBJ TT4A** To recognise that industry good practice for land and water management can assist with achieving Objectives TT1, TT2 and TT4.
- OBJ TT5** Subject to Objectives TT1, TT2 and TT4, to enable the development of on-farm storage and Community Irrigation Schemes¹² that improve and maximise the efficient allocation and efficient use of water.

5.9.2 WATER QUALITY POLICIES

POL TT1 SURFACE WATER QUALITY LIMITS, TARGETS AND STATE INDICATORS

1. In surface water bodies¹³ in Water Management Zones 1, 2, 3 and 5 Hawke's Bay Regional Council will (in Table 5.9.1B):
 - (a) Set instream water quality concentration limits and targets¹⁴ for dissolved inorganic nitrogen (DIN) to provide for maintenance or enhancement of the habitat and health of aquatic ecosystems, macroinvertebrates, native fish and trout (with the targets to be met by 1 July 2030);
 - (b) Set instream water quality concentration limits and targets¹⁴ for nitrate-nitrogen (NO₃-N) to protect aquatic fauna from toxicity effects (with the targets to be met by 1 July 2030);
 - (c) Set instream water quality concentration limits and targets¹⁴ for dissolved reactive phosphorus (DRP) and instream targets for periphyton biomass and cover (with the targets to be met by 1 July 2030).
2. In surface water bodies in Water Management Zone 4 Hawke's Bay Regional Council will (in Table 5.9.1B) set dissolved inorganic nitrogen and dissolved reactive phosphorus limits that reflect existing¹⁵ instream water quality concentrations in recognition that the existing level of periphyton biomass and cover is currently acceptable and it should not be permitted to increase due to that Zone's existing high biodiversity values.

¹¹ Growths that exceed the periphyton limits and targets set in Table 5.9.1B.

¹² The term Community Irrigation Scheme as used in chapter 5.9 of the RRMP is defined in the Glossary.

¹³ Excluding Lake Hatuma.

¹⁴ "Limits" apply where the existing water quality is better than the desired numerical value and "targets" apply where the existing water quality is worse than the desired numerical value.

¹⁵ "Existing" is defined in the Glossary.

3. In surface water bodies¹⁶ in all Water Management Zones Hawke's Bay Regional Council will:
 - (a) Set (in Tables 5.9.1A) instream water quality limits/targets for Temperature, Dissolved Oxygen, *Escherichia coli* (*E. coli*), Total Ammoniacal Nitrogen and Other Toxicants;
 - (b) Set (in Table 5.9.1B and C) environmental state indicators¹⁷ for the Macroinvertebrate Community Index (MCI), Visual Water Clarity and Deposited Sediment.
4. Manage point source discharges and the use of production land upstream of any registered drinking water supply takes to ensure compliance with the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 and the Drinking-Water Standards for New Zealand (2005 Revised edition 2008).

POL TT2 GROUNDWATER QUALITY LIMITS

1. For groundwater Hawke's Bay Regional Council will:
 - (a) Manage the adverse effects of activities likely to affect the quality of groundwater located 10m or more below ground level in accordance with the limits for aesthetic, organic and inorganic determinands; *Escherichia coli* and nitrate-nitrogen set in Table 5.9.2;
 - (b) Set (in Table 5.9.2) an environmental state indicator for the annual average concentration of nitrate-nitrogen;
 - (c) Manage activities likely to affect the quality of groundwater connected to and affecting surface water quality having regard to effects on the achievement of the limits and targets set in Tables 5.9.1A and 5.9.1B;
 - (d) Manage point source discharges and the use of production land upstream of any registered drinking water supply takes to ensure compliance with the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 and the Drinking-Water Standards for New Zealand (2005 Revised edition 2008).
2. The implementation of POL TT2(1) shall take into account uncertainties associated with variables such as the location of the activity, the spatial and temporal nature of groundwater flows, seasonal variations in groundwater levels, and the effects of historical production land use activities on existing and future groundwater quality.

POL TT3 RECEIVING ENVIRONMENT LIMITS FOR POINT SOURCE DISCHARGES

1. In surface water bodies¹⁸ in all Water Management Zones Hawke's Bay Regional Council will manage point source discharges so that after reasonable mixing, contaminants discharged (either by themselves or in combination with the same, similar, or other contaminants) do not cause:
 - (a) the Table 5.9.1A and 5.9.1B limits to be exceeded; or
 - (b) the following receiving environment limits to be exceeded at any time all year round:
 - (i) The percentage reduction to the Quantitative Macroinvertebrate Community Index (QMCI) score relative to the QMCI upstream of the discharge should not exceed 20% at all flows;
 - (ii) The average of the five days filtered / soluble carbonaceous biochemical oxygen demand (ScBOD₅) shall not exceed 2 mg/L at flows less than the median flow;
 - (iii) The average particulate organic matter (POM) shall not exceed 5 mg/L at flows less than the median flow;
 - (iv) The concentration of Total Ammoniacal Nitrogen (TNH₃-N) shall not exceed the acute limits tabulated in Schedule XXIII at all flows (to avoid acute toxicity effects);
 - (v) The percentage reduction to the water clarity relative to the water clarity upstream of the discharge should not exceed:

¹⁶ Excluding Lake Hatuma.

¹⁷ "Indicators" define what the state of certain water quality parameters should be in order to safeguard the life supporting capacity of the water body but they are not "limits" or "targets". The "indicators" stated will be used by Hawke's Bay Regional Council to monitor the effectiveness of the RRMP in achieving the purpose of the RMA in the Tukituki River catchment. The monitoring data collected on the indicators will also inform decision-makers on consent applications about the state of the background environment against which applications should be assessed.

¹⁸ Excluding Lake Hatuma.

1. 20% at flows less than the median flow in all rivers in Water Management Zone 4;
 2. 20% at flows less than the median flow in the mainstem of the Tukituki River in Water Management Zones 1 and 3 and the mainstem of the Waipawa River and the Mangaonuku Stream in Water Management Zone 2;
 3. 30% at flows less than the median flow in all other rivers in the Tukituki catchment.
2. The implementation of POL TT3(1) shall take into account:
- (a) measurement uncertainties associated with variables such as location, flows, seasonal variation and climatic events;
 - (b) in relation to discharges, the degree to which a discharge is of a temporary nature, or is associated with necessary maintenance work.

POL TT3A MANAGING EXISTING COMMUNITY WASTEWATER DISCHARGES

1. Existing community wastewater discharges to surface water are provided for on the basis of best practicable option treatment over time.

POL TT4 IMPLEMENTING THE NITROGEN LIMITS AND TARGETS

1. To ensure that the Table 5.9.1B nitrate-nitrogen and dissolved inorganic nitrogen surface water quality limits and the Table 5.9.1D Tukituki LUC Natural Capital Leaching Rates are not exceeded on a whole of farm property or whole of farming enterprise basis:

- (a) From 1 June 2013 onwards farm properties or farming enterprises exceeding 4 hectares in area shall be required to either:
 - (i) Keep the records specified in Schedule XXI so that Nutrient Budgets can be calculated using Overseer¹⁹ (or an alternative model approved by Hawke's Bay Regional Council²⁰) prior to 31 May 2018; or
 - (ii) Keep copies of Nutrient Budget input and output files that have been prepared in accordance with an industry programme approved by Hawke's Bay Regional Council;

Except that for low intensity farming systems the property size threshold shall be 10 hectares. This exception is to recognise that low intensity farming systems have low nitrogen losses. The farming systems included in this category may be further developed and included in the Regional Resource Management Plan via a plan change prior 31 May 2018.

- (b) By 1 June 2018 farm properties or farming enterprises exceeding 4 hectares in area shall prepare and maintain a Farm Environmental Management Plan prepared in accordance with Schedule XXII. The Farm Environmental Management Plan (FEMP) should be in proportion to the complexity or intensity of the particular farming operation. The FEMP shall be updated at three yearly intervals from 1 June 2018.

Except that for low intensity farming systems the property size threshold shall be 10 hectares. This exception is to recognise that low intensity farming systems have low nitrogen losses. The farming systems included in this category may be further developed and included in the Regional Resource Management Plan via a plan change prior 31 May 2018.

- (c) Require industry good practices to be implemented on farm properties or farming enterprises in order to minimise nitrogen losses;
- (d) Until 31 May 2018 the managers of farm properties and farming enterprises shall be required to measure or model nitrogen leaching rates to support the preparation of Nutrient Budgets²¹ to be included in a Farm Environmental Management Plan. The Nutrient Budgets must be updated thereafter at least 3 yearly. The initial Nutrient Budget must be provided to Hawke's Bay Regional Council while the three yearly updates need only be provided to the Council upon written request.

¹⁹ Overseer is a Nutrient Budget model that calculates and estimates the nutrient flows in a productive farming system. It is owned and administered by the Ministry of Primary Industry, Fertiliser Association of New Zealand and AgResearch. The Overseer model is available at <http://www.overseer.org.nz/Home.aspx>. The application of Overseer or an alternative model is set out in the procedural guideline to be developed by HBRC.

²⁰ To be approved by Hawke's Bay Regional Council any alternative nitrogen loss model would need to be fit for purpose for the production land use, have a demonstrable repeatability of results, be field tested, and be validated to accepted scientific standards.

²¹ A Nutrient Budget is defined in the Glossary.

- (e) Require that the records kept in accordance with POL TT4(1)(a), (b) and (d) are to be reviewed annually in accordance with an industry programme approved by Hawke's Bay Regional Council (or in the absence of an industry programme, as directed by Hawke's Bay Regional Council) to assess whether any farm system changes are evident in the previous 12 months. If such a change is evident, the Nutrient Budget for the farm system must be updated to determine whether the nitrogen leached from the land exceeds the relevant limit in Table 5.9.1D on a whole of farm property or whole of farming enterprise basis and the updated Nutrient Budget must be provided to the Hawke's Bay Regional Council.
 - (f) Allow until 31 May 2020 farm properties or farming enterprises to implement any necessary changes to their farming systems to achieve the Table 5.9.1D Tukituki LUC Natural Capital Nitrogen Leaching Rates on a whole of farm property or whole of farming enterprise basis.
 - (g) Require the use of production land²² on properties greater than 4 hectares in area in those Tukituki River sub-catchments where there are exceedances of Table 5.9.1B (surface water) or Table 5.9.2 (groundwater) nitrate-nitrogen or dissolved inorganic nitrogen limits and targets²³ to be subject to a land use consent under Rule TT2 or Rule TT2A if the targets are still exceeded or become exceeded after 1 June 2020 unless the farm property or farming enterprise is a low intensity farming system or solely comprises plantation forestry;
 - (h) By 31 May 2018 HBRC will develop a Procedural Guideline in collaboration with primary sector representatives to aid in the implementation of POL TT4. The Guideline will include, but not be limited to: the methodology for estimating a Nutrient Budget using Overseer (or an alternative model approved by Hawke's Bay Regional Council), the process for monitoring water quality trends and alerting affected farming properties if water quality limits are being approached; delineation of the 'capture zone' for the relevant water body (the area of groundwater or surface water contributing to the particular part of the water body in question); and, where Rule TT2 is triggered, an adaptive management process for reducing nitrogen leaching from affected farming properties based on the implementation of progressively more stringent on-farm management practices.
 - (i) After 1 June 2020 manage activities with leaching rates that exceed those specified in Table 5.9.1.D through a resource consent process under Rule TT2 where such exceedance is 30% or less or Rule TT2A where leaching rates in Table 5.9.1D are exceeded by more than 30%.
 - (j) For the purposes of achieving compliance with Table 5.9.1D, the estimated leaching rate shall be a 4 year rolling average of the estimated nitrogen leaching rates derived from Nutrients Budgets prepared after 1 June 2013.
2. To assist with monitoring the effectiveness of POL TT4(1) the Hawke's Bay Regional Council will:
- (a) Monitor instream water quality at existing State of the Environment monitoring sites to assess compliance with Table 5.9.1B dissolved inorganic nitrogen (DIN) and nitrate-nitrogen limits and targets; and
 - (b) Incorporate that information in its regular state of the environment reporting and report on it annually.

POL TT5 IMPLEMENTING THE PHOSPHORUS LIMITS AND TARGETS

1. To ensure that the Table 5.9.1B dissolved reactive phosphorus (DRP) surface water quality limits are not exceeded and to attain the Table 5.9.1B DRP targets²⁴ by 1 July 2030 Hawke's Bay Regional Council will:
- (a) From 1 June 2018 onwards, require farm properties or farming enterprises exceeding 4 hectares in area to prepare and maintain a Phosphorus Management Plan as part of a Farm Environmental Management Plan prepared in accordance with Schedule XXII.
- Except that for low intensity farming systems the property size threshold shall be 10 hectares. This exception is to recognise that low intensity farming systems have low phosphorus losses. The farming systems included in this category may be further developed and included in the Regional Resource Management Plan via a plan change prior 31 May 2018.
- (b) In areas where the Table 5.9.1B DRP targets are exceeded²⁵:

²² POL TT4(1)(g) does not apply to discharges of industrial and trade wastewater to land. Those activities are managed under POLs 16 and 17 and Rules 49 and 52 of the RRMP.

²³ At the time of Plan Change notification, based on two discrete sampling exercises, there were localised exceedances in the Kahahakuri and Mangapohio tributaries.

²⁴ The numerical values in Tables 5.9.1A and 5.9.1B are to be treated as "limits" at locations where the existing water quality is better than the relevant numerical value and as "targets" at locations where the existing water quality is worse than the relevant numerical value. At the time of Plan Change notification, only the Waipawa River and Tukituki River catchments upstream of SH50 and the Makaretu River were complying with the limits.

²⁵ POL TT5(1)(a) also applies to discharges of industrial or trade wastewater to land with such discharges being regulated under Rule 52 of the RRMP.

- (i) Ensure existing point source discharges do not contribute any additional phosphorus load to the Tukituki River or its tributaries and through consent review and renewal processes seek to reduce existing loads where necessary to progress towards phasing out the exceedance;
 - (ii) Ensure any new point source discharges will not increase existing DRP concentrations in the Tukituki River or its tributaries after reasonable mixing;
- (c) In areas where the Table 5.9.1B DRP limits are not exceeded, ensure that any new point source discharges will not cause those limits to be exceeded in the Tukituki River or its tributaries after reasonable mixing;
- (d) Require any application for a resource consent for the use of production land on farm properties or farming enterprises to demonstrate:
- (i) In areas where the Table 5.9.1B DRP limits are not exceeded that the proposed activity will not lead to an exceedance of the limits in the Tukituki River or its tributaries;
 - (ii) In areas where the Table 5.9.1B DRP targets are exceeded that the proposed activity will not increase existing DRP concentrations in the Tukituki River or its tributaries and that all reasonable and practicable opportunities have been taken to reduce²⁶ phosphorus losses from the farm property;
 - (iii) The likely achievement of (i) and (ii) through the preparation of a Phosphorus Management Plan.
- (e) Recognise that significant parts of the Tukituki River catchment are generally in a state of over-allocation with respect to instream DRP limits and therefore through the implementation of land use rules:
- (i) On land that is less than 15 degrees in slope, require livestock (other than sheep) to be excluded from lakes, wetlands and flowing rivers (whether they are intermittent or permanent) and their margins by 31 May 2020;
 - (ii) On land that is greater than 15 degrees in slope and where the stocking rate of livestock excluding sheep exceeds 18 stock units per hectare, either:
 1. require livestock (other than sheep) to be excluded from lakes, wetlands and flowing rivers (whether they are intermittent or permanent) and their margins by 31 May 2020; or
 2. other than the Papanui, Porangahau, Maharakeke, Tukipo, Kahahakuri and upper Tukituki corridor catchments shown in Schedule XIVc, if livestock exclusion is not reasonably practicable a Phosphorus Management Plan prepared as part of the Farm Environmental Management Plan that includes all reasonably practical stock exclusion requirements and other mitigation of phosphorus loss must be prepared and provided to the Hawkes Bay Regional Council by 31 May 2018 and thereafter be implemented by 31 May 2020.
 - (iii) Within the Papanui, Porangahau, Maharakeke, Tukipo, Kahahakuri and upper Tukituki corridor catchments (as shown in Schedule XIVc POL TT5(1)(e)(ii)(1) must be complied with.
 - (iv) Require formed stock races crossing rivers and streams (excluding managed stock crossings) to be bridged or culverted by 31 May 2020;
- (f) Provide land advisory services and incentives, in collaboration with the primary industry sector and the community, prioritising efforts on tributary catchments which significantly exceed the DRP targets. In particular Hawke's Bay Regional Council will:
- (i) Develop a catchment strategy and implementation plan to identify critical source areas for phosphorus and eliminate or reduce phosphorus losses;
 - (ii) Encourage industry good practices to be implemented on farm properties or farming enterprises in order to reduce phosphorus losses;
 - (iii) Encourage riparian planting in conjunction with permanent stock exclusion fencing;
 - (iv) In the Water Management Zone 5 (Papanui), encourage riparian planting which provides shading for rivers and streams in order to reduce macrophyte growth and improve life-supporting capacity of the stream;

²⁶ Relative to the losses that were occurring from the farm property prior to the land use change that triggered the need for a Rule TT2 land use resource consent.

- (v) Encourage surface runoff from stock races, stock yards, bridges and culverts to be diverted away from rivers and streams and discharged to land.
2. To assist with monitoring the effectiveness of POL TT5(1) the Hawke's Bay Regional Council will:
- (a) Monitor instream water quality at existing State of the Environment monitoring sites to assess compliance with the Table 5.9.1B DRP limits and targets; and
 - (b) Incorporate that information in its regular state of the environment reporting;
 - (c) In 2025, review the need for an increased regulatory approach taking into account whether:
 - (i) Instream DRP concentration trends indicate that the Table 5.9.1B DRP targets are likely to be met;
 - (ii) Monitoring indicates that the Table 5.9.1B periphyton limit and targets are likely to be met; and
 - (iii) The indicators set out in the Monitoring, Evaluation, Reporting and Improvement Plan²⁷ are being met.

POL TT6 DECISION-MAKING CRITERIA – USE OF PRODUCTION LAND

Land not associated with the Operation of a Community Irrigation Scheme

1. When considering an application for a land use consent to authorise the use of production land on farm properties or farming enterprises not associated with the operation of a Community Irrigation Scheme, the consent authority must have regard to the following matters:
- (a) The extent to which the use, in combination with other permitted or consented activities, will result in the nitrate-nitrogen and dissolved inorganic nitrogen limits in Table 5.9.1B being approached or exceeded;
 - (b) The extent to which the Tukituki LUC Natural Capital Nitrogen Leaching Rates specified in Table 5.9.1D are exceeded on a whole of farm property or whole of farming enterprise basis;
 - (c) Whether the applicant has supplied a Farm Environmental Management Plan prepared in accordance with Schedule XXII which:
 - (i) Adequately describes the farm property or farming enterprise (including soils, climate, topography and environmental risks) and the proposed production land use on the farm property or farming enterprise;
 - (ii) Contains a Nutrient Budget for the farm property or farming enterprise;
 - (iii) Contains a Phosphorus Management Plan for the farm property or farming enterprise;
 - (iv) Describes how industry good practices will be implemented to minimise nutrient (nitrogen and phosphorus) losses, sediment losses and faecal bacteria discharges from the farm property or farming enterprise appropriate to the production land use and land type;
 - (v) Where the farm property or farming enterprise is in Water Management Zone 5, ensures appropriate riparian management measures are implemented to minimise nutrient losses and reduce macrophyte growth in order to improve the life-supporting capacity of the river or stream.
 - (d) Whether conditions on the land use consent will ensure that the Farm Environmental Management Plan supplied under (c) is maintained, submitted to Hawke's Bay Regional Council as may be required by the Council, and implemented by the farm property or farming enterprise owner;
 - (e) Imposing a three year lapse period in order to discourage speculative land use intensification applications.
 - (f) Phasing out of existing over-allocation.

Land Associated with the Operation of a Community Irrigation Scheme

2. When considering an application for a land use consent to authorise use of production land on multiple farm properties or farming enterprises taking water from a Community Irrigation Scheme, the consent authority must

²⁷ The Monitoring Evaluation, Reporting and Improvement Plan (MERI) is one of the key programmes of the Tukituki Catchment Implementation Plan which outlines how the non-regulatory approaches in Change 6 will be implemented.

have regard to the extent to which management plan and/or contractual mechanisms governing the Scheme's operation ensure that:

- (a) In each respective Water Management Zone, the farm properties or farming enterprises serviced by the Scheme will not collectively leach an amount of nitrogen that, in combination with nitrogen leached from non-Scheme farm properties or farming enterprises as a result of production land use activities permitted by this Plan or authorised by consents already granted, cause the nitrate-nitrogen and dissolved inorganic nitrogen limits in Table 5.9.1B to be exceeded;
- (b) Where the farm property or farming enterprise is in Water Management Zone 5, appropriate riparian management and wetland enhancement measures are implemented to minimise nutrient losses and reduce macrophyte growth in order to improve the life-supporting capacity of the river or stream;
- (c) In each respective Water Management Zone, the farm properties or farming enterprise serviced by the Scheme will collectively:
 - (i) In Water Management Zones where the Table 5.9.1B DRP concentration targets are exceeded, not cause DRP concentrations in the Tukituki River or its tributaries to increase compared with a baseline measured or modelled at the time of any resource consent application and ensure that all reasonable and practicable opportunities have been taken to reduce phosphorus losses;
 - (ii) In Water Management Zones where the Table 5.9.1B DRP concentration limits are not exceeded, not cause those limits to be exceeded;
- (d) Any farm property or farming enterprise serviced by the Scheme prepares and maintains a Farm Environmental Management Plan prepared in accordance with Schedule XXII which:
 - (i) Adequately describes the farm property or farming enterprise (including soils, climate, topography and environmental risks) and the proposed production land use on the farm property or farming enterprise;
 - (ii) Contains a Nutrient Budget for the farm property or farming enterprise;
 - (iii) Contains a Phosphorus Management Plan for the farm property or farming enterprise;
 - (iv) Describes how industry good practices will be implemented to minimise nutrient (nitrogen and phosphorus) losses, sediment losses and faecal bacteria discharges from the farm property or farming enterprise appropriate to the production land use and land type;
- (e) Any farm property or farming enterprise serviced by the Scheme is operated in accordance with its Farm Environmental Management Plan;
- (f) Scheme-wide nutrient loss compliance modelling, auditing and enforcement procedures are implemented for nitrogen and phosphorus.

Land Use Consent Duration

- 3 From 4 May 2013 any land use consents granted under Rule TT2 or Rule TT2A to the landowner or occupier shall:
 - (a) have the same expiry date as any section 14 water take irrigation consents for the land, or
 - (b) if there are no irrigation consents for the land then the maximum duration imposed shall not exceed 35 years.

Table 5.9.1A: Surface Water Quality Limits and Targets²⁸ for the Tukituki River Catchment – Catchment Wide

Parameter	Limit or Target
Temperature	The temperature of the water shall be suitable for sustaining the aquatic habitat.
Dissolved Oxygen	The concentration of dissolved oxygen shall exceed 80% of the saturation concentration except in areas of groundwater upwelling including the Porangahau, Maharaekeke, Kahahakuri, Mangaonuku, Papanui sub-catchments.
<i>E. coli</i>	260 <i>Escherichia coli</i> per 100 millilitres for the 1 November to 30 April bathing season (for flows below the median flow). 550 <i>Escherichia coli</i> per 100 millilitres for the 1 November to 30 April bathing season (for flows between the median flow and three times the median flow). 550 <i>Escherichia coli</i> per 100 millilitres for the rest of the year (for flows below three times the median flow). The methodology for compliance is a maximum 95 th percentile calculated as a minimum of 20 sampling points.
Total Ammoniacal Nitrogen (TNH ₃ -N)	99% species protection level for total ammoniacal nitrogen (TNH ₃ -N) as stipulated in the most recent version of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (the ANZECC guidelines) and as tabulated in Schedule XXIII. ¹⁹
Other Toxicants	95% species protection levels for toxicants (other than nitrate-nitrogen and total ammoniacal nitrogen) as stipulated in the most recent version of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (the ANZECC guidelines) for Water Management Zones 1, 2, 3 and 5. ²⁹ 99% species protection levels for toxicants (other than nitrate-nitrogen and total ammoniacal nitrogen) as stipulated in the most recent version of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (the ANZECC guidelines) for Water Management Zone 4. ¹⁹

²⁸ The numerical values in Table 5.9.1A are to be treated as “limits” at locations where the existing water quality is better than the relevant numerical value and as “targets” at locations where the existing water quality is worse than the relevant numerical value.

²⁹ For clarity this limit requires that the risk evaluation process set out in the ANZECC Guidelines will be followed on the basis of the specified protection level (99% or 95%). It does not mean that default trigger values defined in the ANZECC Guidelines will be used as limits.

Table 5.9.1B: Surface Water Quality Limits, Targets³⁰ and Indicators for the Tukituki River Catchment – Zone Specific.

The Water Management Zones referred to in Table 5.9.1B are mapped in Schedule XV.

The key to Table 5.9.1B is provided below Table 5.9.1C.

Water Management Zone	Mainstems/ Tributaries ³¹	Periphyton Limits and Targets				DRP Limits and Targets	Nitrate-nitrogen Limits and Targets		DIN Limits and Targets	Indicators	
		(a)	(b)	(c)	(d)		(a)	(b)		Water Clarity	MCI
Zone 1 Lower Tukituki and Waipawa Rivers and Tributaries (excluding Papanui Stream catchment)	Mainstems	120	30	60	50	0.010	2.4	3.5	0.8	2.8	100
	Tributaries					0.015				1.6	100
Zone 2 Middle Waipawa River and Tributaries above SH2	Waipawa River	120	30	60	50	0.010	3.8	5.6	0.8	3.0	120
	Mangaonuku Stream					0.015				4.0	
	Tributaries					0.015				1.6	100

³⁰ The numerical values in Table 5.9.1B are to be treated as “limits” at locations where the existing water quality is better than the relevant numerical value and as “targets” at locations where the existing water quality is worse than the relevant numerical value.

³¹ Mainstems include the following rivers:

- Zone 1 mainstem of the Tukituki River
- Zone 3 mainstems of the Tukituki and Tukipo rivers, and the Maharakeke, Porangahau, Makaretu and Kahahakuri streams.

Water Management Zone	Mainstems/ Tributaries ³²	Periphyton Limits and Targets				DRP Limits and Targets	Nitrate-nitrogen Limits and Targets		DIN Limits and Targets	Indicators	
		(a)	(b)	(c)	(d)		(a)	(b)		Water Clarity	MCI
Zone 3 Middle Tukituki River and Tributaries above Tapairu Road	Mainstems					0.010				3.0	120 ³³
	Tributaries	120	30	60	50	0.015	3.8	5.6	0.8	1.6	100
Zone 4 Upper Tukituki and Waipawa Rivers	All	50	30	60	50	0.004	n/a	1.5	0.150	3.3	120
Zone 5 Papanui Stream	All	120	30	60	50	0.015	2.4	3.5	0.8	1.6	100

The Water Management Zones referred to in Table 5.9.1B are mapped in Schedule XV.
The Key to Table 5.9.1B is provided below Table 5.9.1C.

³² Mainstems include the following rivers:

- Zone 1 mainstem of the Tukituki River
- Zone 3 mainstems of the Tukituki and Tukipo rivers, and the Maharakeke, Porangahau, Makaretu and Kahahakuri streams.

³³ Except that in the Maharakeke and Porangahau sub-catchments the MCI target is 100.

Table 5.9.1C: Surface Water Quality Deposited Sediment Indicators for the Tukituki River Catchment – Zone Specific.

The Water Management Zones referred to in Table 5.9.1C are mapped in Schedule XV.
The key to Table 5.9.1C is provided below.

Water Management Zone	Deposited Sediment Indicators (% sediment cover)
Zone 1 Lower Tukituki and Waipawa Rivers and Tributaries (excluding Papanui Stream)	10% in the Waipawa and Tukituki Rivers and 20% in all other naturally hard bottomed streams and rivers
Zone 2 Middle Waipawa River and tributaries above SH2	10% in the Waipawa River and Mangaonuku Stream and 20% in all other naturally hard bottomed streams and rivers
Zone 3 Middle Tukituki River and tributaries above Tapairu Road	10% in the Tukituki, Tukipo and Makaretu rivers and 20% in all other naturally hard bottomed streams and rivers (including Maharakeke, Porangahau and Kahahakuri Streams)
Zone 4 Upper Tukituki and Waipawa Rivers	10% in all naturally hard bottomed streams and rivers (including Tukituki, Waipawa and Makaroro Rivers)
Zone 5 Papanui Stream	20% in the Papanui Stream and all other naturally hard bottomed streams and rivers

Key to the Table 5.9.1B and C limits, targets and indicators:

Periphyton:

- (a) Zone 4: Annual maximum algal biomass (mg Chlorophyll *a*/m²). The annual maximum algal biomass shall be calculated as the maximum of monthly monitoring results obtained within an accrual period of 30 days over a period of 1 year.
Zones 1, 2, 3 and 5: Annual maximum algal biomass (mg Chlorophyll *a*/m²). The annual maximum algal biomass shall be calculated as the annual maximum of monthly monitoring results obtained within an accrual period of 30 days over a period of 1 year.
- (b) Annual maximum cover of visible river bed by periphyton as filamentous algae more than 2 cm long. The annual maximum algal cover shall be calculated as the annual maximum of monthly monitoring results obtained within an accrual period of 30 days over a period of 1 year.
- (c) Annual maximum cover of visible river bed by periphyton as diatoms or cyanobacteria mats more than 0.3cm thick. The annual maximum algal cover shall be calculated as the annual maximum of monthly monitoring results obtained within an accrual period of 30 days over a period of 1 year.
- (d) Annual maximum cover of visible river bed by periphyton as cyanobacteria mats more than 0.3 cm thick. The annual maximum algal cover shall be calculated as the annual maximum of monthly monitoring results obtained within an accrual period of 30 days over a period of 1 year.

Phosphorus:

Maximum average concentration of dissolved reactive phosphorus (DRP) when the river flow is at or below 3 times the median flow (mg DRP/L). The average concentration of DRP shall be calculated as the average of monthly monitoring results obtained over a period of 5 consecutive years.

Nitrate Nitrogen:

- (a) Maximum median concentration of nitrate-nitrogen (mg NO₃-N /L). The median concentration of nitrate-nitrogen shall be calculated as the median of monitoring results obtained over a period of 1 year.
- (b) Maximum 95th percentile concentration of nitrate-nitrogen (mg NO₃-N /L). The 95th percentile concentration of nitrate-nitrogen shall be calculated as the 95th percentile of monitoring results obtained over a period of 1 year.

Dissolved Inorganic Nitrogen:

Average concentration of dissolved inorganic nitrogen (mg DIN /L) at all river flows. The average concentration of DIN shall be calculated as the average of monthly monitoring results obtained over a period of 5 consecutive years.

Water Clarity Indicator:

Minimum median visual water clarity at or below median flow (m), measured as the horizontal sighting range of a black disc. The median visual clarity shall be calculated over a period of 5 consecutive years, filtered to exclude data points collected at river flows exceeding the median flow.

MCI indicator: Minimum average macro-invertebrate community index. The average MCI shall be calculated over a period of 5 consecutive years.

% Sediment Cover indicator: Maximum average % fine sediment cover where 'fine' is defined as particles less than 2 mm in diameter (excludes naturally soft bottom streams). The average % Sediment Cover shall be calculated over a period of 5 consecutive years.

Table 5.9.1D: Tukituki LUC Natural Capital; Nitrogen Leaching Rates³⁴

LUC Class	I	II	III	IV	V	VI	VII	VIII
Rate (KgN/ha/year)	30.1	27.1	24.8	20.7	20	17	11.6	3

Table 5.9.2: Groundwater Water Quality Limits and Indicators Applicable 10m or More Below Ground Level in Productive Aquifer Systems

Aesthetic determinands	<i>E. coli</i>	Nitrate-nitrogen	Nitrate-nitrogen Indicator	All other determinands
Guideline value for any aesthetic determinand [Drinking-Water Standards for New Zealand (DWSNZ)]	Maximum concentration of Escherichia coli per 100 millilitres	Maximum 95 th percentile concentration of nitrate-nitrogen (mg NO ₃ -N /L)	Maximum annual average concentration of nitrate-nitrogen (mg NO ₃ -N /L)	All other inorganic or organic determinands of health significance [DWSNZ]
Within guideline	<1	11.3	5.65	Maximum acceptable value (MAV) ³⁵

Key for Table 5.9.2:

Nitrate Nitrogen:

- (a) Maximum annual average concentration of nitrate-nitrogen (mg NO₃-N /L) shall be calculated as the annual average of monitoring results obtained over a period of 5 consecutive years.
- (b) Maximum 95th percentile concentration of nitrate-nitrogen (mg NO₃-N /L) shall be calculated as the 95th percentile of monitoring results obtained over a period of 5 consecutive years.

Note: These limits apply after reasonable mixing and disregarding the effect of any natural conditions that may affect the water body.

³⁴ These are calculated on a whole of farm property or whole of farming enterprise basis.

³⁵ The MAV is to be determined in accordance with the Drinking Water Standards for New Zealand (2005/ Revised edition 2008) or subsequent version, Appendix 1 and Table A1.3. Compliance with chemical determinands is to be based on results obtained over one year and where the sampling frequency is monthly or more frequently the number of exceedances required to be assessed as non-complying is zero.

5.9.3 WATER QUANTITY POLICIES

POL TT7 MINIMUM FLOW REGIME

1. In Surface Water Allocation Zones 1, 2 and 3:
 - (a) The minimum flow regime shall apply to existing³⁶ and new consented takes, but excluding activities which involve storage of water behind an instream dam and downstream takes reliant on the release of that stored water.
 - (b) Transition periods shall be provided to implement increased minimum flows as shown in Table 5.9.3, to provide existing water users a reasonable time to adapt to the reduced security of supply, find alternative sources of water or provide on-farm water storage;
 - (c) Subject to (d) below, consented takes from the mainstems of the Tukituki and Waipawa Rivers shall be subject to the downstream minimum flows for the mainstems set in Table 5.9.3. Takes from tributaries shall be subject to both the downstream mainstem minimum flows and the relevant tributary minimum flow set in Table 5.9.3.
 - (d) Consented takes downstream of the Red Bridge flow management site (Waimarama Rd) shall be subject to the minimum flow at the Red Bridge flow management site except for consented takes below Black Bridge (Mill Rd) which shall not be subject to minimum flow restrictions set in Table 5.9.3;
 - (e) Where a Community Irrigation Scheme stores water and subsequently releases it into a river for use by members of the Scheme or for the purpose of flushing flows, other (non-Scheme) takes from that river will be managed by using a river flow (for the purpose of comparing to the allowable Table 5.9.3 minimum flow) calculated or modelled by Hawke's Bay Regional Council to be that which would have occurred in the absence of the Scheme. This will ensure that water stored and released by the Scheme is used by Scheme participants and is not taken by other users.

POL TT8 ALLOCATION LIMITS

1. To manage the taking of surface water and groundwater in the Tukituki River catchment by:
 - (a) Recognising that although allocation limits for surface water should be determined in order to provide a reasonable security of supply (such as avoiding an irrigation ban of ten consecutive days occurring more frequently than one year in ten), this is not achievable in the Tukituki River catchment given the minimum flows set in Table 5.9.3 and the existing volumes of water being abstracted;
 - (b) Recognising that there is a significant degree of interconnectedness between groundwater in the Ruataniwha Basin and surface water flows within the basin as a whole and consequently surface flows further downstream;
 - (c) Setting surface water and groundwater allocation limits that are based on the existing volume of consented abstraction (Tables 5.9.4 and 5.9.5 and Schedule XVIII);
 - (ca) Enabling additional groundwater to be abstracted as a discretionary activity (Table 5.9.5 Tranche 2) provided that river flows are augmented to maintain the relevant minimum flows specified in Table 5.9.3 commensurate to the scale of effect of the Tranche 2 groundwater take.
 - (d) Applying the Table 5.9.4 and 5.9.5 water allocation limits only to consented takes and not to takes allowed under section 14(3)(b) of the RMA, nor to takes occurring prior to 4 May 2013 under Rules 53 and 54, nor to the construction and operation of in-stream dams (including damming, taking, diverting, using and discharging), nor to downstream takes of water released from an instream dam for members of a Community Irrigation Scheme.

³⁶ Upon review or renewal.

Table 5.9.3: Tukituki River Catchment Minimum Flows

Surface Water Allocation Zone	Flow Management Site	Level of habitat protection	Minimum Flows (L/sec)	Period to which Minimum Flow applies
Zone 1 Lower Tukituki	Tukituki River at Red Bridge V22: 466581	Current level of protection	3500	Until 30 June 2018
		80% habitat protection for trout upstream of Red Bridge	4300	From 1 July 2018 until 30 June 2023
		90% habitat protection for trout upstream of Red Bridge	5200	From 1 July 2023
		80% habitat protection for trout between Red Bridge and Black Bridge	4300	From 1 July 2018
Zone 1 Papanui Stream	Papanui Stream at Middle Rd V22: 278432	90% habitat protection for longfin eel (estimated equivalent)	53	Ongoing
Zone 2 Waipawa River	Waipawa River at RDS/SH2 V22: 153339	Current level of protection	2300	Until 30 June 2018
		90% habitat protection for longfin eel	2500	From 1 July 2018
Zone 2 Mangaonuku Stream	Mangaonuku Stream U/S Waipawa V22: 116373	Current level of protection	n/a	n/a
		90% habitat protection for highest flow demanding fish species (estimated equivalent)	1170	From 1 July 2018
Zone 3 Tukituki River	Tukituki River at Tapairu Road V22: 183312	Current level of protection	1900	Until 30 June 2018
		90% habitat protection for longfin eel	2300	From 1 July 2018
Zone 3 Tukipo River	Tukipo River at SH50 U22: 948324	Current level of protection	150	Ongoing
Zone 3 Tukipo River	Tukipo River Ashcott Road U22: 080311	90% habitat protection for highest flow demanding fish species (estimated equivalent)	1043	From 1 July 2018

Table 5.9.4: Surface Water Allocation Limits

Surface Water Allocation Zones (Schedule XVI)	Direct Take Allocation Limit (L/sec)	Surface Water Depletion Allocation Limit (L/s)	Total Allocation Limit (L/sec)
Zone 1 - Lower Tukituki River	519	412	931
Zone 2 - Waipawa River and Tributaries above RDS/SH2	643	269	912
Zone 3 - Tukituki River and Tributaries above Tapairu Road	763	716	1,479
Sub- catchment allocation of allocation limit for Zone 3:			
Zone 3 - Kahahakuri Stream	176	174	350
Zone 3 – Makaretu Stream	32	8	40
Zone 3 - Tukipo River	152	84	236
Total catchment	1,925	1,397	3,322

Table 5.9.5: Groundwater Allocation Limits

Groundwater Allocation Zones (Schedule XVII)	Allocation Limit (m ³ /year)	
Zone 1 – Otane Basin	4,134,000	
Zone 2 – Ruataniwha Basin north of the Waipawa River	Tranche 1	7,224,000
Zone 3 – Ruataniwha Basin south of the Waipawa River	Tranche 1	21,277,000
Zones 2 and 3 collectively	Tranche 2	15,000,000
Rest of the catchment	No limit set ³⁷	

POL TT9 IMPLEMENTING MINIMUM FLOW REGIME AND ALLOCATION LIMITS

1. To implement the minimum flow regime and allocation limits in the Tukituki River catchment by:
 - (a) Allowing the renewal of existing surface water and groundwater take consents provided:
 - (i) There is no increase in the rate or the maximum 7-day³⁸ volume of take, except as provided for in (a)(ii) and (b) below;
 - (ii) A seasonal volume³⁹ or annual volume is imposed in accordance with Schedule XVIII.
 - (aa) Reviewing all consents that are not otherwise expiring to impose seasonal and annual volumes in accordance with POL TT9(1)(a) as necessary to ensure integrated management of surface water and groundwater resources. Ruataniwha Basin groundwater take consents will be reviewed in 2015.
 - (ab) Prior to the replacement and review of existing Ruataniwha Basin consents in 2015 or the confirmation of seasonal volumes calculated in accordance with Schedule XVIII (whichever occurs first), in order to avoid potential over allocation the Hawke's Bay Regional Council will not grant new consents utilising Table 5.9.4 and Table 5.9.5 Tranche 1 water (being any increase in existing authorised takes or any applications for new takes).
 - (b) After the replacement and review of existing Ruataniwha Basin consents in 2015, allowing for the further allocation of water, including water that is freed up through the surrender or non-replacement of existing takes by the consent holder, provided the new allocation does not result in any exceedance of the allocation limits in Table 5.9.4 or Table 5.9.5 and, except as provided for in (ba) below, subject to seasonal volumes being imposed in accordance with (a)(ii) above.
 - (ba) Not imposing annual volume restrictions on takes for frost protection.
 - (c) Assessing groundwater take applications against OBJ 44, POL 77 and POL TT11 in areas where no groundwater allocation limit is set in Table 5.9.5.

³⁷ Groundwater takes located outside of Groundwater Allocation Zones 1 to 3 are Discretionary Activities.

³⁸ Where existing consents are renewed, but if a 28-day maximum limit is sought in place of a 7 day limit (as per Policy TT14 (g)) then the maximum 28-day limit will be four times the current, maximum 7 day limit.

³⁹ Seasonal volume is the actual crop water requirement required over a crop's growing season (including any crop rotation).

- (d) Not including any taking of water allowed under s14(3)(b) of the RMA or Rules 53 and 54, or Rule TT3 when summing volumes of take for comparison against the surface water allocation limits in Table 5.9.4 and the groundwater allocation limits in Table 5.9.5.
- (e) Reviewing the need, in 2020 and 2025, to increase the Table 5.9.4 and 5.9.5 allocation limits to include a provision for existing and future s14(3)(b) takes for animal drinking water in the event of a Community Irrigation Scheme progressing.
- (f) Other than for takes which involve the storage of water behind an instream dam and downstream takes reliant on the release of that stored water, when a river is at or below its Table 5.9.3 minimum flow, takes from that river and groundwater takes to which minimum flow restrictions apply in accordance with POL TT11 shall be managed as follows:
 - (i) The taking of water allowed by section 14(3)(b) of the RMA may continue without further restriction;
 - (ii) Takes permitted under Rules 53 and 54 may be required to reduce their daily rate of take if Hawke's Bay Regional Council issues a Water Shortage Direction to that effect;
 - (iii) Consented takes for public water supplies, animal drinking water, animal welfare and sanitation (including dairy shed wash down and milk cooling), marae, schools and other educational facilities shall be required to reduce their daily rate of take to a reasonable and justifiable amount as specified in their consent conditions;
 - (iv) Takes for frost protection and takes for filling agrichemical spray tanks shall continue to be allowed without further restriction;
 - (iva) The taking of water authorised for the sole purpose of avoiding the death of horticultural or viticultural root stock or crops shall be allowed to occur to any extent allowed by conditions of consent as follows:
 1. Water allocated for this purpose shall not exceed a cumulative instantaneous limit across all Surface Water Allocation Zones of 200 L/s;
 2. The water shall only be available five days (120 hours) after minimum flow cessation take restrictions are imposed and where no practicable alternative sources of water are available or accessible;
 3. Access to the water shall be provided as a first priority to the protection of the root stock of permanent horticulture such as orchards and viticulture; and
 4. Access to the water shall be provided as a second priority to the protection of crops (excluding pasture species, animal fodder crops and maize).
 - (v) All other consented takes shall cease, or be managed in accordance with POL TT11.

POL TT10 HIGH FLOW ALLOCATION REGIME

1. To enable the taking of surface water from rivers that are flowing at a level above their median flow provided:
 - (a) The high flow take ceases when the river is at or below the High Flow Minimum Flow⁴⁰ as set in Table 5.9.6⁴¹;
 - (b) Such high flow takes do not cumulatively exceed the allocation limits set in Table 5.9.6;
 - (c) The restrictions in (a) and (b) above do not apply to takes which involve storage of water behind an instream dam.

⁴⁰ The High Flow Minimum Flow has been set at the median flow for each Flow Management Site.

⁴¹ These High Flow allocations are additional to those set out in Table 5.9.4

Table 5.9.6: High Flow Allocation Limits and Minimum Flow Regime

River name	Flow Management Site	High Flow Minimum Flow (L/sec)	High Flow Allocation Limit (L/sec)	High Flow Allocation Limit (m ³ /day)
Tukituki River	At Red Bridge	22,022	2000 ⁴²	172,800 ³²
Tukituki River	At Tapairu Road	9,892	500	43,200
Waipawa River	At Waipawa (RDS/SH2)	8,991	500	43,200

POL TT11 MANAGING GROUNDWATER TAKES HYDRAULICALLY CONNECTED TO SURFACE WATER BODIES

1. To generally assess the effects of groundwater takes on surface water bodies, including wetlands, in the following manner:
 - (a) For wells screened shallower than 50 m below ground level (or 40m below ground level in the lower Tukituki catchment downstream of Red Bridge), an initial assessment can be based on a review of well locations, water levels and well lithology records, and the use of an appropriate scientific model using existing or known transmissivity and storativity values to determine whether surface water depletion is likely to be a concern and estimate the potential surface water depletion effects. Wells screened deeper than 50 m or 40 m respectively are excluded from this Policy;
 - (b) In the event that reliable data are not available to make the initial assessment, the applicant will be required to undertake an independent assessment of stream depletion effects using an appropriate scientific method e.g. using Guidelines for the Assessment of Groundwater Abstraction Effects on Stream Flow prepared by Environment Canterbury (Techniques for evaluating stream depletion effects, Supplement to the guidelines for the assessment of groundwater abstraction effects on stream flow (2000), Report No. R09/53, ISBN 978-1-86937-992-6). An acceptable method is the Hunt (2008)⁴³ method, documented in Hunt (2012)⁴⁴ (with the Q_13 function).
2. To generally manage the effects of groundwater takes (excluding those deep groundwater takes excluded by POL TT11(1)(a) on surface water bodies, including wetlands, in the following manner:
 - (a) The potential adverse effects of groundwater takes on surface water depletion shall be managed in accordance with Table 5.9.7;
 - (b) Groundwater takes that are classified as Direct, High or Medium in Table 5.9.7 shall be included within the surface water allocation limits described in POL TT8 and POL TT9;
 - (c) Groundwater takes that are classified as Direct in Table 5.9.7 shall be subject to the minimum flow limits in POL TT7 and POL TT9;
 - (d) Groundwater takes that are classified as High in Table 5.9.7 shall be subject to the minimum flow limits in POL TT7 and POL TT9, except that irrigation takes shall be able to continue to take up to 50% of the daily volume as specified in their consent conditions for the period when flows are at or below the minimum flow.

⁴² The allocation limit above the Red Bridge site is a cumulative one in so far as it includes the allocation limits above the Tapairu Road and Waipawa (RDS/SH2) sites.

⁴³ Hunt, B. (2008), Stream depletion for streams and aquifers with finite widths. ASCE Journal of Hydrologic Engineering, Vol. 13, No. 2, 80-89.

⁴⁴ Hunt, B (2012), Groundwater analysis using function.xls. Prepared by Civil Engineering Department, University of Canterbury.

Table 5.9.7: Management of Surface Water Depletion Effects

Classification of surface water depletion effect	Magnitude of surface water depletion effect	Management approach
Direct	The surface water depletion effect is assessed as: (a) 90% or greater of the average groundwater pumping rate ⁴⁵ after 7 days of pumping; and (b) greater than 2 L/s.	The calculated loss of surface water is included in the surface water allocation regime, and specific minimum flow restrictions are imposed on the groundwater take, subject to the proviso in POL TT11(2)(c).
High	The surface water depletion effect is assessed as: (c) 60% or greater and less than 90% of the average groundwater pumping rate ⁴⁶ after 150 days of pumping; and (d) greater than 2 L/s.	The calculated loss of surface water is included in the surface water allocation regime, and specific rate of take / volume restrictions are imposed on the groundwater take-in accordance with POL TT11(2)(d).
Medium	The surface water depletion effect is assessed as: (a) 20% or greater and less than 60% of the average groundwater pumping rate ³⁶ after 150 days of pumping; and (b) greater than 2 L/s.	The calculated loss of surface water is included in the surface water allocation regime, but no specific minimum flow or rate of take restrictions are imposed on the groundwater take.
Low	The surface water depletion effect is assessed as: (a) less than 20% of the average groundwater pumping rate ³⁶ after 150 days of pumping; or (b) 2 L/s or less.	The calculated loss of surface water is not included in the surface water allocation regime, and no specific minimum flow or rate of take restrictions are imposed on the groundwater take.

POL TT12 TRANSFERS

- 1 To maximise the efficient use of water and improve security of supply by:
 - (a) Enabling the transfer of existing take consents to other sites within the same Surface Water Allocation Zone, Groundwater Allocation Zone or aquifer system;
 - (b) Enabling the management of temporary transfers within an irrigation season by a management entity⁴⁷ approved by Hawke's Bay Regional Council where the metering of takes and the telemetry of take data allows for real time management and monitoring of the water being taken.

POL TT13 COMMUNITY IRRIGATION SCHEMES

1. To enable Community Irrigation Schemes provided that the management of the take and the management of the Scheme:
 - (a) Demonstrates how the supply of irrigation water and the resulting use of irrigated production land will meet the limits and targets set by POL TT1 and POL TT2;
 - (b) Provides water for future irrigation demand at a security of supply described in POL TT8(1)(a), taking into account the effects of climate change;
 - (c) Ensures that water is available at a rate and quality sufficient to meet the domestic and stock water needs of any farm properties whose existing water supply is rendered unsuitable for human or animal drinking as a result of the implementation of the Community Irrigation Scheme, or alternatively ensures affected water supplies are appropriately treated at no additional cost to the affected party;
 - (d) Demonstrates industry good practice for irrigation scheme efficiency;
 - (e) Maintains or enhances terrestrial riparian biodiversity and surface water recreational opportunities within the catchment;
 - (f) Avoids, remedies or mitigates adverse effects on aspects of water quality and quantity that contribute to mauri in rivers and streams affected by the operation of the Community Irrigation Scheme.

⁴⁵ The average groundwater pumping rate is based on the lesser of the daily rate assuming pumping occurs for 24 hours per day or the 7 day volume averaged over 7 days assuming pumping occurs for 24 hours per day.

⁴⁶ The average groundwater pumping rate is based on the seasonal or annual volume averaged over 150 days or full year whichever is applicable assuming pumping occurs for 24 hours per day.

⁴⁷ Such as water user groups or irrigator user groups.

POL TT13A IN-STREAM DAMS

1. In-stream dams shall be managed to ensure that:
 - (a) The minimum flows set in Table 5.9.3 are not breached more frequently or for a longer duration than would be the case in the absence of the in-stream dam;
 - (b) Flow variability above the minimum flows set in Table 5.9.3 is provided for to give effect to Objective TT1;
 - (c) Potential adverse effects on High Flow takes are considered.

POL TT14 CONSENT CATEGORISATION AND DURATIONS

1. To manage the taking and use of surface water and groundwater in the Tukituki River catchment, so as to give effect to POL TT7 to POL TT13A, as follows:
 - (a) The taking of water allowed by section 14(3)(b) of the RMA shall continue to be allowed without further restriction under this Plan;
 - (b) From 4 May 2013 no new taking of surface water shall be allowed under Permitted Activity Rule 54⁴⁸;
 - (c) From 4 May 2013 the renewal of existing surface take consents, and the renewal of existing groundwater take consents within Groundwater Allocation Zones 1 to 3, shall be a Restricted Discretionary Activity provided that the Table 5.9.4 or 5.9.5 Allocation Limits are not exceeded and the minimum flow regime is complied with. Renewed production land irrigation consents shall have durations not exceeding 20 years;
 - (d) From 4 May 2013 the taking of water associated with a Community Irrigation Scheme involving an in-stream dam or any other in-stream dam shall be a Discretionary Activity under Rule 55 and if granted the consent duration should reflect the capital investment required and may be up to 35 years;
 - (e) New takes within the Table 5.9.4, 5.9.5 or 5.9.6 Allocation Limits and complying with the minimum flow regime shall be a Discretionary Activity;
 - (f) Outside Groundwater Allocation Zones 1 to 3 the renewal of existing groundwater take consents and the taking of new groundwater shall be a Discretionary Activity;
 - (fa) Except as provided for in (a) to (f) above, takes (including those that do not comply with the minimum flow regime), shall be Non-complying Activities.
 - (fc) For takes granted under (e) to (fa) above the consent duration shall be no more than 20 years;
 - (g) Consent conditions shall be imposed that limit the instantaneous rate of take, the 28 day and seasonal volume of take for irrigation takes, and, except as provided for in POL TT9(1)(ba), the annual volume of take for non-irrigation takes;
 - (h) Single resource consents may be granted to cover multiple uses of water.

POL TT15 WATER MEASURING AND REPORTING REQUIREMENTS

1. Except as provided for in POL TT15(3), all consented takes from surface water or groundwater shall be measured as follows:
 - (a) Water meters shall be installed, in accordance with industry good practice and the most current version of the Hawke's Bay Regional Council's Technical Specifications and Installation Requirements for Flow Meters, where:
 - (i) The authorised rate of take is 5 L/s or greater; or
 - (ii) The take is subject to a minimum flow cessation condition.
 - (b) Any single mobile pumps or take systems that are used on more than one farm property or farming enterprise or for more than one take consent and a water meter is required in accordance with POL TT15(1)(a), an integral tamperproof GPS location of the mobile pump or take system's position with data provided at 15 minute intervals is required with telemetry data required by POL TT15(1)(g).

⁴⁸ Note that taking groundwater as a permitted activity under Rule 53 is still allowed within the Tukituki River catchment.

- (c) To enable accurate measurement of consent take volumes, if a single bore or surface water take point is being used for consented takes and a take permitted by section 14(3) of the RMA, then the water used for section 14(3)(b) purposes shall be physically drawn off before the water meter, or another water meter shall be fitted to measure the section 14(3) component of the overall take.
 - (d) The meter shall have an installed accuracy within +/-5% for all volumes of water that are taken under the consent.
 - (e) The meter shall be sealed and made tamperproof to minimise the possibility of the meter or any adjacent components (e.g. data-loggers and telemetry equipment) being dismantled, altered or removed without visibly damaging the protective devices.
 - (f) The meter shall be verified upon installation. Meters shall be verified to be accurate every five years:
 - (i) A verification device that is accurate to within +/-3% shall be used to determine the insitu accuracy of the meter;
 - (ii) Flow rigs shall be used for all verification tests, unless a more suitable method has been approved by the Hawke's Bay Regional Council;
 - (g) The meter must be connected to a telemetry device fitted so that it is compatible with the Hawke's Bay Regional Council's telemetry system if one or more of the following apply:
 - (i) The take is subject to a minimum flow limit (including high flow allocation takes);
 - (ii) The consent covers multiple farm properties or farming enterprises and associated take points;
 - (iii) Single mobile pumps or take systems are used on more than one farm property or farming enterprise or for more than one take consent;
 - (iv) The consent is one of a number of consents where temporary transfers are being managed by a management entity approved by Hawke's Bay Regional Council as provided for in POL TT12;
 - (v) The consent is in a surface water or groundwater allocation zone defined by Schedule XVI and XVII;
 - (vi) The take is classified as having Direct or High Surface Water Depletion Effects as defined by POL TT11;
 - (vii) Telemetry is considered necessary by the consent authority to ensure compliance with conditions of consent.
 - (h) Should any parts of any water meter and telemetry component fail, they shall be replaced by new or temporary replacement parts within 7 days so that full operational status is able to be achieved.
2. Except as provided for in POL TT15(3), all consented takes that are required to be measured in accordance with POL TT15(1) shall generally be recorded and reported as follows:
- (a) Where the meter is connected to a telemetry device in accordance with POL TT15(1)(g):
 - (i) Data must be transmitted to the Hawke's Bay Regional Council's telemetry system at least once in every 24 hour period;
 - (ii) The data logger and telemetry unit shall record the volume and rate of take every 15 minutes. Each 15 minute interval shall be date and time stamped with the New Zealand standard time at the end of that interval. When a telemetry device is not operative for any reason, the water meter shall be read manually at daily intervals and reported to Council within 7 days;
 - (iii) Telemetry devices shall not be able to be made inoperable while the pump or system is operating. Fixed telemetry devices shall be operative 365 days of the year, or if the device needs to be turned off to save on operating costs, the consent holder shall inform the Council when turning the telemetry device off;
 - (iv) On mobile pumps or take systems, water measuring devices, data loggers and telemetry components shall remain turned on during the irrigation season; and shall not be able to be made inoperable while the pump or take system is operating.
 - (b) Where the meter is read manually, it shall be read weekly and reported monthly to the Hawke's Bay Regional Council.

3. The method of measuring and reporting of water takes that are of a volume or nature that water meters cannot accommodate shall be consistent with the provisions of the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010.

5.9.4 TUKITUKI IMPLEMENTATION PLAN

POL TT16 IMPLEMENTATION PLAN

1. To give effect to the Regional Resource Management Plan provisions that apply within the Tukituki Catchment Hawke's Bay Regional Council will:
 - (a) By 31 December 2014, develop an overall Implementation Plan in collaboration with iwi and hapū and other affected or interested stakeholders;
 - (b) Report on the achievement of the Implementation Plan outcomes on a 5 yearly basis through the Plan Effectiveness Report; and
 - (c) Support the establishment of a multi-stakeholder group for the Tukituki Catchment for the purpose of developing the Implementation Plan and facilitating input into the development and delivery of specific implementation or monitoring projects and programmes.
2. The Implementation Plan will include (but not be limited to):
 - (a) A Regional Resource Management Plan effectiveness monitoring programme for the Tukituki Catchment;
 - (b) Commissioning the monitoring and assessment of water quality, water quantity and freshwater, estuarine and coastal aquatic habitat environment matters and any other matters that reflect cultural interests and values, including kaitiakitanga and mauri;
 - (c) The Tukituki Catchment Implementation Plan (draft April 2013);
 - (d) The matters addressed in POL TT4(2) and POL TT5(2); and
3. To enable assessment and monitoring of the cultural values and mauri of the Tukituki Catchment the Hawke's Bay Regional Council will:
 - (a) Resource, subject to POLTT16(5), and assist iwi and Tukituki hapū in the development of a mauri monitoring framework, including the use of wānanga with relevant technical experts on at least the following:
 - i. Marine and coastal ecology;
 - ii. River ecology and fish passage;
 - iii. Water quality (e.g. nitrate/nitrogen) and quantity; and
 - iv. Monitoring methodologies (e.g. mauri model, CHI, State of the Takiwa); and
 - (b) Collaborate with iwi and Tukituki hapū to develop and implement a monitoring programme that gives effect to the mauri monitoring framework; and
 - (c) Work with the iwi and Tukituki hapū to jointly report annually on the outcomes of the monitoring and any recommended actions to Hawke's Bay Regional Council; and
 - (d) Incorporate the outcomes in the Plan Effectiveness Report.
4. For the purposes of POL TT16, Hawke's Bay Regional Council collaboration with iwi and Tukituki hapū will be based on tikanga Māori and an Engagement Plan to be developed in consultation with Te Taiwhenua o Tamatea, Te Taiwhenua o Heretaunga, Te Taiwhenua o Te Whanganui Ā Orotu and Ngāti Kahungunu Iwi Incorporated. The Engagement Plan shall be finalised by 30 June 2014 and shall include a collective iwi/hapū management group.
5. Hawke's Bay Regional Council will use its Annual Plan special consultative process to identify and commit the funding necessary to give effect to POL TT16(1) to (4) including the implementation of the Implementation Plan.

6 REGIONAL RULES

Users' Guide to Rules

INTRODUCTION

- 6.1.1.1 Chapter 6 of the Plan contains rules which allow, regulate, or prohibit resource use activities in the Hawke's Bay region (but not within the coastal environment). This Users' Guide has been prepared to assist readers to locate and understand rules of interest. It provides the following:
- Section 6.1.2** An explanation of the classification of activities under the RMA.
 - Section 6.1.3** A guide to understanding how the rules are set out in the tables.
 - Section 6.1.4** A guide to interpreting the terms 'noxious', 'dangerous', 'offensive' and 'objectionable', which are used in several rules, especially those regulating the discharge of contaminants into air.
 - Section 6.1.5** An outline of various national environmental standards and Regulations under the RMA that apply in addition to rules in this Plan.
- 6.1.1.2 This Users' Guide provides some information on how to interpret regional rules under the RMA. However, the HBRC can provide more detailed information on interpreting regional rules and consent application processes. HBRC staff should be contacted by anyone who is in doubt about understanding the rules in this Plan or the resource consent process.

RULE CLASSIFICATIONS

- 6.1.2.1 If an activity is classified in a rule as:
- (a) **Permitted**, it can be carried out without a resource consent provided the conditions in the rule are met.
 - (b) **Controlled**, a resource consent is required, but the HBRC must grant the consent if the standards and terms in the rule are met. However, the Council may impose conditions on the consent relating to matters specified in the rule over which control is reserved.
 - (c) **Restricted discretionary**, a resource consent is required, and the HBRC will decide whether or not to grant the consent. However, in deciding whether or not to grant consent the HBRC is restricted to exercising its discretion over the list of matters specified in the rule.
 - (d) **Discretionary**, a resource consent is required, and the HBRC will decide whether or not to grant the consent. Whether or not the Council grants consent will depend upon how consistent the proposed activity is with provisions of the RMA and the objectives and policies set in this Plan. Particular regard will be had to the "Decision-Making Criteria" contained in Chapter 3.
 - (e) **Non-complying**, a resource consent is required, and can only be granted if the adverse effects on the environment will be minor, or granting consent will not be contrary to the objectives and policies of this Plan.
 - (f) **Prohibited**, the activity is not allowed under any circumstances.
- 6.1.2.2 Figure 5 (overleaf) provides an overview of how the activity classifications work.

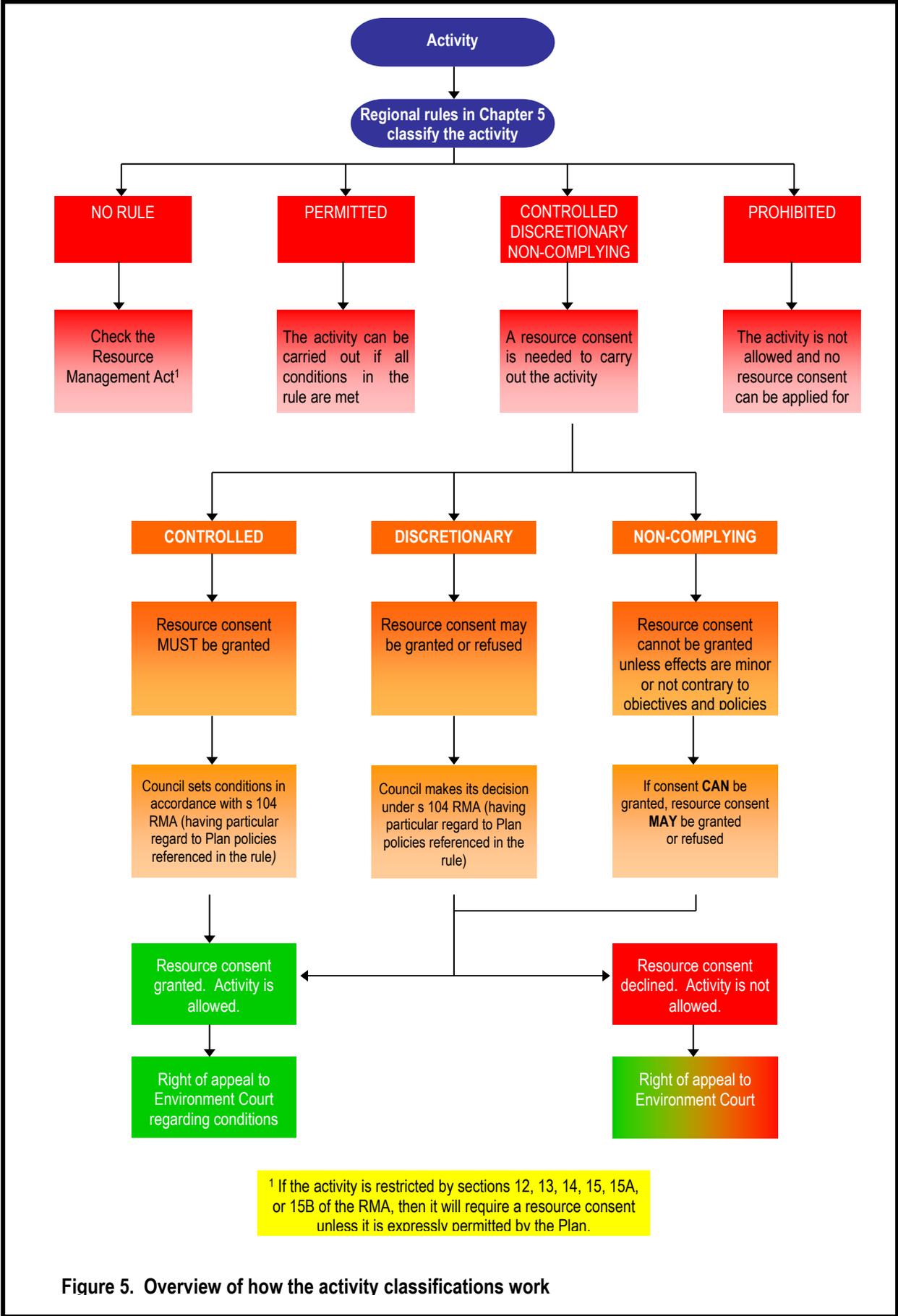


Figure 5. Overview of how the activity classifications work

6.1.3 GUIDE TO RULE TABLES

6.1.3.1 The rules in this Plan are arranged in tables. Within each of the rule tables there are six columns headed as follows:

- (a) **Rule**
This column contains the rule number together with a brief title for the rule.
- (b) **Activity**
The activity column describes the activity to be undertaken. For the activity to be considered under this rule it must be consistent with the description contained in this column, and meet any criteria contained in the conditions/standards/terms column.
- (c) **Classification**
This column contains the classification of the activity, i.e. permitted, controlled, restricted discretionary, discretionary, non-complying or prohibited (activity classifications are explained in section 6.1.2 of this Plan).
- (d) **Conditions/Standards/Terms**
This column contains conditions for permitted activities, and standards and terms for controlled and restricted discretionary activities (note that standards and terms must be stated for controlled activities, but may or may not be stated for restricted discretionary activities). The conditions, standards and terms are ongoing requirements that must be met for as long as the activity is undertaken. Failure to comply with these amounts to a breach of the rule and may be subject to enforcement action. In the case of a permitted activity, failure to comply with the conditions would also mean that the activity was no longer permitted, and would thus require a resource consent.
- (e) **Matters for Control/Discretion**
This column is relevant only for controlled activities and restricted discretionary activities. For controlled activities, this column contains the matters over which the HBRC has reserved its control. For restricted discretionary activities, it contains the matters to which the Council has restricted the exercise of its discretion. When this column is blank, it means that the activity is classified as a permitted, discretionary, non-complying or prohibited activity.
- (f) **Non-notification**
This column is also only relevant for controlled activities and restricted discretionary activities. For each of these activity classifications, the HBRC may state whether a consent application for the activity could be considered without notification, and/or without the need to obtain the written approval of affected persons²¹. It is important to note that a consent application for a discretionary or non-complying activity may also be considered without notification if the consent authority is satisfied that the adverse effect on the environment will be minor, and written approval has been obtained from every affected person (unless it is unreasonable to require this). An affected person is a person who is affected in a manner different from the public generally (an interested party or interest group is not necessarily an affected person).
- (g) **Advisory Notes**
Advisory notes at the foot of most pages contain important information on the status of various activities.

²¹ **Non-notification of restricted discretionary activities** - Note that, for restricted discretionary activities, the rule must state both the standards and terms that the activity shall comply with, and the matters over which the Council restricts its discretion, if it is to include a statement on non-notification.

6.1.4 INTERPRETATION OF NOXIOUS, DANGEROUS, OFFENSIVE AND OBJECTIONABLE EFFECTS

6.1.4.1 Several rules in this Plan use the terms 'noxious', 'dangerous', 'offensive', and 'objectionable', particularly rules relating to the discharges of contaminants into air. These terms are also included in section 17 of the RMA. Whether an activity is 'noxious', 'dangerous', 'offensive' or 'objectionable' depends upon an objective assessment. A Regional Council enforcement officer's views will not be determinative but may trigger further action and will be one factor considered by the Court if formal enforcement action is taken.

6.1.4.2 Reference to the terms 'noxious', 'dangerous', 'offensive' and 'objectionable' are made in the glossary to this Plan. The glossary refers plan users to this section. There is no standard definition of these terms because of the need to take account of case law precedent as it develops, i.e. the Plan cannot override interpretations decided by the judiciary. However, the following notes are intended to provide some guidance for interpreting these terms:

(a) **NOXIOUS, DANGEROUS** - The Concise Oxford Dictionary defines 'noxious' as "harmful, unwholesome". At the time of writing this Plan, the term 'noxious' did not appear to have been defined or considered in case law pertaining to the RMA. Noxious effects may include significant adverse effects on the environment (e.g. on plant and animal life) even though the effects may not be dangerous to humans.

'Dangerous' is defined as "involving or causing exposure to harm". Dangerous discharges include those that are likely to cause adverse physical health effects, such as discharges containing toxic concentrations of chemicals.

The Workplace Exposure Standards (Occupational Safety and Health Service, 1994) provide guidelines for those involved in occupational health practice, and can be used for interpreting the terms 'noxious' and 'dangerous'. The concentration of any contaminant specified in the Workplace Exposure Standards should not exceed one thirtieth of the time weighted average standard on adjacent properties or public land. Although human health cannot be assured by compliance with this guideline, it can be used as a guide for protection of the general population.

(b) **OFFENSIVE, OBJECTIONABLE** – 'Offensive' is defined as "giving or meant to give offence disgusting, foul-smelling, nauseous, repulsive". 'Objectionable' is defined as "open to objection, unpleasant, offensive". Case law has established that what may be offensive or objectionable under the RMA cannot be defined or prescribed except in the most general of terms. Each case will depend upon its own circumstances. Key considerations include:

(i) **Location of an activity and sensitivity of the receiving environment** – For example, what may be considered offensive or objectionable in an urban area, may not necessarily be considered offensive or objectionable in a rural area.

(ii) **Reasonableness** - Whether or not an activity is offensive or objectionable should be determined by an ordinary person who is representative of the community at large and neither hypersensitive nor insensitive, in deciding whether the activity is disgusting, nauseous, repulsive or otherwise objectionable.

(iii) **Existing uses** - It is important to consider what lawfully established activities exist in an area, i.e. if a new activity requires a permit, the effect of existing discharges of contaminants into air should be considered.

Each investigation of a complaint concerning offensive or objectionable discharges will depend upon the specific circumstances. However, for odour, the approach will be as follows:

(a) An assessment of the situation will be made by a council officer who has experience in odour complaints and has had his/her nose calibrated using olfactometry. This assessment will take into

account the FIDOL factors - frequency, intensity, duration, offensiveness, location; and those matters identified as key considerations in 6.1.4.2 (b) (i), (ii), and (iii).

- (b) If the discharge is deemed to be offensive or objectionable by the council officer, the discharger will be asked to take whatever action is necessary to avoid, remedy or mitigate the effects of the discharge.
- (c) If the discharger disputes the council officer's assessment or the problem is ongoing, then a number of approaches may be taken, including one or more of the following:
 - (i) assessments by more council officers
 - (ii) asking people living and working in the subject area to keep a diary which notes details of any offensive or objectionable odours
 - (iii) promoting the use of community working groups and other means of consultation between the affected community and the discharger
 - (iv) using the services of an independent consultant to carry out an investigation, and/or community survey
 - (v) using the services of the Council's odour panellists who have all had their noses calibrated by olfactometry and are deemed to have an average sense of smell
 - (vi) undertaking an odour assessment using an olfactometer, or other appropriate technology
 - (vii) leaving the matter to be determined by the Environment Court.
- (d) If the discharge is found to be offensive or objectionable, then enforcement action may be taken. This could be in the form of an abatement notice, infringement notice, enforcement order or prosecution, pursuant to the Resource Management Act 1991. In the case of a permitted activity, failure to comply with the conditions would also mean that the activity was no longer permitted, and would thus require a resource consent application to be lodged.

6.1.5 APPLICATION OF RESOURCE MANAGEMENT REGULATIONS & NATIONAL ENVIRONMENTAL STANDARDS

- 6.1.5.1 National environmental standards (NESs) provide a consistent approach to decision-making processes throughout the whole country or within a specific area. NESs are prepared by central government and can prescribe technical and non-technical standards, methods (including rules) or other requirements for a range of environmental matters. In some circumstances, rules in regional plans can be more lenient or stringent than NES regulations. The circumstances when this is allowed will be identified in each NES. A standard in a NES will prevail over a rule in a plan unless a clause in that NES authorises a rule to be more lenient or stringent. If an activity does not comply with a NES, it requires a resource consent. NESs are enforced by local authorities.
- 6.1.5.2 From time to time, Regulations can also be introduced under the RMA. These are another form of central government direction that can apply throughout the whole country or within a specific area. Regulations made under section 360 of the RMA generally deal with matters of detail or implementation, matters of a technical nature, or matters likely to require frequent alterations or updating. Like NESs, Regulations under the RMA are also typically administered and enforced by local authorities.

TABLE 12A: Summary of National Environmental Standards under RMA

National Environmental Standard	Details on which rules are more lenient or stringent than the NES
Resource Management (National Environmental Standards for Air Quality) Regulations 2004 (NES-AQ) In force from 8 October 2004	A rule in this plan prevails over a standard in the NES-AQ if it is more stringent than a standard.
Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 (NES-DWS) In force from 20 June 2008	A rule in this plan prevails over a standard in the NES-DWS if it is more stringent than a standard.
Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 (NES-ETA) In force from 14 January 2010	No rules in this plan prevail over a standard in the NES-ETA.
Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES-CS) In force from 1 January 2012	The NES-CS does not deal with regional councils' RMA functions.
Resource Management (National Environmental Standards for Telecommunications Facilities) Regulations 2016 (NES-TF) In force from 1 January 2017, replacing the NES-TF 2008	A rule in this plan prevails over a standard in the NES-TF if it is more stringent than a standard in limited circumstances or where the standard refers to compliance within any applicable regional rules for an activity (.e.g. earthworks). The NES-TF does not apply to anything done in the CMA or in, on, under, or over the bed of a river or lake. However, the NES-TF does apply to anything done over a river or lake. Refer to rules in Chapters 6.3.3 and 6.8.
Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 (NES-PF) In force from 1 May 2018	A rule in this plan prevails over a standard in the NES-PF if it is more stringent than a standard in limited circumstances.
Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-F) In force from 3 September 2020	A rule in this plan prevails over a standard in the NES-F if it is more stringent than a standard.
Resource Management (National Environmental Standards for Marine Aquaculture) Regulations 2020 (NES-MA) In force from 1 December 2020	There are no relevant rules in this Plan as the NES-MA applies to the coastal marine area. Instead, refer to Hawke's Bay Regional Coastal Environment Plan for relevant rules.
Resource Management (National Environmental Standards for Outdoor Tyre Storage) Regulations 2021 (NES-OTS) In force from 20 August 2021	A rule in this plan prevails over a standard in the NES-OTS if it is more stringent than a standard.

6.2 Summary of Regional Rules

6.2.1 Table 13 (below) provides a summary of the rules for easy reference.

6.2.2 It is important to note that a “permitted activity” as described in the summary in Table 13 may be undertaken without resource consent only if the activity complies with all the conditions/standards/terms column in the permitted activity rule.

Table 13. Summary of Regional Rules

RULE NUMBER AND TITLE		CLASSIFICATION	Page
6.3	LAND USE ACTIVITIES		
6.3.1	Bore drilling & leaking bores		
Rule 1	Bore drilling	Controlled	122
Rule 2	Bore drilling that does not comply with Rule 1	Restricted discretionary	122
Rule 3	Unwanted or leaking bores	Non-Complying	123
Rule 4	Decommissioning of bores	Permitted	123
6.3.2	Feedlots and feedpads		
Rule 5	Feedlots and feedpads	Permitted	124
Rule 6	Feedlots and feedpads not complying with Rule 5	Restricted discretionary	124
6.3.3	Vegetation clearance and soil disturbance		
Rule 7	Vegetation clearance and soil disturbance	Permitted	125
Rule 8	Vegetation clearance and soil disturbance activities that do not comply with Rule 7	Restricted discretionary	126
6.4	DISCHARGES TO AIR/LAND/WATER		
6.4.1	Agrichemicals – discharges to air/land/water		
Rule 9	Small scale application of agrichemicals	Permitted	127
Rule 10	Widespread application of agrichemicals	Permitted	128
6.4.2	Agricultural activities & other activities on production land – discharges to air/land/water		
Rule 11	Fertiliser use	Permitted	129
Rule 12	Stock feed	Permitted	129
Rule 13	Use of compost, biosolids & other soil conditioners	Permitted	130
Rule 14	Animal effluent	Controlled	131
Rule 15	Animal effluent in sensitive catchments	Discretionary	132
Rule 16	Management of solid waste on production land	Permitted	133
6.5	DISCHARGES TO AIR		
6.5.1	Combustion of fuel – discharges to air		
Rule 17	Combustion of specified fuels	Permitted	136
Rule 18	Combustion of specified fuels	Controlled	137
Rule 18a	Rule 18a has been withdrawn. Withdrawal effective from 1 July 2011	-	137
Rule 18b	Discharge to air from open fires – Napier & Hastings Airsheds	Prohibited	138
Rule 18c	Discharge to air from any small scale solid fuel burner – Hastings Airshed	Permitted	138
Rule 18d	Discharge to air from any small scale solid fuel burner – Napier Airshed	Permitted	139
Rule 18e	Rule number not used		139
Rule 18f	Discharge to air from any small scale solid fuel burner or open fire in a registered historic building – Napier & Hastings Airsheds	Permitted	140
Rule 18g	Discharge to air from any small scale solid fuel burner – Napier & Hastings Airsheds	Prohibited	140
Rule 18h	Discharge to air from any small scale solid fuel burner or open fire at property ownership transfer – Napier & Hastings Airsheds	Prohibited	141

RULE NUMBER AND TITLE		CLASSIFICATION	Page
6.5.2	Burning of waste – discharges to air		
Rule 19	Burning of waste	Permitted	142
Rule 19a	Burning of vegetative matter, paper, cardboard and untreated wood	Permitted	143
Rule 19b	Outdoor burning for specified purposes	Permitted	143
Rule 19c	Outdoor burning during certain times of the year	Non-complying	144
Rule 19d	Discharge to air from frost protection heaters	Permitted	144
Rule 19e	Outdoor burning on horticultural production land during certain times of the year – Napier & Hastings Airsheds	Permitted	145
Rule 20	Burning of specified waste in the open & in small scale fuel burning appliances	Prohibited	146
Rule 20a	Burning of waste for purposes of disease control or quarantine control	Permitted	147
6.5.3	Management of waste & other matter, excluding industrial & trade premises – discharges to air		
Rule 21	Waste & other matter, excluding industrial & trade premises	Permitted	148
6.5.4	Abrasive blasting – discharges to air		
Rule 22	Wet abrasive blasting	Permitted	149
Rule 23	Dry abrasive blasting – fixed source	Permitted	149
Rule 24	Dry abrasive blasting – moveable source	Discretionary	150
6.5.5	Moveable sources– discharges to air		
Rule 25	Moveable aggregate crushing & screening plants	Permitted	151
Rule 26	Moveable asphalt plants	Discretionary	151
Rule 27	Moveable road burners	Non-complying	151
6.5.6	Industrial & trade premises– discharges to air		
Rule 28	Miscellaneous industrial & trade premises	Discretionary	152
Rule 29	Minor discharges from industrial & trade premises	Permitted	153
6.5.7	Non-compliance with other rules– discharges to air		
Rule 30	Discharges that cannot comply with other rules	Restricted discretionary	155
6.6	DISCHARGES TO LAND/WATER		
6.6.1	Water– discharges to water		
Rule 31	Discharge of water	Permitted	156
6.6.2	Drainage water– discharges to land/water		
Rule 32	Discharge of drainage water (gravity flow systems)	Permitted	157
Rule 33	Discharge of drainage water (pumped systems)	Controlled	157
6.6.3	Bore drilling fluids – discharges to land/water		
Rule 34	Discharge of bore drilling fluids	Permitted	159
6.6.4	Domestic sewage– discharges to land		
Rule 35	Existing sewage systems	Permitted	152
Rule 36	Existing high discharge volume sewage systems	Restricted discretionary	153
Rule 37	New sewage systems	Permitted	153
Rule 38	Discharge of Septage	Discretionary	155
	Figure 6 – Design specifications for sewage systems	-	156
6.6.5	Landfills, transfer stations & waste oil – discharges to land/water		
Rule 39	Discharges from operating landfills & transfer stations	Discretionary	159
Rule 40	Discharges from closed landfills	Controlled	159
Rule 41	Discharge of waste oil	Non-complying	159
6.6.6	Stormwater– discharges to land/water		
Rule 42	Diversion & discharge of stormwater	Permitted	160
Rule 43	Diversion & discharge of urban stormwater	Controlled	160
	<i>Rules 44 – 46 these rule numbers have been 'banked' for possible future use</i>	-	-

RULE NUMBER AND TITLE		CLASSIFICATION	Page
6.6.7	Generic discharges of contaminants– discharges to land/water		
Rule 47	Discharges to surface water (amended by Plan Change 6)	Permitted	170
Rule 48	Discharges of solid contaminants to land that will not enter water	Permitted	171
Rule 49	Discharges to land that may enter water	Permitted	172
Rule 50	Disturbance of bed of river/lake by livestock (amended by Plan Change 6)	Permitted	173
Rule 51	Disturbance of bed of river/lake by livestock	Discretionary	173
6.6.8	Non-compliance with other rules– discharges to land/water		
Rule 52	Discharges that do not comply with other rules	Discretionary	174
6.7	WATER TAKES, USES & DIVERSIONS		
6.7.1	Take & Use of water		
Rule 53	Minor takes & uses of groundwater	Permitted	175
Rule 54	Minor takes & uses of surface water (amended by Plan Change 6)	Permitted	176
Rule 55	Other takes and uses of surface & groundwater (amended by Plan Change 6)	Discretionary	177
6.7.2	Diversion of water		
Rule 56	Minor diversions	Permitted	178
Rule 57	Lawfully established diversions	Permitted	179
Rule 58	Diversions in artificial water courses	Permitted	179
Rule 59	Diversions that cannot comply with other rules	Discretionary	179
6.7.3	Transfer of water permits		
Rule 60	Transfer of permits to take & use surface water from a lake	Permitted	180
Rule 61	Transfer of permits to take & use surface water from a river (amended by Plan Change 6)	Controlled	180
Rule 62	Transfer of permits to take & use groundwater (amended by Plan Change 6)	Controlled	180
6.8	USE OF RIVERS & LAKE BEDS		
6.8.1	Use, repair & maintenance of structures		
Rule 63	Use of structures	Permitted	181
Rule 64	Maintenance of structures	Permitted	181
Rule 65	Replacement and upgrading of structures	Permitted	182
6.8.2	Removal & demolition of structures		
Rule 66	Removal & demolition of structures	Permitted	183
6.8.3	Erection and placement of dams & other barrier structure, & damming of water		
Rule 67	Dams, weirs & other barrier structures in rivers, lakes and artificial water courses	Permitted	184
Rule 68	Existing damming of water in rivers and lakes	Controlled	185
Rule 69	River and lake bed activities not expressly regulated by other rules	Discretionary	185
6.8.4	River control & drainage works & structures		
Rule 70	River control & drainage works & structures	Permitted	186
Rule 71	Activities affecting river control & drainage structures	Discretionary	187
6.8.5	Erection & placement of other structures (including access structures)		
Rule 72	Erection & placement of other structures, including bridges, culverts & other access structures	Permitted	188
6.8.6	River bed gravel extraction		
Rule 73	Small scale river bed gravel extraction	Permitted	189
Rule 74	Large scale river bed gravel extraction	Restricted discretionary	189
6.8.7	Other disturbances of river and lake beds		
Rule 75	Other disturbances of river and lake beds	Permitted	190
6.8.8	Introduction & planting of plants		
Rule 76	Planting of plants	Permitted	191

RULE NUMBER AND TITLE		CLASSIFICATION	Page
6.9	Tukituki River Catchment specific rules		
Rule TT1	Use of production land	Permitted	191A
Rule TT2	Use of production land	Restricted Discretionary	191C
Rule TT2A	Use of production land that does not comply with Rule TT2	Non-Complying	191C
Rule TT3	The take and use of surface water and groundwater for spray tanks	Permitted	191D
Rule TT3A	The take and use of surface water for hydro-electric generation purposes	Controlled	191D
Rule TT3B	Replacement of an existing take and use of surface water or groundwater	Restricted Discretionary	191D
Rule TT4	The takes and use of surface water and groundwater	Discretionary	191E
Rule TT5	The take and use of surface water and groundwater that does not comply with Rule TT3B and Rule TT4	Non-Complying	191E

6.3 Land Use Activities

For information requirements refer to section 7.3

If any land use activity (such as earthworks, fencing or landscaping) may modify, damage or destroy any known archaeological site(s) an authority from the New Zealand Historic Places Trust must be obtained for the work to proceed lawfully.

6.3.1 BORE DRILLING & BORE SEALING

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>1</p> <p>Bore drilling</p> <p>Refer POL 17, 21, 27, 75</p>	The drilling, construction, and alteration of bores. ²²	Controlled	a. The bore shall be cased and sealed to prevent aquifer cross-connection, and leakage from the ground surface into ground water.	<p>a. Bore location, diameter, depth.</p> <p>b. Bore screen slot size, length, depth and diameter.</p> <p>c. Well head completion.</p> <p>d. Backflow prevention.</p> <p>e. Information requirements, including bore logs, hydraulic head levels and aquifer tests.</p> <p>f. Duration of consent.</p> <p>g. Lapsing of consent.</p> <p>h. Review of consent conditions.</p> <p>i. Compliance monitoring.</p>	Applications will generally be considered without notification, without the need to obtain the written approval of affected persons.
<p>2</p> <p>Bore drilling that does not comply with Rule 1</p> <p>Refer POL 17, 21, 27, 75</p>	The drilling, construction, or alteration of bores that does not comply with Rule 1.	Restricted discretionary		<p>a. Bore location diameter, depth.</p> <p>b. Bore screen slot size, length, depth and diameter.</p> <p>c. Bore head completion.</p> <p>d. Backflow prevention.</p> <p>e. Information requirements, including bore logs, hydraulic head levels and aquifer tests.</p> <p>f. Duration of consent.</p> <p>g. Lapsing of consent.</p> <p>h. Review of consent conditions.</p> <p>i. Compliance monitoring.</p>	

²² For the purposes of this Plan, a 'bore' is defined as any pipe, cylinder or hole inserted into the ground that either

- is created for the purpose of accessing underground water, oil or gas, or
- penetrates a confined aquifer, or
- in any way causes the release of water from a confined aquifer, or
- is created for the purpose of exploring water, oil or gas resources.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>3</p> <p>Unwanted or leaking bores</p> <p><i>Refer POL 21</i></p>	<p>The existence of any bore that is no longer wanted or is leaking water, oil or gas.</p>	<p>Non-complying</p>			
<p>4</p> <p>Decommissioning of bores</p> <p><i>Refer POL 75</i></p>	<p>The decommissioning or sealing of bores.</p>	<p>Permitted</p>	<p>a. Decommissioned bores shall be backfilled and sealed at the surface to prevent contamination of groundwater.</p> <p>b. Decommissioned holes and bores intersecting groundwater shall be sealed to prevent the vertical movement of groundwater, and to permanently confine the groundwater to the specific zone (or zones) in which it originally occurred.</p> <p>c. Backfill materials, where used between permanent seals, shall consist of clean sand, coarse stone, clay or drill cuttings. The material shall be non toxic.</p> <p>d. Decommissioning shall be undertaken by a suitably qualified person.</p> <p>e. The Council shall be advised of any bores that are decommissioned.</p>		

6.3.2 FEEDLOTS & FEEDPADS

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>5</p> <p>Feedlots & feedpads²³</p> <p><i>Refer POL 71</i></p>	<p>The use of land for the purposes of operating a feedlot²⁴ or feedpad²⁵.</p>	<p>Permitted</p>	<p>a. The land used for the feedlot or feedpad shall be managed in a manner that prevents any seepage of contaminants into groundwater^{26,27}.</p> <p>b. The feedlot or feedpad shall be located no less than 20 m from any surface water body.</p> <p>c. The feedlot or feedpad shall be located no less than:</p> <ul style="list-style-type: none"> i. 150 metres from a residential building or any other building being part of a place of assembly on another site ii. 50 metres from a property boundary, and iii. 20 metres from a public road. <p>d. Runoff from the surrounding catchment area is prevented from entering the feedlot or feedpad.</p>		
<p>6</p> <p>Feedlots & feedpads that do not comply with Rule 5²⁸</p> <p><i>Refer POL 17, 20, 47, 48, 71</i></p>	<p>The use of land for the purposes of operating a feedlot or feedpad, in a manner which does not comply with Rule 5.</p>	<p>Restricted discretionary</p>		<p>a. The conditions which the activity cannot comply with, and the related environmental effects.</p> <p>b. Duration of consent.</p> <p>c. Lapsing of consent.</p> <p>d. Review of consent conditions.</p> <p>e. Compliance monitoring.</p>	

²³ Rule 5 only address the use of land for a feedlot or feedpad (and thus, the effects associated with having a high density of animals on one site). Any discharges of contaminants associated with the operation of a feedlot or feedpad, e.g. the use of stock feed and the management of animal effluent, are addressed under rules in sections 6.4 and 6.6 of this Plan. Any discharge of contaminants associated with the operation of a feedlot or feedpad, such as the disposal of animal wastes and the bedding material or the runoff of manure during heavy rainfall are addressed under Rules in Sections 6.4 and 6.6. Any discharge of contaminants to air are covered in Rule 21.

²⁴ For the purposes of this Plan, a **'feedlot'** is defined as an area of land upon which animals are kept and fed, for more than 15 days in any 30 day period, where the stocking density or feedlot structure (e.g. a concrete pad) precludes the maintenance of pasture or ground cover.

²⁵ For the purposes of this Plan, a **'feedpad'** is defined as an area of land to which animals are brought for supplementary feeding on a regular basis, where the stocking density or feedpad structure precludes the maintenance of pasture or ground cover.

²⁶ **Sealing** - The Council will accept, as one means of compliance with condition (a), the construction of a sealing layer with a permeability of no greater than 10⁻⁹ m/s (0.000000001 m/s).

²⁷ **Compliance** – At any time Council may request information from the operator of a feedlot or feedpad to confirm compliance with condition (a).

²⁸ Rule 6 only address the use of land for a feedlot or feedpad (and thus, the effects associated with having a high density of animals on one site). Any discharges of contaminants associated with the operation of a feedlot or feedpad, e.g. the use of stock feed and the management of animal effluent, are addressed under rules in sections 6.4 and 6.6 of this Plan. Any discharge of contaminants associated with the operation of a feedlot or feedpad, such as the disposal of animal wastes and the bedding material or the runoff of manure during heavy rainfall are addressed under Rules in Sections 6.4 and 6.6. Any discharge of contaminants to air are covered in Rule 21.

6.3.3 VEGETATION CLEARANCE AND SOIL DISTURBANCE ACTIVITIES

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>7</p> <p>Vegetation clearance and soil disturbance^{29a}</p> <p><i>Refer to POL 3, 67, 71</i></p>	Vegetation clearance ³⁰ or soil disturbance ³¹ activities.	Permitted	<p>a. All cleared vegetation, disturbed soil or debris shall be deposited or contained to reasonably prevent the transportation or deposition of disturbed matter into any water body³².</p> <p>b. Vegetation clearance or soil disturbance shall not give rise to any significant change in the colour or clarity of any adjacent water body, after reasonable mixing.</p> <p>c. No vegetation clearance shall occur within 5 metres of any permanently flowing river, or any other river with a bed width in excess of 2 metres, or any other lake or wetland, except that this condition shall not apply to:</p> <p>i. the clearance of plantation forestry established prior to the date of this Plan becoming operative, or^{32a}</p> <p>ii. the areas identified in Schedule X to this Plan.</p> <p>d. Deposition of soil or soil particles across a property boundary shall not be objectionable or offensive, cause property damage or exceed 10 kg/m².</p> <p>e. Where the clearance of vegetation or the disturbance of soil increases the risk of soil loss the land shall be:</p> <p>i. re-vegetated as soon as practicable after completion of the activity, but in any event no later than 18 months with species providing equivalent or better land stabilisation; or</p> <p>ii. retained in a manner which inhibits soil loss.</p>		

^{29a} Rule 7 does not apply to the harvesting, vegetation clearance and soil disturbance associated with plantation forestry activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.

³⁰ "Vegetation clearance" means the cutting, burning, clearing or destruction (including destruction by spraying) of trees, shrubs, or plants.

³¹ "Soil disturbance" means the disturbance of soil by any means including blading, contouring, ripping, discing, root raking, moving, ploughing, removing, cutting and blasting.

Vegetation clearance and soil disturbance exclude:

- The normal maintenance of legally established structures, roads, tracks, railway lines and river beds.
- The clearance of grasses, forest thinning, and agricultural and horticultural crops.
- The clearance of isolated or scattered regrowth on productive pasture.
- The clearance of any indigenous vegetation understorey beneath plantation forests.
- The clearance of noxious weeds covered by the Regional Plant Pest Management Strategy prepared under the Biosecurity Act, 1993.
- Non-motorised soil disturbance activities.
- Thrusting, boring, trenching or mole ploughing associated with cable or pipe laying or a network utility operation.
- Soil disturbance undertaken by a mine or quarry operation which either had a valid mining licence at the date the Proposed Regional Resource Management Plan was publicly notified (15 April 2000) or is lawfully established.
- Cultivation and grazing.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>8</p> <p>Vegetation clearance and soil disturbance³³</p> <p><i>Refer to POL 3, 67, 71</i></p>	Vegetation clearance or soil disturbance activities which do not meet the conditions in Rule 7.	Restricted discretionary		<p>a. The conditions, standards or terms which the activity cannot comply with, and the related environmental effects.</p> <p>b. Monitoring and reporting requirements.</p> <p>c. Duration of consent.</p> <p>d. Review of consent conditions.</p>	Applications may be considered without notification, without the need to obtain the written approval of affected persons.

- Foundations works for structures.

³¹ "Soil disturbance" means the disturbance of soil by any means including blading, contouring, ripping, discing, root raking, moving, ploughing, removing, cutting and blasting.

Vegetation clearance and soil disturbance exclude:

- The normal maintenance of legally established structures, roads, tracks, railway lines and river beds.
- The clearance of grasses, forest thinning, and agricultural and horticultural crops.
- The clearance of isolated or scattered regrowth on productive pasture.
- The clearance of any indigenous vegetation understorey beneath plantation forests.
- The clearance of noxious weeds covered by the Regional Plant Pest Management Strategy prepared under the Biosecurity Act, 1993.
- Non-motorised soil disturbance activities.
- Thrusting, boring, trenching or mole ploughing associated with cable or pipe laying or a network utility operation.
- Soil disturbance undertaken by a mine or quarry operation which either had a valid mining licence at the date the Proposed Regional Resource Management Plan was publicly notified (15 April 2000) or is lawfully established.
- Cultivation and grazing.
- Foundations works for structures.
- Construction and maintenance of fences and drains.

³² **Explanation of Rule 7 (a):** In considering whether condition (a) in Rule 7 has been met, Council shall have regard to recognised Industry Codes of Practice, Best Practice Guidelines and Environmental Management Plans relevant to and adopted in carrying out the activity.

NOTE: 10 kg/m² of dry soil is equivalent to 5 mm depth assuming a specific gravity of 2 kg/litre.

^{32a} NOTE: Rule 7(c) has been deleted to ensure the Regional Plan aligns with the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 and does not conflict with, or duplicate the requirements within those Regulations.

³³ Rule 8 does not apply to the trimming, felling, or removing of any tree or vegetation or earthworks, in relation to an existing high voltage electricity transmission lines. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

6.4 DISCHARGES TO AIR/LAND/WATER – AGRICHEMICALS & AGRICULTURAL DISCHARGES

6.4.1 AGRICHEMICALS - DISCHARGES TO AIR/LAND/WATER

For information requirements refer to sections 7.4, 7.5, 7.6

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>9</p> <p>Small scale application of agri-chemicals</p> <p><i>Refer POL 10</i></p>	<p>The discharge of contaminants into air or onto land arising from the use or disposal of:</p> <ul style="list-style-type: none"> any agrichemicals for domestic purposes³⁴ any licensed animal remedies, or any agrichemicals using a hand-held appliance³⁵ <p>excluding the use of any agrichemicals approved for aquatic use.</p>	<p>Permitted³⁶</p>	<p>a. The discharge shall be undertaken in a manner which does not exceed any rate, or contravene any other requirement, specified in the agrichemical manufacturer's instructions.</p> <p>b. There shall be no discharge or drift of any agrichemical beyond the boundary of the subject property.</p> <p>c. The discharge shall not result in any agrichemical entering a water body.</p> <p>d. Where the agrichemical is used for non-domestic purposes, the discharge shall be undertaken in accordance with all mandatory requirements set out in Sections 2, 5 and 6 of the New Zealand Standard for the Management of Agrichemicals (NZS 8409:2004)³⁷.</p>		

³⁴ For the purpose of this rule - “domestic purposes” means the use of agrichemicals by a person, group or organisation in a private capacity, who do not use agrichemicals in the course of their business activities.

³⁵ For the purposes of this Plan, a “hand-held appliance” refers to a knapsack sprayer, a non-motorised handgun sprayer, or a sprayer with a rate and volume of application no greater than these devices.

³⁶ If Rule 9 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30 or a discretionary activity under Rule 52, whichever is relevant.

³⁷ Section 2 of the Code deals with the management of agrichemicals (including risk management, user responsibility and identification of most suitable agrichemicals), Section 5 deals with the use of agrichemicals (including handling, mixing, an drift hazard) and Section 6 deals with the disposal of agrichemicals and their containers.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p style="text-align: center;">10</p> <p style="text-align: center;">Widespread application of agrichemicals</p> <p style="text-align: center;"><i>Refer POL 8, 10, 17, 47</i></p>	<p>The discharge of contaminants into air or onto land, or into water, arising from the use or disposal of any agrichemical³⁸, except as provided for by Rule 9.</p>	<p>Permitted³⁹</p>	<p>a. The discharge shall be undertaken in a manner which does not exceed any rate, or contravene any other requirement, specified in the agrichemical manufacturer's instructions.</p> <p>b. The discharge shall be undertaken in accordance with all mandatory requirements set out in Sections 2, 5 and 6 of the New Zealand Standard for the Management of Agrichemicals (NZS 8409:2004).</p> <p>c. For the ground based application of agrichemicals the following qualifications shall be held at all times:</p> <ul style="list-style-type: none"> i. Every commercial user shall hold a qualification that meets the requirements of Schedule XI for commercial user or be under direct supervision of a person holding the qualification. ii. Every contractor shall be a GROWSAFE® Registered Chemical Applicator. iii. Every employee of a contractor shall hold or be under training for a valid qualification that meets the requirements of Schedule XI for contractor employees. <p>d. Every pilot undertaking the aerial application of agrichemicals shall hold a GROWSAFE® Pilot Agrichemical Rating Certificate.</p> <p>e. The discharge shall not result in any agrichemical being deposited on any roof or other structure used as a catchment for water supply other than in compliance with condition (f).</p> <p>f. Where the discharge is onto land or onto water for the purpose of eradicating, modifying or controlling unwanted aquatic plants:</p> <ul style="list-style-type: none"> i. Only agrichemicals approved for aquatic use by the Environmental Risk Management Authority may be used. ii. The applications shall not exceed the quantity and concentration required for that purpose. iii. The discharge shall not include disposal to water of any agrichemical. iv. The discharger shall notify: <ul style="list-style-type: none"> ▪ every person taking water for domestic supply within 1 km downstream of the proposed discharge, and 		

³⁸ Rule 10 does not cover the disposal of agrichemical containers.

³⁹ If Rule 10 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30, or a discretionary activity under Rule 52, whichever is relevant.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			<ul style="list-style-type: none"> ▪ every holder of a resource consent for the taking of water for public water supply purposes downstream of the proposed discharge at least 1 week before commencing the discharge. g. For aerial discharges, all reasonable measures shall be taken to prevent any discharge of agrichemicals within 20 m of: <ul style="list-style-type: none"> i. any continually flowing river which has a bed width of 3 m or more, and ii. any lake or wetland⁴⁰. h. Aerial and ground based discharges shall be notified by the property owner, manager or contractor in accordance with the following requirements⁴¹: <ul style="list-style-type: none"> i. Where the application is on private land, occurs on any land within 50 m of an adjacent property twice in any 12 month period, and occurs in circumstances where spray drift beyond the property boundary cannot be avoided, a property spray plan shall be prepared at the beginning of each year, or spray season, in accordance with Appendix M4 of the New Zealand Standard for the Management of Agrichemicals (NZS 8409:2004). The plan shall be given upon request to the owner or occupier of any adjacent property, or to a Council officer. ii. Where the application is on private land, signs shall be used to clearly indicate the use of any agrichemicals: <ul style="list-style-type: none"> • within 10m of public land where there is a shelter belt giving effective protection between the application and the public land, or • within 30m of public land where there is no shelter belt giving effective protection between the application and the public land. 		

⁴⁰ For the purposes of this Plan, the term 'wetland' does NOT include:

- wet pasture
- artificial wetlands used for wastewater or stormwater treatment
- farm dams and detention dams
- land drainage canals and drains
- reservoirs for firefighting, domestic or municipal water supply
- temporary ponded rainfall
- artificial wetlands created for beautification purposes.

⁴¹ For the avoidance of doubt, the notification requirements set out in condition h(i) **do not** apply to discharges of agrichemicals where there is never any spray drift beyond the property boundary.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			iii. Where the application is on public land notification shall be given in newspapers or by door-to-door advice to land occupiers adjacent to the intended application at the beginning of the spray season, not more than six months prior to application and in any case not less than one month prior to application; and signs shall be used to clearly indicate the agrichemical use. iv. Where the application may affect bee keeping, prior notification shall be given to the affected parties.		

ADVISORY NOTES:

- Vertebrate toxic agents** are covered under the Hazardous Substances and New Organisms Act 1996 and under the Agricultural Compounds and Veterinary Medicines Act 1997.
- Agrichemical spray drift hazard** – Table Y1 from the New Zealand Standard for the Management of Agrichemicals (NZS 8409:2004) includes the following guidance chart for assessing agrichemical spray drift hazard. Dischargers should note that adequate notification of those who may be at risk enables them to take precautionary action which can reduce the potential effects of spray drift.

FACTOR	POTENTIAL DRIFT HAZARD SCALE	
	HIGH	LOW
Wind speed	Zero/very low (<1 m/s) or >6 m/s	Steady (1-3 m/s)
Wind direction	Unpredictable	Predictable, and away from sensitive areas
Humidity	Low (delta T>8°C)	High (delta T<4°C)
Atmospheric stability	Inversion layer present	No inversion layer
Maximum height of release	>1.5 m above the target	<0.5 m above the target
Particle (droplet) size	<50 microns diameter	>250 microns diameter
Volatility	High (vapour pressure >10 mPa)	Low (vapour pressure <0.1 mPa)
Sensitive area	Close (<100 m away)	None, or more than 1 km distant
Buffer zone	None	Yes (>100 m)
Shelter belts	No shelter	Live shelter, >3 m high and 1 m thick
Toxicity	Scheduled agrichemicals	Unscheduled agrichemicals

6.4.2 AGRICULTURAL ACTIVITIES & OTHER ACTIVITIES ON PRODUCTION LAND - DISCHARGES TO AIR/LAND/WATER

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
11 Fertiliser use <i>Refer POL 69</i>	The discharge of contaminants into air, or into or onto land, arising from the storage, transfer or use of fertiliser ⁴² .	Permitted ⁴³	a. The discharge shall not cause any effects which are noxious, offensive or objectionable. Note: The HBRC will accept, as one means of compliance with condition (a), any discharge of fertiliser undertaken in accordance with the Code of Practice for Fertiliser Use (New Zealand Fertiliser Manufacturers' Research Association, 1998).		
12 Stock feed <i>Refer POL 12, 69, 71, 75</i>	The discharge of contaminants into air, or onto or into land arising from the storage, transfer, treatment, mixing or use of stock feed ⁴⁴ on production land, including silage.	Permitted ⁴⁵	a. Any area in the Heretaunga Plains unconfined aquifer (Schedule Va) or the Ruataniwha Plains unconfined aquifer (Schedule IV) which is used for storing stock feed, including silage, and when there is a potential for contamination of groundwater by seepage of contaminants, shall be managed in a manner that prevents such contamination. b. Any discharges to air shall not cause any offensive or objectionable odour, or noxious or dangerous levels of gases, beyond the boundary of the subject property. c. There shall be no visible discharge of any material, including dust, beyond the boundary of the subject property, unless written approval is obtained from the affected property owner. d. The discharge shall not result in any airborne liquid contaminant being carried beyond the boundary of the subject property. e. There shall be no discharge within 20 m of any surface water body. f. There shall be no surface ponding in any area used to store stock feed or feed stock, and no runoff of contaminants into any surface water body. g. There shall be no discharge within 30 m of any bore or well.		

⁴² For the purposes of this Plan, 'fertiliser' is defined as any substance used in sustaining or increasing the growth, productivity, or quality of plants by its application to those plants or the soil in which they grow or will grow. Rule 11 does not encompass the use of biosolids, soil conditioners, or animal effluent (See Glossary for further details).

⁴³ If Rule 11 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30, or a discretionary activity under Rule 52, whichever is relevant.

⁴⁴ For the purposes of this Plan, 'stock feed' means organic material that can be consumed by farmed animals.

⁴⁵ If Rule 12 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30, or a discretionary activity under Rule 52, whichever is relevant.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>13</p> <p>Use of compost, biosolids & other soil conditioners⁴⁶</p> <p><i>Refer PQL 12, 69, 71, 75</i></p>	<p>The discharge of contaminants into air, or onto or into land, arising from the storage, transfer, treatment, mixing or use of compost, biosolids and other (solid or liquid) organic material for soil conditioning purposes⁴⁷ including:</p> <ul style="list-style-type: none"> • paunch grass • apex meal • stockyard scrapings • grape marc • compost (except as regulated by Rule 28⁴⁸) and • poultry manure (except as regulated by Rule 11 or 14). 	Permitted⁴⁹	<p>a. Any area in the Heretaunga Plains unconfined aquifer (Schedule Va) or the Ruataniwha Plains unconfined aquifer (Schedule IV) which is used for storing organic material and when there is a potential for contamination of ground water by seepage of contaminants, shall be managed in a manner that prevents such contamination.</p> <p>b. Any discharges to air shall not cause any offensive or objectionable odour, or noxious or dangerous levels of gases, beyond the boundary of the subject property.</p> <p>c. There shall be no visible discharge of any material, including dust, beyond the boundary of the subject property, unless written approval is obtained from the affected property owner.</p> <p>d. The discharge shall not result in any airborne liquid contaminant being carried beyond the boundary of the subject property.</p> <p>e. There shall be no surface ponding in the area used to store, mix or use the organic material, and no runoff of contaminants into any surface water body.</p> <p>f. There shall be no discharge within 30 m of any bore or well.</p> <p>g. The discharge shall occur no less than 600 mm above the winter ground water table.</p> <p>h. Where material is discharged onto grazed pasture, the application rate shall not exceed 150 kg/ha/y of nitrogen.</p> <p>i. Where material is discharged onto land used for a crop, the application rate shall not exceed the rate of nitrogen uptake by the crop.</p>		

⁴⁶ If Council receives complaints about an activity operating under this rule, the Council may request a management plan which sets out how the conditions are being met.

⁴⁷ For the purpose of this rule “soil conditioning purposes” means the application of organic material to improve the structure and quality of the soil

⁴⁸ The composting of more than 100 m³ of compost and raw material per premises is regulated by Rule 28.

⁴⁹ If Rule 13 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30, or a discretionary activity under Rule 52, whichever is relevant.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>14</p> <p>Animal effluent</p> <p><i>Refer POL 8, 12, 14, 17, 19, 47</i></p>	<p>The discharge of contaminants into air, or onto or into production land, arising from the management of liquid animal effluent⁵⁰, including dairy shed effluent, piggery effluent, and poultry farm effluent⁵¹, including associated sludges (except as provided for by Rules 13 & 15).</p>	<p>Controlled⁵²</p>	<p>a. Any area used for storing animal effluent, where there is a potential for contamination of groundwater by seepage of contaminants, shall be managed in a manner that prevents any such contamination.</p> <p>b. Either:</p> <p>i. there shall not be offensive or objectionable odour, or noxious or dangerous levels of gases or other airborne liquid contaminants, beyond the boundary of the subject property, or</p> <p>ii. for discharges of effluent from piggeries, every point of discharge shall be sited so as to meet the requirements of the "Code of Practice - Pig Farming" (New Zealand Pork Industry Board, 1997), in respect of buffer zone distances.</p> <p>c. There shall be no visible discharge of any material, including dust, beyond the boundary of the subject property, unless written approval is obtained from the affected property owner.</p> <p>d. There shall be no runoff of any contaminant into any surface water body.</p> <p>e. There shall be no discharge within 30 m of any bore or well.</p> <p>f. Where effluent is discharged onto grazed pasture, the nitrogen loading rate from the effluent application shall not exceed 150 kg/ha/y of nitrogen.</p> <p>g. Where effluent is discharged onto land covered by a crop, or to be used for cropping purposes, the application rate shall not exceed the rate of nitrogen uptake by the crop.</p>	<p>a. Amount of effluent per discharge.</p> <p>b. Frequency of discharge.</p> <p>c. Maintenance of vegetative cover.</p> <p>d. Buffer zone requirements.</p> <p>e. Measures to avoid a breach of the environmental guidelines for surface and groundwater quality set out in section 5.4 and 5.6.</p> <p>f. Management of cumulative adverse effects.</p> <p>g. For discharges of effluent from piggeries, use of the best practicable option for minimising discharges of odour beyond the boundary of the subject property.</p> <p>h. Duration of consent.</p> <p>i. Review of consent conditions.</p> <p>j. Compliance monitoring.</p>	<p>Applications may be considered without notification, without the need to obtain the written approval of affected persons, except that written approval of affected neighbours may be required for new consents, but upon renewal the approval of affected neighbours will not be required.</p>

50 For the purposes of this rule, "animal effluent" refers to animal excreta (excluding human waste) that is collected and managed by people, including associated process water and contaminants including associated process water, contaminants and sludges.

51 Rule 14 covers the discharge of poultry effluent from poultry farms on land associated with the poultry farm, where the discharge is for the purpose of disposal.

52 If Rule 14 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30, or a discretionary activity under Rule 52, whichever is relevant.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>15 Discharge of animal effluent in sensitive catchments <i>Refer POL 8, 17, 19, 20, 47</i></p>	<p>The discharge of contaminants into air, or onto or into production land, arising from the management of liquid animal effluent⁵³, including dairy shed effluent, piggery effluent, and poultry farm effluent in the following catchments as shown in Schedule VIb:</p> <ul style="list-style-type: none"> • Headwaters of Mohaka River • Headwaters of the Ngaruroro River • Maungawhio • Lake Hatuma • Lake Tutira • Heretaunga Plains unconfined aquifer • Ruataniwha Plains unconfined aquifer • Lake Whakaki • Headwaters of the Tutaekuri River • Headwater of the Tukituki River. 	<p>Discretionary</p>			

53 For the purposes of this rule, “animal effluent” refers to animal excreta (excluding human waste) that is collected and managed by people, including associated process water and contaminants including associated process water, contaminants and sludges.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>16</p> <p>Management of solid waste on production land</p> <p><i>Refer POL 16</i></p>	<p>The discharge of contaminants into air, or onto or into production land, arising from the storage, transfer, treatment or disposal of solid waste, including:</p> <ul style="list-style-type: none"> the use of farm tips offal holes. 	Permitted ⁵⁴	<p>a. The waste shall have been generated on the subject property, or on another property under the same ownership as that used for disposal.</p> <p>b. There shall be no disposal of waste oil or other hazardous substances.</p> <p>c. Any discharges to air shall not cause any offensive or objectionable odour, or noxious or dangerous levels of gases, beyond the boundary of the subject property.</p> <p>d. There shall be no visible discharge of any material, including dust, beyond the boundary of the subject property, unless written approval is obtained from the affected property owner.</p> <p>e. The discharge shall not result in any airborne liquid contaminant being carried beyond the boundary of the subject property.</p> <p>f. There shall be no discharge within 20 m of any surface water body, or over the Heretaunga Plains or Ruataniwha Plains unconfined aquifers as shown in Schedule IV.</p> <p>g. There shall be no ponding in the area used for waste management, and no runoff of contaminants into any surface water body.</p> <p>h. There shall be no discharge within 30 m of any bore or well.</p> <p>i. The discharge shall not cause any contamination of groundwater.</p> <p>j. Any waste disposal shall be no less than 600 mm above the winter groundwater table.</p> <p>k. Any offal holes used shall be securely covered, and shall be constructed in soil with an infiltration rate not exceeding 150 mm/hour⁵⁵.</p>		

ADVISORY NOTES:

1. **Combustion of waste** – The combustion of waste is addressed by Rules in Section 6.5.2 of this Plan.

⁵⁴ If Rule 16 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30, or a discretionary activity under Rule 52, whichever is relevant.

⁵⁵ **Soil infiltration rate** – For the purposes of condition (k), the soil type should not comprise gravels, coarse/medium sands, scoria, fissured rock, or other such materials likely to permit free travel of excreta residues away from the offal hole.

6.5 DISCHARGES TO AIR

6.5.1 COMBUSTION OF FUEL - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>17</p> <p>Combustion of specified fuels</p> <p><i>Refer POL 69, 69a</i></p>	<p>The discharge of any contaminant into air from any industrial or trade premises or any other source⁵⁶, excluding any moveable source⁵⁷ and any dwellinghouse, arising from the combustion of:</p> <ul style="list-style-type: none"> natural or liquefied petroleum gas; and/or coal, diesel, kerosene, light fuel oil, heavy fuel oil, wood pellet fuel or untreated wood. 	<p>Permitted⁵⁸</p>	<p>a. The maximum heat output shall not exceed:</p> <ol style="list-style-type: none"> 5 MW for natural or liquefied petroleum gas, or 100 kW for coal, light fuel oil, heavy fuel oil, or untreated wood, or 200 kW for wood pellet fuel 2 MW for diesel or kerosene (external combustion) 100 kW for diesel or kerosene (internal combustion) Where more than one fuel type is used on the site the combined heat output shall not exceed the lowest MW threshold of the fuel types used. <p>b. The fuel shall be burned using fuel burning equipment, and the discharge shall be from a chimney or exhaust structure designed so that the emission is effectively dispersed upwards.</p> <p>c. At any point beyond the boundary of the subject property or on public land:</p> <ol style="list-style-type: none"> the discharge shall not result in any smoke that adversely affects traffic safety, or reduces visibility within 5 metres of ground level; The discharge shall not result in any objectionable deposition of particulate matter on land or structure; The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases. <p>d. The fuel shall not comprise any of the waste materials specified in the activity description of Rule 20.</p> <p>e. For external combustion sources the stack shall comply with the requirements of Schedule IX.⁵⁹</p>		

56 Includes the discharge of contaminants into air from any small scale solid fuel burner and open fire on industrial or trade, or commercial premises where the small scale solid fuel burner or open fire is used exclusively for the smoking or cooking of food for wholesale or retail sale.

57 Discharges of contaminants into air arising from the combustion of fuels in moveable sources (including motor vehicles and aircraft but excluding moveable asphalt plants and road burners which are regulated under Section 6.5.4), are not regulated by this Plan and therefore do not require resource consents.

58 If Rule 17 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.

59 Schedule IX sets out estimated emission rates of contaminants from the activities provided for by Rule 17.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>18</p> <p>Combustion of specified fuels</p> <p><i>Refer POL 8, 69,69a</i></p>	<p>Except as provided for by Rule 17, the discharge of any contaminant into air from any industrial or trade premises or any other source, excluding any moveable source and any dwellinghouse, arising from the combustion of:</p> <ul style="list-style-type: none"> • natural or liquefied petroleum gas, and/or • diesel or wood pellet fuel. 	Controlled⁶⁰	<p>a. The maximum heat output shall not exceed:</p> <ol style="list-style-type: none"> i. 50 MW for natural or liquefied petroleum gas, or ii. 600 kW for wood pellet fuel in a modified pellet boiler iii. 1.2 MW for wood pellet fuel in a custom designed pellet boiler iv. 5 MW for diesel (external combustion). v. Where more than one fuel type is used on the site the combined heat output shall not exceed the lowest MW threshold of the fuel types used. <p>b. The fuel shall not comprise any of the waste materials specified in the activity description of Rule 20.</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <ol style="list-style-type: none"> i. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure; ii. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases; iii. The discharge shall not result in any smoke that adversely affects traffic safety or reduces visibility within a height of 5 metres above ground level. 	<p>a. Methods used to disperse contaminants, including chimney height, chimney design and emission velocity and direction of exhaust gases. Chimney height will be determined generally in accordance with Schedule IX.</p> <p>b. Duration of consent.</p> <p>c. Lapsing of consent.</p> <p>d. Review of consent conditions.</p> <p>e. Compliance monitoring.</p> <p>f. Contaminant emission rate.⁶¹</p> <p>g. Any measures necessary to: ensure maintenance of fuel burning equipment, the carrying out of measurements, samples, analysis, surveys, investigations or inspections, including the monitoring of: contaminant concentrations and emission rates, the opacity of the discharge, quantity of fuel used, the cumulative effects of the discharge in combination with discharges from other sources, the provision of information to the consent authority at specified times.</p> <p>h. Administrative charges.</p> <p>i. Effects on flight paths and the roading network.</p> <p>j. New technologies available to minimise any discharges or their effects.</p>	<p>Applications will generally be considered without notification, without the need to obtain the written approval of affected persons.</p>
18a	[NOTE: Rule 18A has been withdrawn. Withdrawal effective from 1 July 2011]				

⁶⁰ If Rule 18 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.

⁶¹ Schedule IX sets out estimated emission rates of contaminants from the activities provided for by Rule 18.

6.5.1A SMALL SCALE SOLID FUEL BURNERS - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>18b</p> <p>Discharge to air from open fires</p> <p>Napier & Hastings Airsheds</p> <p><i>Refer POL 69, 69a</i></p>	<p>Except as provided for by Rule 18f, the discharge of contaminants into air from a building located within the Hastings or Napier Airsheds resulting from the burning of any solid fuel in any open fire from 1 January 2012, unless:</p> <ul style="list-style-type: none"> the open fire was installed before 10 December 2008, and is located on a property over 2 hectares in size or is located in Airzone 2 of the Hastings or Napier Airsheds. 	Prohibited			
<p>18c</p> <p>Discharge to air from any small scale solid fuel burner - Hastings Airshed</p> <p><i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air from a small scale solid fuel burner in a building located within the Hastings Airshed.</p>	Permitted⁶²	<p>a. Any solid fuel burner located on a property less than 2 hectares in size in Airzone 1 of the Hastings Airshed must comply with the requirements in Part A Schedule XII, except where the solid fuel burner:</p> <ul style="list-style-type: none"> was installed before the operative date of this Rule, and meets the requirements of Part B Schedule XII or Part C Schedule XII, or complies with the definition of 'wood fired cooker' in this Plan. <p>b. Any solid fuel burner located in Airzone 2 of the Hastings Airshed or in Airzone 1 of the Hastings Airshed on a property over 2 hectares in size must comply with the requirements in Part B Schedule XII, except where the solid fuel burner was installed before the operative date of this Rule.</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <ol style="list-style-type: none"> The discharge shall not result in any objectionable deposition of particulate matter on any land or structure; The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases. 		

62 If Conditions (b), (c) or (d) of Rule 18c cannot be complied with, then the activity is a restricted discretionary activity under Rule 30. If Condition (a) of Rules 18c cannot be complied with then the activity is prohibited under Rule 18g.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			d. Contaminants discharged may only be derived from the combustion of fuel approved by the manufacturer for use in the solid fuel burner.		
18d Discharge to air from any small scale solid fuel burner - Napier Airshed <i>Refer POL 69, 69a</i>	The discharge of contaminants into air from a small scale solid fuel burner in a building located within the Napier Airshed.	Permitted ⁶³	<p>a. Any solid fuel burner located on a property less than 2 hectares in size in Airzone 1 of the Napier Airshed must comply with the requirements in Part B Schedule XII or Part C Schedule XII, except where the solid fuel burner was installed before the operative date of this rule and complies with the definition of 'wood fired cooker' in this plan.</p> <p>b. Any solid fuel burner located in Airzone 2 of the Napier Airshed or in Airzone 1 of the Napier Airshed on a property over 2 hectares in size must comply with the requirements in Part B Schedule XII, except where the solid fuel burner was installed before the operative date of this Rule.</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <p>i. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure;</p> <p>ii. The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases.</p> <p>d. Contaminants discharged may only be derived from the combustion of fuel approved by the manufacturer for use in the solid fuel burner.</p>		
18e	Number not used				

⁶³ If Conditions (b), (c) or (d) Rule 18d cannot be complied with, then the activity is a restricted discretionary activity under Rule 30. If Condition (a) of Rule 18d cannot be complied with then the activity is prohibited under Rule 18g.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>18f</p> <p>Discharge to air from any small scale solid fuel burner or open fire in a registered historic building</p> <p>Napier & Hastings Airsheds</p> <p><i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air from any existing small scale solid fuel burner or open fire that is located within a registered historic building located in the Napier or Hastings Airsheds.</p>	<p>Permitted</p>	<p>a. The small scale solid fuel burner or open fire must be located within a registered historic building.⁶⁴</p> <p>b. Any wood burner installed after 1 September 2005, or any small scale solid fuel burner installed after 10 December 2008, in a building on a property with an allotment size of less than 2 hectares, must comply with the requirements in Schedule XII.</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <p>i. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure;</p> <p>ii. The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases.</p>		
<p>18g</p> <p>Discharge to air from any small scale solid fuel burner</p> <p>Napier & Hastings Airsheds</p> <p><i>Refer POL 69, 69a</i></p>	<p>Except as provided for by Rules 18c, 18d and 18f the discharge of contaminants into air from any small scale solid fuel burner in a building located in Airzone 1 of the Napier or Hastings Airsheds is prohibited from the following dates:</p> <ul style="list-style-type: none"> • small scale solid fuel burners installed prior to 31 December 1995 are prohibited from use after 1 January 2014; • small scale solid fuel burners installed between 1 January 1996 and 31 August 2005 are prohibited from use after 1 January 2016. • small scale solid fuel burners installed after 1 September 2005 that do not comply with the requirements in Schedule XII are prohibited from use after 1 January 2018 in Airzone 1 of the Hastings Airshed, and after 1 January 2020 in Airzone 1 of the Napier Airshed. 	<p>Prohibited</p>			

⁶⁴ For the purposes of Rule 18f 'registered historic buildings' are buildings that are individually registered on the Historic Places Register and/or in the District Plan.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>18h Discharge to air from any small scale solid fuel burner or open fire at property ownership transfer⁶⁵ – Napier & Hastings Airsheds <i>Refer POL 69, 69a</i></p>	<p>Except as provided for by Rules 18c, 18d and 18f, the discharge of contaminants into air from any existing small scale solid fuel burner or open fire, located within Airzone 1 of the Napier or Hastings Airsheds that:</p> <ul style="list-style-type: none"> • is occurring at any time after the date from which there is a registered transfer of ownership of the property, following this rule becoming operative. 	<p>Prohibited⁶⁶</p>			

⁶⁵ Rule 18h does not apply to a transfer in title in consequence of death of an owner when the title is transferred to the surviving partner, or where the surviving partner continues to occupy the dwelling.

⁶⁶ For the purposes of Rule 18h, the Hawke's Bay Regional Council may require evidence that the small scale solid fuel burner complies with the standards specified in Rules 18c and 18d. Approved models are listed on the website for the Ministry for the Environment (www.mfe.govt.nz).

6.5.2 BURNING OF WASTE - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>19</p> <p>Burning of waste</p> <p><i>Refer POL 69, 69a</i></p>	<p>Except as provided for in Rule 20a, the discharge of contaminants into air arising from the burning of waste.⁶⁷</p>	<p>Permitted⁶⁸</p>	<p>a. The waste shall have been generated on the same property, or on another property under the same ownership, as that used for combustion, except for:</p> <ul style="list-style-type: none"> i. Waste originating from ships, or road or rail reserves, or park reserves ii. Waste originating from river control works iii. Waste to be burned for fire training purposes. <p>b. Except for burning undertaken in accordance with (c) below, any material burnt on, or originating from, industrial or trade premises shall be burned using fuel burning equipment, and the discharge shall be from a chimney or exhaust structure designed so that the emission is effectively dispersed upwards.</p> <p>c. The material to be burned shall not contain any animal waste (except animal waste generated on production land), tyres or other rubber, waste oil, any waste products containing hydrocarbons, wood treated with chemicals, painted wood, chip board, plastic, asbestos, medical waste, chemical waste, or any combination of metals and combustible materials or any of the other waste materials specified in the activity description of Rule 20, except where the burning is for the purpose of training fire fighting personnel.</p> <p>d. At any point beyond the boundary of the subject property, or on public land:</p> <ul style="list-style-type: none"> i. The discharge shall not result in any smoke that adversely affects traffic safety, or reduces visibility within a height of 5 metres above ground level, or reduces visibility within recognised flight paths in the vicinity of airports; ii. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure; 		

⁶⁷ Where discharges of contaminants occur as a result of local authorities carrying out their functions by burning waste on public land the above Conditions (a) to (e) apply.

⁶⁸ If Rule 19 cannot be complied with (and the activity is not prohibited by Rule 20), then the activity is a restricted discretionary activity under Rule 30.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			<p>iii The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases.</p> <p>e. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		
<p>19a Burning of vegetative matter, paper, cardboard and untreated wood <i>Refer POL 69, 69a</i></p>	<p>Except as provided for by Rule 19e and Rule 20a, the discharge of contaminants into air arising from the burning in the open of vegetative matter, paper, cardboard and untreated wood.</p>	Permitted ⁶⁹	<p>a. Burning shall only consist of vegetative matter, paper, cardboard and untreated wood generated on the same property, or a property under the same ownership.</p> <p>b. If the property is located within the Hastings or Napier Airsheds the discharge shall not occur during the months of May, June, July or August.⁷⁰</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <p>i. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure;</p> <p>ii. The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases.</p> <p>d. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		
<p>19b Outdoor burning for specified purposes <i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air from outdoor burning of materials for any of the following purposes:</p> <ul style="list-style-type: none"> • fire fighting research or fire fighting training purposes • creating special smoke and fire effects for the purposes of producing films 	Permitted	<p>a. At any point beyond the boundary of the subject property, or on public land:</p> <p>i. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure;</p> <p>ii. The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases.</p> <p>b. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		

69 For the avoidance of doubt, the burning of prunings, tree branches, roots, leaves, grass cuttings, seed pods, stalks, stubble (stems) and wood on horticultural or production land is covered by Rule 19a.

70 If Condition b of Rule 19a cannot be complied with, then the activity is non-complying under Rule 19c.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
	<ul style="list-style-type: none"> fireworks display or other temporary event involving the use of fireworks. 		<p>c. Any discharge for the purposes of research or training people to put out fires must take place under the control of the New Zealand Fire Service or other nationally recognised body authorised to undertake fire fighting research or fire fighting activities.</p> <p>d. Any discharge for the purposes of fire fighting research or training purposes, or for the creation of special smoke or fire effects for producing films:</p> <p>(i) Must not occur during the months of May, June, July or August⁷¹ If the property is located within the Hastings or Napier Airsheds; and</p> <p>(ii) Must be notified to the Council at least 2 working days prior to the activity commencing.</p>		
<p>19c Outdoor burning during certain times of the year <i>Refer POL 69, 69a</i></p>	<p>Except as provided for in Rules 19, 19d, 19e, 20 and 20a the discharge of contaminants into air in the Hastings and Napier Airsheds from outdoor burning during the months of May, June, July or August.⁷²</p>	<p>Non complying</p>			
<p>19d Discharge to air from frost protection heaters <i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air from the burning of fuel in any frost protection heater.⁷³</p>	<p>Permitted</p>	<p>a. The discharge shall only take place to prevent frost damage to horticultural production crops.</p> <p>b. The burning of oil⁷⁴ shall only take place in fuel burning equipment that operates with a stack or chimney.</p> <p>c. The fuel shall not comprise any of the specific fuels or waste specified in Rule 20.</p>		

71 If Condition d(i) of Rule 19b cannot be complied with, then the activity is non-complying under Rule 19c.

72 Rule 19c does not override Regulation 10 of the Resource Management (National Environmental Standards for Air Quality) Regulations 2004 which prohibits burning of oil in the open.

73 Rule 19d does not override Regulation 10 of the Resource Management (National Environmental Standards for Air Quality) Regulations 2004 which prohibits burning of oil in the open.

74 For the purposes of Condition (b) of Rule 19d oil is defined as: petroleum in any form other than gas, including crude oil, and refined oil products (e.g. diesel fuel, kerosene, motor gasoline), but excludes waste oil which is prohibited from being burnt in the open under Rule 20.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>19e</p> <p>Outdoor burning on horticultural production land during certain times of the year</p> <p>Napier & Hastings Airsheds</p> <p><i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air from outdoor burning of vegetative matter on horticultural production land located within the Napier and Hastings Airsheds during the months of May, June, July or August.</p>	<p>Permitted</p>	<p>(a) Burning shall only be undertaken to dispose of vegetative material that has been generated on the property⁷⁵ containing the horticultural production land.</p> <p>(b) Burning shall only be undertaken to dispose of diseased vegetative material, or to dispose of remaining vegetative material from orchard/vineyard redevelopment⁷⁶ where there is no other reasonable or practicable onsite alternative disposal technique (e.g. mulching).</p> <p>(c) The discharge shall not occur when the wind or forecast wind is likely to cause smoke to move towards the urban area (Airzone 1) of the Napier or Hastings Airsheds.</p> <p>(d) The discharge shall not occur if the wind speed measured at 1 metre above the ground is less than 3 metres per second.</p> <p>(e) The burn shall only take place between the months of May – August (inclusive)⁷⁷.</p> <p>(f) At any point beyond the boundary of the subject property or on public land:</p> <p>(i) The discharge shall not result in any smoke that adversely affects traffic safety, or reduces visibility within 5 metres of ground level;</p> <p>ii The discharge shall not result in any objectionable deposition of particulate matter on land or structure;</p> <p>iii The discharge shall not result in any offensive or objectionable smoke or odour.</p> <p>(g) The burn shall be supervised at all times.</p> <p>(h) At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		

75 For the purposes of Rule 19e 'property' shall include any land under the same ownership or lease.

76 For the purposes of Rule 19e 'orchard/vineyard redevelopment' means the replacement of commercial food production trees with other commercial food production trees, or where shelterbelts need to be removed for redevelopment purposes.

77 If the Activity is taking place outside of the months of May – August (inclusive) then it is permitted under Rule 19a subject to conditions, standards and terms being met.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>20</p> <p>Burning of specified waste in the open & in small scale fuel burning appliances</p> <p>Refer POL 69, 69a</p>	<p>Except as provided for in Rules 19 and 20a the discharge of contaminants into air arising from the burning in the open, and/or in a small scale fuel burner of:</p> <ul style="list-style-type: none"> • any combination of metals and combustible materials, including coated or covered cables, or • animal waste (excluding animal waste generated on production land), tyres and other rubber, waste oil, wood treated with chemicals (except wood pellets which comply with the definition of 'wood pellets' in this Plan), oiled, painted or stained wood, chip board, asbestos, medical waste, pacemakers, biomechanical devices, or chemical waste, or • synthetic material, including but not limited to, motor vehicle parts, foams, fibreglass, batteries, surface coating materials, tar, or any type of plastic, or • peat. 	<p>Prohibited</p>			

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for control/discretion	Non-notification
<p>20a</p> <p>Burning of waste for purposes of disease control or quarantine control</p> <p><i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air arising from the burning of waste for the purposes of disease control or quarantine control⁷⁸ in accordance with Section 7A and Part VII of the Biosecurity Act 1993, or where the Hawke's Bay Regional Council has declared a Biosecurity risk.</p>	<p>Permitted</p>	<p>a. At any point beyond the boundary of the subject property, or on public land:</p> <ul style="list-style-type: none"> i. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure; ii. The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases; iii. The discharge shall not result in any smoke that adversely affects traffic safety, or reduces visibility within a height of 5 metres above ground level, or reduces visibility within recognised flight paths in the vicinity of airports. <p>b. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		

ADVISORY NOTE:

1. **Territorial authority bylaws** – It is important to note that Rules in Section 6.5.2 do not replace territorial local authority bylaws controlling burning. Persons burning any waste or other materials should ensure that they comply with any relevant bylaws, including prohibited or restricted fire seasons.

⁷⁸ **Disease control and quarantine control** – The Ministry of Agriculture administers disease control and quarantine control requirements.

6.5.2 MANAGEMENT OF WASTE & OTHER MATTER, EXCLUDING INDUSTRIAL & TRADE PREMISES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>21 Waste & other matter, excluding industrial & trade premises <small>78A</small></p> <p><i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air arising from the storage, use, transfer, treatment or disposal of waste and other matter⁷⁹, excluding:</p> <ul style="list-style-type: none"> discharges into air from any industrial or trade premises⁸⁰ discharges into air addressed by other Rules in this Plan discharges into air from moveable sources. 	Permitted ⁸¹	<p>a. Any waste which is disposed of shall have been generated on the subject property or on another property under the same ownership as that used for disposal.⁸²</p> <p>b. The discharge shall not result in any airborne liquid contaminant being carried beyond the boundary of the subject property.</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <ol style="list-style-type: none"> The discharge shall not result in any visible discharge of any material, including dust; The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases. <p>d. For any discharge into air arising from material sourced from industrial and trade premises, a management plan shall be prepared which sets out how conditions (b) to (d) will be met. A copy of this management plan shall be provided to the Hawke's Bay Regional Council upon request.</p>		

78A Rule 21 does not apply to the discharge of contaminants into air arising from the storage, use, transfer, treatment or disposal of waste and other matter associated with **plantation forestry** activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.

79 **Combustion of waste** – The discharge of contaminants into air arising from the burning of waste and other matter, is addressed under Rules 19 and 20.

80 **Industrial and trade premises** – The discharge of contaminants into air from industrial or trade premises, arising from the management of waste and other matter, is addressed under Rules 28 and 29.

81 If Rule 21 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.

82 Condition (a) of Rule 21 only restricts the source of waste to be disposed of. The source of waste or other matter that is stored, used, transferred or treated is not restricted.

6.5.3 ABRASIVE BLASTING - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>22</p> <p>Wet abrasive blasting⁸³</p> <p><i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air from abrasive blasting, using wet abrasive blasting techniques.</p>	<p>Permitted⁸⁴</p>	<p>a. The operator shall so far as is practicable collect and remove all debris and used blasting materials on a daily basis, and when operations are completed.⁸⁵</p> <p>b. At any point beyond the boundary of the subject property, or in relation to public land, the lesser of beyond the boundary of the public land or beyond 50 metres from the discharge:</p> <p>i. There shall be no discharge of water spray or dust;</p> <p>ii. The discharge shall not result in any noxious or dangerous levels of airborne contaminants.</p>		
<p>23</p> <p>Dry abrasive blasting – fixed source⁸⁶</p> <p><i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air from dry abrasive blasting, other than from the use of a moveable source.</p>	<p>Permitted⁸⁷</p>	<p>a. All items shall be blasted within an abrasive blasting enclosure.⁸⁸</p> <p>b. There shall be no visible discharge of dust beyond the abrasive blasting enclosure.</p> <p>c. At any point beyond the boundary of the subject property, or any public land:</p> <p>i. There shall be no discharge of water spray or dust;</p> <p>ii. The discharge shall not result in any noxious or dangerous levels of airborne contaminants.</p>		

83 Rule 22 does not apply to the wet or dry abrasive blasting of a transmission line support structures of existing high voltage electricity transmission lines or the preparation of the structure to receive a protective coating. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

84 If Rule 22 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.

85 For the purpose of Rule 22(a), the surface to be blasted should not contain any significant levels of hazardous substances, including lead, zinc, arsenic, chromium, copper, mercury, asbestos, tributyl tin, thorium-based compounds, other heavy metals, and anti-fouling substances. The document "Guidelines for the Management of Lead-based Paint" (Occupational Safety and Health Service and Public Health Commission, 1995) provides comprehensive guidance for the removal of lead-based paints.

86 Rule 23 does not apply to the wet or dry abrasive blasting of a transmission line support structures of existing high voltage electricity transmission lines or the preparation of the structure to receive a protective coating. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

87 If Rule 23 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.

88 For the purpose of Rule 23(a), the surface to be blasted should not contain any significant levels of hazardous substances, including lead, zinc, arsenic, chromium, copper, mercury, asbestos, tributyl tin, thorium-based compounds, other heavy metals, and anti-fouling substances. The document "Guidelines for the Management of Lead-based Paint" (Occupational Safety and Health Service and Public Health Commission, 1995) provides comprehensive guidance for the removal of lead-based paints.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>24</p> <p>Dry abrasive blasting – moveable source⁸⁹</p> <p><i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air from abrasive blasting, using both dry abrasive blasting techniques and a moveable source.</p>	<p>Discretionary⁹⁰</p>			

ADVISORY NOTE:

1. Where discharges may enter water, then the activity must also meet the requirements of Rule 49; or the requirements of the Regional Coastal Plan where the discharge enters coastal waters.

⁸⁹ Rule 24 does not apply to the wet or dry abrasive blasting of a transmission line support structures of existing high voltage electricity transmission lines or the preparation of the structure to receive a protective coating. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

⁹⁰ **Resource consents for multiple locations** - Nothing in Rule 24 precludes persons from applying for a single permit to cover multiple locations in the Hawke's Bay region.

6.5.4 MOVEABLE SOURCES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>25</p> <p>Moveable aggregate crushing & screening plants</p> <p><i>Refer POL 69, 69a</i></p>	The discharge of contaminants into air from the operation of a moveable aggregate crushing and screening plant.	Permitted⁹¹	<p>a. At any point beyond the boundary of the subject property, or in relation to public land, the lesser of beyond the boundary of the public land or beyond 50 metres from the discharge, there shall be no visible discharge of water spray or dust.</p> <p>b. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		
<p>26</p> <p>Moveable asphalt plants</p> <p><i>Refer POL 69, 69a</i></p>	The discharge of contaminants into air arising from the operation of a moveable asphalt plant.	Discretionary⁹²			
<p>27</p> <p>Moveable road burners</p> <p><i>Refer POL 69</i></p>	The discharge of contaminants into air arising from the operation of moveable equipment used to treat road surfaces with heat. ⁹³	Non-complying⁹⁴			

91 If Rule 25 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.

92 Resource consents for multiple locations - Nothing in Rule 26 precludes persons from applying for a single permit to cover multiple locations in the Hawke's Bay region.

93 Rule 27 does not override Regulation 8 of the Resource Management (National Environmental Standards for Air Quality) Regulations 2004 which prohibits burning of bitumen on a road.

94 Resource consents for multiple locations - Nothing in Rule 27 precludes persons from applying for a single permit to cover multiple locations in the Hawke's Bay region.

6.5.5 INDUSTRIAL & TRADE PREMISES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>28</p> <p>Miscellaneous industrial & trade premises</p> <p><i>Refer POL 8, 13, 14, 69, 69a</i></p>	<p>The discharge of contaminants into air from any industrial or trade premises arising from any of the following activities, that is not specifically regulated by any other rule within this Plan:</p> <ul style="list-style-type: none"> • waste disposal • composting, where more than 100m³ (in total) of raw material, composting material and compost is held per premises at any one time • combustion of natural or liquefied petroleum gas with a maximum heat output that exceeds 50 MW • combustion of coal, light fuel oil, heavy fuel oil or untreated wood with a maximum heat output that exceeds 100 kW • the manufacture of cement, fertiliser, milk powder, other dried milk derived products, or rubber goods • the manufacture of fibre board, pulp or paper • the mechanical drying of treated timber • rendering, tanning, fellmongering, skin or hide processing, or pet food processing • fumigation processes, except for biosecurity purposes • the manufacture of organic or inorganic chemicals, including pharmaceuticals • crematoria • asphalt plants • hot dip galvanising • manufacture or disposal of radioactive substances • manufacture of soaps or detergents • use of di-isocyanates or organic plasticisers • manufacture of aluminium, steel, fibreglass, glass or frit • sintering, calcining, or roasting of metal ores • smelting of any metal or metal alloy, including scrap metal • carbonisation, gasification, refining, purification, or reforming of natural gas, petroleum oil, shale, coal, wood, or other carbonaceous materials • smelting or burning of calcium or calcium-magnesium carbonates to produce calcium or magnesium oxides or hydroxides • combustion of diesel with a maximum heat output that exceeds 5 MW (external combustion) • Combustion of diesel and kerosene with a maximum heat output that exceeds 100 kW (internal combustion) 	<p>Discretionary</p>			

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/ Discretion	Non-notification
	<ul style="list-style-type: none"> • Combustion of kerosene with a maximum heat output that exceeds 2 MW (external combustion) • Combustion of wood pellets with a maximum heat output that exceeds 600 kW (modified pellet boilers) • Combustion of wood pellets with a maximum heat output that exceeds 1.2 MW (custom designed pellet boilers) • materials being burned in fuel burning equipment comprising any of the waste materials specified in the activity description of Rule 20. 				
<p style="text-align: center;">29</p> <p style="text-align: center;">Minor discharges from industrial & trade premises</p> <p style="text-align: center;"><i>Refer POL 69, 69a</i></p>	<p>The discharge of contaminants into air from any industrial or trade premises that is not specifically regulated by any other rule within this Plan, including:</p> <ul style="list-style-type: none"> • discharges of heat to air • discharges of energy to air, including release of energy from sources of electromagnetic radiation, including radio transmitter, television, or cell phones; or release of X-rays from a radioactive source • discharges for the purposes of ventilation or vapour displacements • discharges arising from the use of fumigants for biosecurity purposes • discharges of dust arising from the loading, unloading, and conveyance of goods and materials (including aggregates). 	Permitted⁹⁵	<ol style="list-style-type: none"> a. The opacity of any discharge of smoke when measured at the point of discharge shall not exceed 20%, except that a discharge in excess of this shall be permitted for a period of not more than two minutes continuously or for an aggregate of four minutes in any 60 minute period. b. The discharge shall not result in any airborne liquid contaminant excluding water vapour being carried beyond the boundary of the subject property. c. The discharge shall be located and designed to avoid cross contamination of air intake used for ventilation purposes. d. At any point beyond the boundary of the subject property, or on public land; <ol style="list-style-type: none"> i. The discharge shall not result in any noxious or dangerous levels of airborne contaminants; ii. There shall be no visible discharge of any contaminant, other than smoke from fuel burning equipment or water vapour; 		

⁹⁵ If Rule 29 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			<ul style="list-style-type: none"> iii. Any discharge of water vapour shall not result in any plume which adversely affects traffic safety, or reduces visibility within a height of 5 metres above ground level, or reduces visibility within recognised flight paths in the vicinity of airports; iv. The discharge shall not result in any offensive or objectionable odour; v. The dust deposition rate resulting from the discharge shall not raise the ambient dust deposition rate by more than 4g/m² per 30 days; vi. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure. e. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines. 		

6.5.6 NON-COMPLIANCE WITH/NOT REGULATED BY OTHER RULES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>30</p> <p>Discharges of contaminants to air not regulated by⁹⁶, or that cannot comply with, Rules 11-19e, 20a -29</p> <p><i>Refer POL 8, 12, 13, 14, 16, 17, 19, 20, 69, 69a, 71, 75</i></p>	<p>The discharge of contaminants into the air that:</p> <ul style="list-style-type: none"> is from an industrial and trade premises and is not specifically classified by any other rule in this Plan as a discretionary, non-complying or prohibited activity, or does not comply with all relevant conditions on a permitted activity rule, or does not comply with all relevant standards and terms on a controlled activity rule or restricted discretionary activity rule. 	<p>Restricted discretionary</p>		<p>a. The conditions, standards or terms which the activity cannot comply with, and related environmental effects.</p> <p>b. For activities that would otherwise be permitted or controlled activities (if they complied with all standards and terms of the relevant rule), the conditions/standards/terms or "matters for control" set out in the relevant rule.</p> <p>c. Duration of consent.</p> <p>d. Lapsing of consent.</p> <p>e. Review of consent conditions.</p> <p>f. Compliance monitoring.</p> <p>g. Contaminant emission limits.</p> <p>h. Any measures necessary to: ensure maintenance of fuel burning equipment, the carrying out of measurements, samples, analysis, surveys, investigations or inspections including the monitoring of: contaminant concentrations and emission rates, the opacity of the discharge, quantity of fuel used, the cumulative effects of the discharge in combination with discharges from other sources, and the provision of information to the consent authority at specified times.</p> <p>i. Administrative charges.</p> <p>j. Effects on flight paths and the roading network.</p> <p>k. New technologies available to minimise any discharges or their effects.</p> <p>l. Methods used to disperse contaminants, including chimney height, chimney design and emission velocity. Chimney height will be determined generally in accordance with Schedule IX.</p>	<p>Applications will generally be considered without notification, without the need to obtain the written approval of affected persons.</p>

⁹⁶ All other discharges to air (e.g. from residential properties) which are not specifically regulated by rules in this Plan are regulated by Section 15 of the RMA. NOTE: The Resource Management (National Environmental Standards for Air Quality) Regulations 2004 regulate the installation of woodburners on properties less than 2 hectares in size.

6.6 Discharges to Land/Water

For information requirements refer to sections 7.5, 7.6

6.6.1 WATER - DISCHARGES TO WATER

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>31</p> <p>Discharge of water⁹⁷</p> <p><i>Refer POL, 71, 79</i></p>	<p>The discharge of water (excluding drainage water) into water⁹⁸.</p>	<p>Permitted⁹⁹</p>	<p>a. The discharge shall not cause or contribute to the flooding of any property, unless written approval is obtained from the affected property owner.</p> <p>b. The discharge shall not cause any scouring or erosion of any land or any watercourse beyond the point of discharge.</p> <p>c. The discharge shall not cause the natural temperature of any receiving water to be changed by more than 3°C from normal seasonal water temperature fluctuations, after reasonable mixing¹⁰⁰.</p>		

ADVISORY NOTE:

1. **Discharge of water onto or into land** - Note that the discharge of water onto or into land is not restricted by the RMA.

97 Rule 31 does not apply to the discharge of water into water in relation to an existing high voltage electricity transmission activity. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

98 Discharges of sediment to surface water bodies as a result of scouring are covered by Rule 49.

99 If Rule 31 cannot be complied with, then the activity is a discretionary activity under Rule 52.

100 See Glossary for definition of "after reasonable mixing".

6.6.2 DRAINAGE WATER - DISCHARGES TO LAND/WATER

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>32</p> <p>Discharge of drainage water (gravity flow systems)</p> <p><i>Refer POL 71, 72, 79</i></p>	The diversion and discharge of drainage ¹⁰¹ water into water or onto or into land, from a gravity flow system (without pumping).	Permitted ¹⁰²	<p>a. There shall be no adverse flooding effects on any property owned or occupied by another person, as a result of any discharge from the drainage activity.</p> <p>b. The discharge shall not cause any scouring or erosion of any land or any water course beyond the point of discharge.</p> <p>c. The activity shall not adversely affect any wetland¹⁰³.</p> <p>d. The discharge shall not cause the natural temperature of any receiving water to be changed by more than 3°C from normal seasonal water temperature fluctuations, after reasonable mixing.</p> <p>e. Any discharge of water arising from a drainage system shall be to the same catchment¹⁰⁴ as that to which the water would naturally flow.</p> <p>f. Any suspended solids in the discharge shall comply with Policy 72.</p>		
<p>33</p> <p>Discharge of drainage water (pumped systems)</p>	The diversion and discharge of drainage ¹⁰⁵ water into water or onto or into land, from a pumped system ¹⁰⁶ .	Controlled ¹⁰⁷	<p>a. There shall be no adverse flooding effects on any property owned or occupied by another person, as a result of the drainage activity.</p> <p>b. The discharge shall not cause any scouring or erosion of any land or any water course beyond the point of discharge.</p> <p>c. The activity shall not adversely affect any wetland.</p>	<p>a. Location of discharge.</p> <p>b. Rate of pumping.</p> <p>c. Time of pumping.</p> <p>d. Flood mitigation measures.</p> <p>e. Duration of consent.</p> <p>f. Review of consent conditions.</p> <p>g. Compliance monitoring.</p>	Applications will generally be considered without notification or the need to obtain the written approval of affected persons.

¹⁰¹ 'Drainage' means the activity of lowering the water table to achieve productive land use to facilitate stability of land or structures, or to achieve some other resource use activity. This generally involves the diversion of water.

¹⁰² If Rule 32 cannot be complied with, then the activity is a discretionary activity under Rule 52.

¹⁰³ For the purposes of this Plan the term 'wetland' does NOT include:

- wet pasture land
- artificial wetlands used for wastewater or stormwater treatment
- farm dams and detention dams
- land drainage canals and drains
- reservoirs for firefighting, domestic or municipal water supply
- temporary ponded rainfall
- artificial wetlands.

¹⁰⁴ 'Catchment' means the total area from which a single water body collects surface and subsurface runoff.

¹⁰⁵ 'Drainage' means the activity of lowering the water table to achieve productive land use to facilitate stability of land or structures, or to achieve some other resource use activity. This generally involves the diversion of water.

¹⁰⁶ While the discharge of drainage water by gravity flow is a permitted activity, the discharge of drainage water from a pumped system requires a resource consent due to the potential adverse environmental effects of greater water flow, generated by a pumped system. The consent authority may require the ability to control the water flow from time to time, such as through temporary cessation of pumping or other means.

¹⁰⁷ If Rule 33 cannot be complied with, then the activity is a discretionary activity under Rule 52.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
Refer POL 71, 72, 79			<p>d. The discharge shall not cause the natural temperature of any receiving water to be changed by more than 3°C from normal seasonal water temperature fluctuations, after reasonable mixing.</p> <p>e. Any discharge of water arising from a drainage system shall be to the same catchment¹⁰⁸ as that to which the water would naturally flow.</p> <p>f. Any suspended solids in the discharge shall comply with Policy 72.</p>		

¹⁰⁸ 'Catchment' means the total area from which a single water body collects surface and subsurface runoff.

6.6.3 BORE DRILLING FLUIDS - DISCHARGES TO LAND/WATER

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>34</p> <p>Discharge of bore drilling fluids</p> <p><i>Refer POL 71</i></p>	<p>The discharge of bore drilling fluids onto or into land, or into water¹⁰⁹, for the purpose of bore construction, maintenance or alteration.</p>	<p>Permitted¹¹⁰</p>	<p>a. There shall be no discharge of contaminants into any surface water body.</p> <p>b. There shall be no discharge of contaminants onto any property other than the subject property, without the consent of the property owner.</p> <p>c. The discharge shall not contain more than 15 g/m³ of oil and grease.</p> <p>d. No discharge to groundwater shall contain more than 100 g/m³ suspended solids and no discharge to land shall contain more than 150 g/m³ suspended solids.</p> <p>e. The discharge shall not cause the natural temperature of any receiving water to change by more than 3°C from normal seasonal water temperature fluctuations, after reasonable mixing.</p>		

¹⁰⁹ For the purpose of this Rule “into water” refers to the groundwater into which the bore is being drilled, and therefore is concerned only with groundwater-bearing aquifers.

¹¹⁰ If Rule 34 above cannot be complied with, then the activity is a discretionary activity under Rule 52.

6.6.4 DOMESTIC SEWAGE - DISCHARGES TO LAND

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>35 Existing¹¹¹ sewage systems</p> <p><i>Refer to POL 16, 71, 75</i></p>	<p>Except as provided for by Rule 36, the discharge of contaminants onto or into land, and any ancillary discharge of contaminants into air, from any existing sewage system.</p>	<p>Permitted¹¹²</p>	<p>a. The rate of discharge shall not exceed 2 m³/d, averaged over any 7 day period.</p> <p>b. The discharge shall not occur over the Heretaunga Plains unconfined aquifer as shown in Schedule Va.</p> <p>c. There shall be no surface ponding as a result of the discharge, or direct discharge into any water body.</p> <p>d. There shall be no increase in the concentration of pathogenic organisms in any surface water body as a result of the discharge.</p> <p>e. Either:</p> <p>i. The point of discharge shall be no less than 600 mm above the highest seasonal groundwater table; or</p> <p>ii. The discharge shall not result in, or contribute to, a breach of the "Drinking Water Quality Standards for New Zealand" (Ministry of Health, 2005 (Revised 2008)) in any groundwater body after reasonable mixing.</p> <p>f. The discharge shall not cause any emission of offensive or objectionable odour, or release of noxious or dangerous gases (including aerosols) beyond the boundary of the subject property.</p> <p>g. Either:</p> <p>i. discharges from pit privies shall be from privies constructed in soil with a soil texture category of 2 to 6 as per AS/NZS 1547 that has an infiltration rate not exceeding 150 mm/h; or</p> <p>ii. all other discharges shall be into a land treatment field that complies with the requirements specified in Figure 6.</p> <p>h. Compliance with any conditions of a resource consent held for the activity.</p> <p>i. The wastewater treatment and land application system shall be maintained in accordance with the manufacturer's instructions, or if no manufacturer's instructions exist, in accordance with the best management practice as described in AS/NZS 1547, or TP58: On-site Wastewater Systems: Design and Management Manual (Auckland Regional Council Technical Publication No. 58), or other alternative recognised on-site wastewater design manuals. A schedule of</p>		

¹¹¹ Any existing sewage system that is modified or replaced after 1 January 2012 is considered to be a 'new' system and must be assessed in accordance with Rule 37.

¹¹² NOTE: Rule 35 means that once a system has been lawfully established, the system's continued operation is permitted under this rule. No ongoing consent is required for the operation of lawfully established discharges provided the conditions of this rule are met.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			<p>maintenance shall be kept, and this schedule shall be available for inspection by the Regional Council upon request.</p> <p>j. The discharge shall not be disposed of by way of spray irrigation.</p>		
<p>36</p> <p>Existing high discharge volume sewage systems</p> <p><i>Refer to POL 16, 17, 18, 71, 75</i></p>	<p>The discharge of contaminants onto or into land, and any ancillary discharge of contaminants into air, from any existing sewage-system with a discharge volume exceeding 2m³/day averaged over any 7 day period.</p>	<p>Restricted discretionary</p>	<p>a. The discharge shall not occur over the Heretaunga Plains or Ruataniwha Plains unconfined aquifer as shown in Schedule IV.</p> <p>b. There shall be no surface ponding as a result of the discharge, or direct discharge into any water body.</p> <p>c. There shall be no increase in the concentration of pathogenic organisms in any surface water body as a result of the discharge.</p> <p>d. Either:</p> <p>i. The point of discharge shall be no less than 600 mm above the highest seasonal groundwater table; or</p> <p>ii. The discharge shall not result in, or contribute to, a breach of the "Drinking Water Quality Standards for New Zealand" (Ministry of Health, 2005 (Revised 2008)) in any groundwater body after reasonable mixing.</p> <p>e. The discharge shall not cause any emission of offensive or objectionable odour, or release of noxious or dangerous gases (including aerosols) beyond the boundary of the subject property.</p>	<p>a. Method of treatment.</p> <p>b. Method of disposal.</p> <p>c. Effluent application rate.</p> <p>d. Need for reserve area.</p> <p>e. Buffer zone requirements.</p> <p>f. Duration of consent.</p> <p>g. Review of consent conditions.</p> <p>h. Compliance monitoring</p> <p>i. Proximity to registered drinking water supplies</p> <p>j. Maintenance of system</p>	
<p>37</p> <p>New¹¹³ sewage systems</p> <p><i>Refer POL 16, 71, 75</i></p>	<p>Except as provided for in Rule 35 or Rule 36, the discharge of contaminants (including greywater) onto or into land, and any ancillary discharge of contaminants into air, from a new sewage system.</p>	<p>Permitted</p>	<p>a. Where the wastewater receives no more than advanced primary treatment, the discharge shall be onto or into a property with a land area of no less than 2500m².</p> <p>aA. Where the wastewater receives more than advanced primary treatment then:</p> <p>i. the discharge shall be onto or into a property with a land area of no less than 1000m²; and</p> <p>ii. the net site area to discharge volume ratio shall not be less than 1.5 m² per litre per day ¹¹⁴.</p> <p>b. The rate of discharge of sewage (including greywater) shall not exceed 2 m³/d, averaged over any 7 day period.</p> <p>c. The treatment and disposal system shall be designed to cater for the peak daily loading.</p>		

¹¹³ NOTE: New sewage systems include those systems installed after this Plan becomes operative, as well as those lawfully established sewage systems that have been modified or replaced since 1 January 2012.

¹¹⁴ NOTE: The net site area to discharge volume ratio can be calculated by dividing the net site area by the expected daily wastewater volume. If the answer is less than 1.5, the discharge does not comply with this condition. e.g. a 1000 m² property with a three bedroom home on it with maximum daily discharge volume of 1200 L (6 people at 200 L/p/d) has a ratio of 0.83 (1000/1200). This discharge would not comply with this condition.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			<p>d. The discharge shall not occur over the Heretaunga Plains or Ruataniwha Plains unconfined aquifer as shown in Schedule IV.</p> <p>e. The discharge and land treatment field shall not be within 20 m of any surface water body (including any stormwater open drain or roadside drain), or any tile drain or within 1.5 metres of any property boundary.</p> <p>eA. The system shall be designed and installed in accordance with the requirements specified in Figure 6.</p> <p>f. There shall be no surface ponding as a result of the discharge, or direct discharge into any water body.</p> <p>g. The discharge shall be distributed evenly over the entire disposal area.</p> <p>h. There shall be no increase in the concentration of pathogenic organisms in any surface water body as a result of the discharge.</p> <p>i. At the time of installation and commencement, the discharge shall not occur within 30 m of any bore drawing groundwater from an unconfined aquifer into which any contaminant may enter as a result of the discharge.</p> <p>j. The point of discharge shall be no less than 600 mm above the highest seasonal groundwater table.</p> <p>k. The discharge shall not result in, or contribute to, a breach of the "Drinking Water Quality Standards for New Zealand" (Ministry of Health, 2005 (Revised 2008)) in any groundwater body after reasonable mixing.</p> <p>l. The discharge shall not cause any emission of offensive or objectionable odour, or release of noxious or dangerous gases (including aerosols) beyond the boundary of the subject property or on any public land.</p> <p>m. For discharges using pit privies:</p> <ul style="list-style-type: none"> i. the privy shall be constructed in soil with an infiltration rate not exceeding 150 mm/h, and ii. the privy shall not be the primary wastewater system for any permanently occupied dwelling. <p>n. The system shall be designed, constructed, operated and maintained in a manner which ensures that there is no clogging of the disposal system or soils.</p> <p>nA. The discharge shall not be into a trench or bed disposal system constructed in category 5 or 6¹¹⁵ soil except where wastewater receives at least secondary treatment.</p>		

¹¹⁵ A category 5 soil is a light clay, permeability (K_{sat}) can range generally between 0.5 m/d (strongly structured) and <0.06 m/d (weakly structured or massive) and the soil is poorly drained. Clay content of approximately 35-40%. Category 6 soils are medium to heavy clays that are very poorly drained. The permeability of category 6 soils is generally less than 0.06 m/d. Clay content of over 40%.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			<p>o. Where the wastewater receives secondary treatment or better, the discharge shall not exceed 20 g/m³ of BOD, and 30 g/m³ of suspended solids.</p> <p>p. The wastewater treatment and land application system shall be maintained in accordance with the manufacturer's instructions, or if no manufacturer's instructions exist, in accordance with the best management practice as described in AS/NZS 1547, or TP58: On-site Wastewater Systems: Design and Management Manual (Auckland Regional Council Technical Publication No. 58), or other alternative recognised on-site wastewater design manuals. A schedule of maintenance shall be kept, and this schedule shall be available for inspection by the Regional Council upon request.</p> <p>q. The discharge shall not be disposed of by way of spray irrigation.</p> <p>r. The discharge shall not be into a raised bed.</p>		
<p>38</p> <p>Discharge of septage¹¹⁶</p> <p><i>Refer POL 16, 17</i></p>	The discharge of septage onto or into land.	Discretionary			

ADVISORY NOTES TO SECTION 6.6.4:

- 1. Non compliance with rules** - If any of the rules in this section cannot be complied with, then the activity is a discretionary activity under Rule 52.
- 2. Levels of treatment** – For the purposes of the Rules in this section, primary treatment, advanced primary treatment, and secondary treatment are defined as follows:
 - “Primary treatment” – The settlement or separation of sludge, scum and other settleable solids, e.g. a single or double chamber septic tank.
 - “Advanced primary treatment” – Primary treatment with the addition of an effluent filter screen.
 - “Secondary treatment” – Treatment of settled overflow from primary treatment, or advanced primary treatment, by aerobic biological or physical biological processes.

¹¹⁶ ‘Septage’ is defined as the pumped out contents of a primary treatment unit removed during desludging operations, including scum, sludge and tank liquid.

FIGURE 6: Design specifications for sewage systems

6.1 Design Flow Allowances for sewage systems

Source	Minimum wastewater flow allowance in L/person/day	
	On-site roof water tank supply	Reticulated community/bore water supply
Households	180	200
Households (blackwater only)	60	60
Households (greywater only)	90	120
Motels/hotels		
- Guests, resident staff	220	220
- Non-resident staff	30	30
- Reception rooms	20-30	20-30
- Bar trade (per customer)	20	20
- Restaurant (per diner)	25-30	25-30
Community halls		
- Banqueting	20	30
- Meetings	10	15
Tea rooms (per customer)		
-Without restroom facilities	10	15
-With restroom facilities	15	25
School (pupils plus staff)	15-30	15-30
Rural factories, shopping centres	30	50
Camping grounds		
- fully serviced	100	130
-recreation areas	50	65

NOTE: For the purposes of determining building occupancy, Hawke's Bay Regional Council adopts an occupancy of 2 people per room, excluding bathrooms, kitchens, laundries and any other room that cannot feasibly be used as a bedroom

6.2 Irrigation Systems

6.2.1 Maximum design irrigation rates for irrigation systems

Soil category	Soil texture	Design irrigation rate (mm/day)
1	Gravels and sands	5
2	Sandy loams	5
3	Loams	4
4	Clay loams	3.5
5	Light clays	3
6	Medium to heavy clays	2

6.2.2 Design specifications for Irrigation systems

- a) Irrigation lines placed on the surface shall be pinned to the surface and covered with at least 100 mm depth of media.
- b) Subsurface irrigation lines shall be installed at a maximum depth of 200 mm below ground level and covered with at least 100 mm depth of cover.
- c) Maximum spacing of 600 mm in Category 1 and 2 soils and 1000 mm in all other soil categories, as defined by AS/NZS 1547.
- d) Secondary treated wastewater shall be applied evenly across the entire land treatment field.
- e) On sloping ground the design irrigation rate (DIR) shall be decreased to ensure that effluent migration down slope is taken up adequately within the top soil and plant root system. Required reductions according to slope are as follows:
 - i) Flat slopes and up to 10% - no reduction;
 - ii) 10% to 20% - reduction in DIR value of 20%;
 - iii) 20% to 30% - reduction in DIR value of 50%; and
 - iv) >30% - specialist advice required.

6.3 Trenches or Beds

6.3.1 Maximum design loading rates for trenches and beds

Soil category	Soil texture	Structure	Design loading rate		
			Primary treated effluent		Secondary treated effluent (mm/d)
			Conservative rate (mm/d)	Maximum rate (mm/d)	
1	Gravels and sands	Structureless	20 (see note 1)	35 (see note 1)	50 (see note 1)
2	Sandy loams	Weakly structured	20	35	50
		Massive	15	25	50
3	Loams	High/mod structure	15	25	50
		Weakly structured / Massive	10	15	30
4	Clay loams	High/mod structure	10	15	30
		Weakly structured	6	10	20
		Massive	4	5	10
5	Light clays	Strongly structured Mod structured / Massive	Consent required – see Rule 37(nA)	Consent required – see Rule 37(nA)	Consent required – see Rule 37(nA)
6	Medium to heavy clays	Strongly structured Mod structured / Massive	Consent required – see Rule 37(nA)	Consent required – see Rule 37(nA)	Consent required – see Rule 37(nA)

Note 1: The treatment capacity of the soil and not the hydraulic capacity of the soil or the growth of the clogging layer govern the effluent loading rate of category 1 soils. Category 1 soils require special design.

6.3.2 Design specifications for trenches or beds

- a) Trenches must be at least 400 mm deep and 300 mm wide and have a depth of aggregate of 200 mm to 400 mm.
- b) They shall be no longer than 25 m long, and there must be a spacing of at least 1000 mm between adjacent trench walls
- c) Beds must be at least 1000 mm wide, with a minimum spacing of 1000 mm between adjacent bed walls
- d) Multiple distribution lines to be included where beds are more than 1.5 metres in width
- e) Both trenches and beds must be backfilled with distribution media and covered with a minimum 150 mm of topsoil
- f) The discharge shall be pumped, or dosed in fixed quantities so that the wastewater is applied evenly across the entire land treatment field
- g) Gravity drainage to trench and beds is not permitted unless a specifically designed siphon system is used to provide dose loading and distribution over the entire trench or bed area at any one time
- h) Trenches or beds shall not be constructed on slopes of greater than 15 degrees (approximately 27 % slope).

6.6.5 LANDFILLS, TRANSFER STATIONS & WASTE OIL - DISCHARGES TO LAND/WATER

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>39</p> <p>Discharges from operating landfills & transfer stations</p> <p><i>Refer POL 17, 47</i></p>	The discharge of contaminants onto or into land, or into water, arising from operating landfills and transfer stations.	Discretionary			
<p>40</p> <p>Discharges from closed landfills¹¹⁷</p> <p><i>Refer POL 17, 47</i></p>	The discharge of contaminants onto or into land, or into water, arising from closed landfills.	Controlled	a. Management of the site shall be undertaken in accordance with a Landfill Management Plan approved by the Hawke's Bay Regional Council.	<p>a. Adequacy of protection of the landfill from saltwater and fresh water intrusion.</p> <p>b. The permeability of the compacted capping layer.</p> <p>c. The ability of landfill surfaces to prevent ponding.</p> <p>d. The adequacy of the grass cover.</p> <p>e. Mitigation measures to meet required water quality standards.</p> <p>f. Frequency, location and method of sampling, and the determinants to be measured and method of measurement.</p>	
<p>41</p> <p>Discharge of waste oil</p> <p><i>Refer POL 17</i></p>	The discharge of waste oil ¹¹⁸ onto or into land (excluding by way of disposal at a landfill).	Non-complying			

¹¹⁷ "Closed landfill" means any landfill that was no longer operating at the date of public notification of this Plan.

¹¹⁸ See Glossary for a definition of "waste oil"

6.6.6 STORMWATER - DISCHARGES TO LAND/WATER

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>42</p> <p>Diversion and discharge of stormwater</p> <p><i>Refer POL 15, 16, 17, 47, 49, 71, 75</i></p>	<p>The diversion and discharge of stormwater from any constructed open drainage system or piped stormwater drainage system that:</p> <ul style="list-style-type: none"> • does not drain any industrial or trade premises, or • drains any industrial or trade premises covering an area of less than 2 ha, excluding premises used for the storage of any hazardous substance. 	Permitted	<p>a. The activity shall not cause any permanent:</p> <ol style="list-style-type: none"> reduction of the ability of the receiving channel to convey flood flows. bed scouring or bank erosion of the receiving channel. <p>b. The discharge shall not cause the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials in any receiving water body after reasonable mixing.</p>		
<p>43</p> <p>Diversion and discharge of stormwater</p> <p><i>Refer POL 15, 16, 17, 47, 49, 71, 75</i></p>	<p>Diversion and discharge of stormwater except as provided by Rule 42.</p>	Controlled	<p>a. All reasonable measures shall be taken to ensure that the discharge is unlikely to give rise to all or any of the following effects in any receiving water after reasonable mixing:</p> <ol style="list-style-type: none"> The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials. Any conspicuous change in the colour or visual clarity. Any emission of objectionable odour. The rendering of fresh water unsuitable for consumption by farm animals. Any significant adverse effects on aquatic life. 	<ol style="list-style-type: none"> Location of the point of diversion and discharge including its catchment area. Volume, rate, timing and duration of the discharge, in relation to a specified design rainfall event. Effects of the activity on downstream flooding. Contingency measures in the event of pipe capacity exceedence. Actual or likely adverse effects on fisheries, wildlife, 	<p>Applications may be considered without notification and without the need to obtain the written approval of affected persons in accordance with section 94 (1) (b) of the RMA.</p> <p>Applications may however be notified if special circumstances exist in terms of section 94 (5) of the</p>

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
				habitat or amenity values of any surface water body. f. Actual or likely adverse effects on the potability of any ground water. g. Duration of the consent. h. A compliance monitoring programme. i. A bond. j. Administrative charges.	RMA. In considering whether or not special circumstances exist, the Council will include consideration of: 1. The record of compliance with any previous regulations relating to the activity for which a discharge permit is sought. 2. The downstream uses of the receiving water body. 3. The extent of public and tangata whenua interest in the activity and/or its effects.

ADVISORY NOTES:

1. Non-compliance with rules – If the rules in this section cannot be complied with, then the activity is a discretionary activity under Rule 52.
2. For the purposes of clarification, the rules in this section do not apply to the discharge of stormwater into coastal water.

6.6.7 GENERIC DISCHARGES OF CONTAMINANTS - DISCHARGES TO LAND/WATER^{118b}

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>47</p> <p>Discharges to surface water¹¹⁹</p> <p><i>Refer POL 71, 79</i></p>	<p>The discharge of contaminants into surface water, pursuant to section 15 (1) (a) RMA, except as expressly regulated by other rules in this Plan.</p>	<p>Permitted¹²⁰</p>	<p>a. The rate of discharge shall be no greater than 50 m³/d.</p> <p>b. There shall be no adverse flooding effects on any property owned or occupied by another person, as a result of the discharge activity.</p> <p>c. There shall be no scouring or erosion of any land or any water course beyond the point of discharge.</p> <p>d. The discharge shall not cause the natural temperature¹²¹ of any receiving water to be changed by more than 3°C from normal seasonal water temperature fluctuations, after reasonable mixing or cause an exceedance of the temperature limit in Table 5.9.1A (Tukituki River catchment).</p> <p>e. The discharge shall not cause the pH to change by more than 0.2 units, or to extend outside the range 6.5 to 9.0 units, after reasonable mixing.</p> <p>f. There shall be no production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials, or any emission of objectionable odour, in any receiving water after reasonable mixing¹²².</p> <p>g. There shall be no conspicuous change in the colour or visual clarity of any receiving water after reasonable mixing or cause an exceedance of the water clarity limits in Policy TT3(1) (Tukituki River catchment).</p> <p>h. The discharge shall not cause the biochemical oxygen demand to increase by more than 2 g/m³ in any receiving water body after reasonable mixing or cause an exceedance of the biochemical oxygen demand limit in Policy TT3(1) (Tukituki River catchment).</p> <p>i. The discharge shall not cause any increase in the concentration of pathogenic organisms or cause an exceedance of the <i>E.coli</i> limits in Table 5.9.1A (Tukituki River catchment).</p> <p>j. The discharge shall not cause the concentration of dissolved oxygen in any river or lake to drop below 80% after reasonable mixing or cause an exceedance of the dissolved oxygen limit in Table 5.9.1A (Tukituki River catchment).</p>		

^{118b} Note: The Rules contained in 6.6.7 Generic Discharges of Contaminants do not apply to plantation forestry activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.

¹¹⁹ Rule 47 does not apply to the discharge of contaminants into water in relation to an existing high voltage electricity transmission activity. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

¹²⁰ **Compliance** - Where there is doubt about compliance with the Conditions (a) to (m) of Rule 47 it is the responsibility of the person undertaking the activity to prove to the council that the conditions are being complied with or a resource consent shall be required.

¹²¹ **"Natural temperature"** means the temperature which occurs naturally when the water is not influenced by known discharges or activities which may cause an increase or decrease in the temperature in the water.

¹²² See Glossary for a definition of **"after reasonable mixing"**.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			<p>k. The discharge shall not cause the concentration of ammoniacal nitrogen (NH₄⁺) in any river or lake to exceed 0.1 mg/l after reasonable mixing or cause an exceedance of the acute total ammoniacal nitrogen limits in Policy TT3(1) or the chronic ammoniacal nitrogen limits in Table 5.9.1A (Tukituki River catchment).</p> <p>l. The discharge shall not cause the concentration of dissolve inorganic nitrogen (DIN) in any river to exceed 0.8 mg/l as set out in Table 5.9.1B (Tukituki River catchment) after reasonable mixing.</p> <p>m. The discharge shall not cause the concentration of soluble reactive phosphorus in any river or lake to exceed 0.015 mg/l or cause an exceedance of the dissolved reactive phosphorus limits in Table 5.9.1B (Tukituki River catchment) after reasonable mixing.</p> <p>n. The discharge shall not cause the concentration of any other contaminant (including other nutrients, heavy metals, hazardous substances and indicator bacteria), after reasonable mixing, to:</p> <ul style="list-style-type: none"> i. Increase by more than 5% in any natural or modified receiving water body or 10% in any artificial receiving water body; ii. Exceed the following standards: <ul style="list-style-type: none"> a. The contact recreation guidelines contained in "Bacteriological Water Quality: Guidelines for Marine and Fresh Water" (Ministry of Health and Ministry for the Environment, December 1998). b. The guidelines for the protection of freshwater aquatic ecosystems contained in the "Australian Water Quality Guidelines for Fresh and Marine Waters" (ANZECC, 1992). iii. Exceed limits for other toxicants in Table 5.9.1A (Tukituki River catchment). 		
<p>48 Discharges of solid contaminants, including cleanfill, to land that will not enter water¹²³</p>	<p>The discharge of solid contaminants, including cleanfill, onto or into land in circumstances that will not result in any contaminant entering water, pursuant to section 15 (1) (d) and section 15 (2) RMA, except as expressly regulated by other rules in this Plan.</p>	<p>Permitted</p>	<ul style="list-style-type: none"> a. The discharge shall not increase land instability or the risk of erosion. b. The discharge shall not cross the boundary of the subject property onto any other property, unless written approval is obtained from the affected property owner. c. The discharge shall not cause any increase in the concentration of any hazardous substances or pathogenic organisms on or in any land. d. The discharge shall not cause any increase in the risk of human or animal disease. e. The discharge shall not have any acid producing potential¹²⁴. 		

¹²³ Rule 48 does not apply to the discharge of contaminants to land that will not enter water in relation to an existing high voltage electricity transmission activity. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

¹²⁴ "Acid producing potential" is a laboratory measure of the ability of a rock or soil mass to generate acid drainage.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
Refer POL 67			<p>f. Upon request by the HBRC, a management plan, setting out how the conditions above will be met shall be prepared and provided to the HBRC.</p> <p>g. There shall be no discharge within 20 m of any surface water body, or over the Heretaunga Plains or Ruataniwha Plains unconfined aquifers as shown in Schedule IV, or within 20 metres of the coastal marine area, except for material extracted from a surface water body associated with the maintenance of legally established structures.</p> <p>h. Where the volume of solid contaminants on the subject property is greater than 100 m³ the person responsible for the discharge shall notify the Hawke's Bay Regional Council within 7 days of that volume being reached or exceeded.</p>		

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>49</p> <p>Discharges to land that may enter water¹²⁵</p> <p><i>Refer POL 16, 71, 79</i></p>	<p>The discharge of contaminants onto or into land, in circumstances which may result in those contaminants (or any other contaminant emanating as a result of natural processes from those contaminants) entering water, pursuant to section 15 (1) (b) RMA, except as expressly regulated by other rules in this Plan.</p>	<p>Permitted¹²⁶</p>	<p>a. The rate of discharge shall be no greater than 50 m³/d.</p> <p>b. The discharge shall not result in a breach of any of the conditions set out in Rule 47.</p> <p>c. The discharge shall not result in a breach of any of the conditions set out in Rule 48.</p> <p>d. The point of discharge shall occur no less than 600 mm above the winter ground water table.</p> <p>e. There shall be no surface ponding in the area of discharge, or runoff of any contaminant into a surface water body as a result of the discharge.</p> <p>f. The discharge shall not result in any airborne liquid contaminant being carried beyond the boundary of the subject property.</p> <p>g. There shall be no discharge within 20 m of any surface water body, or over the Heretaunga Plains or Ruataniwha Plains unconfined aquifers as shown in Schedule IV, except for material extracted from a surface water body associated with the maintenance of legally established structures.</p> <p>h. There shall be no surface ponding in the area used to store, mix or use the organic material, and no runoff of contaminants into any surface water body.</p> <p>i. There shall be no discharge within 30 m of any bore drawing groundwater from an unconfined aquifer into which any contaminant may enter as a result of the discharge.</p> <p>j. The discharge shall not cause any degradation of existing ground water quality in confined aquifers in the Heretaunga Plains and Ruataniwha Plains aquifer systems.</p> <p>k. For other aquifers, the discharge shall not cause or contribute to a breach of the following guidelines after reasonable mixing:</p> <p>i. The “Drinking Water Quality Standards for New Zealand” (Ministry of Health, 1995).</p> <p>ii. The guideline for irrigation contained in the “Australian Water Quality Guidelines for Fresh and Marine Waters” (Australian and New Zealand Environment and Conservation Council, 1998).</p>		

¹²⁵ Rule 49 does not apply to the discharge of contaminants to land that may enter water in relation to an existing high voltage electricity transmission activity. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

¹²⁶ **Compliance** - Where there is doubt about compliance with the Conditions (a) to (l) of Rule 49 it is the responsibility of the person undertaking the activity to prove to the council that the conditions are being complied with or a resource consent shall be required.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			i. Where the quality of ground water in any aquifer encompassed by condition (k) breaches the standards specified in that condition prior to the discharge occurring, the discharge shall not cause any further degradation of the quality of ground water in any such aquifer after reasonable mixing.		
50 Disturbance of bed of river or lake by livestock <i>Refer POL 47, 79</i>	Subject to Rule TT1, the disturbance of the bed of any permanently flowing river or any lake arising from the entry of livestock. ^{127A}	Permitted	a. Other than in the Tukituki River catchment, the disturbance shall not cause any conspicuous change ¹²⁷ in the visual clarity of the water after reasonable mixing. b. Supplementary feed is not deposited on the bed of the river or lake. c. Other than in the Tukituki River catchment, ¹²⁸ the disturbance shall not result in faecal coliforms exceeding 200 cfu/100 ml in any receiving water after reasonable mixing.		
51 Disturbance of bed of river or lake by livestock <i>Refer POL 47, 79</i>	The disturbance of the bed of any permanently flowing river or any lake arising from the entry of livestock, which cannot comply with one or more conditions/ standards/ terms in Rule 50. ^{128A}	Discretionary			Consent applications will generally be considered without notification and without the need to obtain the written approval of affected persons.

ADVISORY NOTES:

- 1. Non-compliance with rules** - If any of the rules in this section cannot be complied with, then the activity is a discretionary activity under Rule 52.
- 2. Discharges onto or into land that are not from industrial or trade premises** – Section 15(1)(d) of the RMA restricts the discharge of any contaminant from industrial or trade premises onto or into land. By contrast, the discharge of contaminants from other premises onto or into land is allowed (provided no contaminant enters water) unless specifically regulated by a rule.

¹²⁷ For the purpose of Rule 50, “conspicuous change” means more than 20% change in clarity as measured by a 200 mm black disc as per “Water Quality Guidelines Number 2” published by the Ministry for the Environment.

^{127A} Also refer to Resource Management (Stock Exclusion) Regulations 2020.

¹²⁸ Refer Rule TT1.

^{128A} Also refer to Resource Management (Stock Exclusion) Regulations 2020.

6.6.8 NON-COMPLIANCE WITH OTHER RULES - DISCHARGES TO LAND/WATER ^{128B}

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>52</p> <p>Discharges that do not comply with rules 9-14, 16, 31-51</p> <p><i>Refer POL 14, 16, 17, 19, 22, 47, 48, 49, 71, 79</i></p>	<p>The discharge of:</p> <ul style="list-style-type: none"> contaminants onto or into land, or into water, or water into water <p>which does not comply with any condition on a permitted activity rule, or any standard or term on a controlled activity rule within this Plan, but which is not expressly classified as a discretionary, non-complying or prohibited activity.</p>	<p>Discretionary</p>			

^{128B} Note: The Rules contained in 6.6.8 Non-compliance with other Rules - Discharges to Land/Water do not apply to plantation forestry activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.

6.7 Water Takes, Uses & Diversions

For information requirements refer to section 7.7

6.7.1 TAKE & USE OF WATER

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>53 Minor takes & uses of ground water</p> <p><i>Refer POL 24, 33, 77</i></p>	<p>The take and use of groundwater, excluding the take and use of groundwater from the water management zones shown in Schedule VI.</p>	<p>Permitted</p>	<p>a. The total volume taken shall not exceed 20 m³/d per property¹²⁹ (other than for aquifer testing, for which the volume of take is not restricted).</p> <p>Note that:</p> <ul style="list-style-type: none"> The take and use of water for reasonable domestic needs¹³⁰, stock drinking purposes and fire fighting, including from locations within the groundwater management zones in Schedule VI is not required to be included in this measurement. When the permitted activity limit of 20 m³ per day is exceeded a consent is required for the total take. <p>b. The rate of take shall not exceed 10 l/s (other than aquifer testing, for which the rate of take is not restricted).</p> <p>c. The take shall not adversely affect any lawfully established efficient groundwater take¹³¹, or any lawfully established surface water take, which existed prior to commencement of the take unless written approval is obtained from the affected person.</p> <p>d. The take shall not adversely affect any wetland¹³².</p> <p>e. A backflow prevention device shall be installed in circumstances where there is the risk of contaminants flowing down a bore used for taking groundwater, into a groundwater aquifer.</p>		

¹²⁹ For the purposes of this Plan the term ‘**property**’ refers to one or more allotments as contained on a single certificate of title, and also includes all adjacent land that is in the same ownership.

¹³⁰ Refer to Glossary for definition of “**reasonable domestic needs**”.

¹³¹ For the purposes of this Plan, “**efficient taking**” of groundwater means abstraction by a bore which penetrates an aquifer from which water is being drawn at a depth sufficient to enable water to be drawn all year (i.e. the bore depth is below the range of seasonal fluctuations in groundwater level), with the bore being adequately maintained, of sufficient diameter and screened to minimise drawdown, with a pump capable of drawing water to the land surface.

¹³² For the purpose of this Plan the term “**wetland**” does NOT include:

- wet pasture land
- artificial wetlands used for wastewater or stormwater treatment
- farm dams and detention dams
- land drainage canals and drains
- reservoirs for firefighting, domestic or municipal water supply
- temporary ponded rainfall
- artificial wetlands.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>54</p> <p>Minor takes & uses of surface water¹³³</p> <p><i>Refer POL 35, 43</i></p>	<p>The take and use of surface water, except from the following catchments, as shown in Schedule Via:</p> <ul style="list-style-type: none"> • Maraekakaho Stream to confluence with Ngaruroro River. • Ahuriri Estuary catchment including Taipo Stream catchment. • Awanui Stream (including Poukawa Stream and Lake Poukawa catchments) to confluence with Karamu Stream. • Louisa Stream to confluence with Karamu Stream. • Papanui Stream. • Lake Tutira and catchment. • Herehere Stream. • Mangaroa Stream. • School Stream. • Karituwhenua Stream. • Te Waikaha Stream. • The whole of the Tukituki River catchment, except for existing takes occurring prior to 4 May 2013 which shall continue to be permitted. 	<p>Permitted</p>	<p>a. Except for takes occurring for a period of less than 4 weeks, the total volume taken shall not exceed 20 m³/d¹³⁴ per property; (or per work site where the activity relates to the take and use of water for the maintenance of road reserves) nor shall the total volume exceed the reasonable needs of the user, whichever is the lesser.</p> <p>b. For takes occurring for a period of less than 4 weeks within any 90 day period, the total volume taken by any person shall not exceed 200 m³ per 7 day period.</p> <p>c. The rate of take shall not exceed 10% of the instantaneous flow¹³⁵ at the point of take.</p> <p>d. The intake velocity shall not exceed 0.3 m/s.</p> <p>e. The activity shall not adversely affect any wetland.</p> <p>f. The take shall not adversely affect any lawfully established efficient groundwater take, or any lawfully established surface water take, which existed prior to commencement of the take unless written approval is obtained from the affected person.</p>		

¹³³ The taking of water for an individual's reasonable domestic needs and the reasonable needs of an individual's animals drinking water is not restricted by this rule.

¹³⁴ When the permitted activity limit of 20 m³ per day is exceeded, a consent is required for the total take.

¹³⁵ "Instantaneous flow" refers to the rate of river flow at the time of measurement.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
55 Other takes & uses of surface & groundwater <i>Refer POL 26-32, 36-43, 73, 77</i>	The take and use of surface water or groundwater, including takes and uses associated with, or ancillary to Community Irrigation Schemes, except as provided for by Rules 53, 54 TT3, TT3A, TT3B and TT4.	Discretionary			

ADVISORY NOTE:

1. **Bore drilling** – Note that a land use consent is required for the drilling, construction or alteration of any bore, in accordance with Rule 1.

6.7.2 DIVERSION OF WATER

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>56</p> <p>Minor diversions</p> <p><i>Refer POL 79</i></p>	<p>The diversion of water, except as expressly provided for by other rules within this Plan.</p>	<p>Permitted</p>	<p>a. Either:</p> <ol style="list-style-type: none"> i. The catchment¹³⁶ area above the diversion shall not exceed 50 hectares, or ii. The diversion shall remain within the bed of the affected water body, or iii. The diversion shall divert no more than 10% of the flow of the affected water body, and the diverted water shall be returned to the affected water body no more than 100 m downstream of the point at which the water is diverted. <p>b. The activity shall not adversely affect any wetland¹³⁷.</p> <p>c. The diversion shall not be from one catchment to another.</p> <p>d. The diversion shall not cause any scouring or erosion of any land or any water course beyond the point of discharge.</p> <p>e. The diversion shall not adversely affect any lawfully established take, which existed at the time that the diversion commenced.</p> <p>f. The activity shall be undertaken in a manner that continues to provide for the existing passage of fish past the diversion.</p> <p>g. There shall be no adverse flooding effects on any property owned or occupied by another person, as a result of the diversion activity.</p>		

¹³⁶ 'Catchment' means the total area from which a single water body collects surface and subsurface runoff.

¹³⁷ For the purposes of this Plan the term 'wetland' does NOT include:

- wet pasture land
- artificial wetlands used for wastewater or stormwater treatment
- farm dams and detention dams
- land drainage canals and drains
- reservoirs for firefighting, domestic or municipal water supply
- temporary ponded rainfall
- artificial wetlands.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>57</p> <p>Lawfully established diversions</p> <p><i>Refer POL 79</i></p>	Any lawfully established diversion of water ¹³⁸ .	Permitted	<p>a. The diversion shall not cause any scouring or erosion of any land or any water course beyond the point of discharge.</p> <p>b. The diversion shall not adversely affect any lawfully established take, which existed at the time that the diversion commenced.</p> <p>c. The activity shall be undertaken in a manner that continues to provide for the existing passage of fish past the diversion.</p> <p>d. There shall be no adverse flooding effects on any property owned or occupied by another person, as a result of the diversion activity.</p>		
<p>58</p> <p>Diversions and discharge of water in an artificial water course</p> <p><i>Refer POL 79</i></p>	The diversion and discharge of water associated with the maintenance and removal or demolition of structures in any artificial water course and any associated discharge of sediment.	Permitted	<p>a. There shall be no adverse flooding effects on any property owned or occupied by another person, as a result of the diversion and drainage activity.</p> <p>b. There shall be no discharge of contaminants, other than sediment, into the river or lake.</p> <p>c. Any release of sediment shall not cause any conspicuous change in the colour or visual clarity of water after reasonable mixing.</p>		
<p>59</p> <p>Diversions that cannot comply with rules 56-58</p> <p><i>Refer POL 38, 79</i></p>	Any diversion of water which cannot comply with any condition on a permitted activity rule, or any standard or term on a controlled activity rule within this Plan, but which is not expressly classified as a discretionary or non-complying activity.	Discretionary			

¹³⁸ **Lawfully established diversions** – Rule 57 provides for diversions established in accordance with either Section 14 of the RMA, or Section 20 of the RMA which provides for certain existing lawful activities to be allowed.

6.7.3 TRANSFER OF WATER PERMITS

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
60 Transfer of permits to take & use surface water from a lake <i>Refer POL36</i>	The transfer of a permit to take and use surface water from a lake, to another site.	Permitted	a. The transfer is to another site within the same lake.		
61 Transfer of permits to take & use surface water from a river <i>Refer POL 36, 79</i>	The transfer of a permit to take and use surface water from a river, to another site.	Controlled	a. The transfer is to another site within the same stream management zone, ¹³⁹ where the flow is not significantly less than at the original site of abstraction. b. The transfer shall not result in any reduction in the rate of surface water recharge into groundwater. c. The transfer shall not adversely affect any lawfully established surface water abstraction, which existed prior to transfer of the take. d. The transfer shall not result in any increase in adverse effects on aquatic ecosystems or fish passage.	a. Timing of take. b. Design of intake. c. Duration of consent. d. Review of consent conditions. e. Compliance monitoring. f. Volume of water required by, or reasonable needs of, transferee. g. In the Tukituki River catchment, the efficient use of water having regard to POL TT12.	Consent applications will generally be considered without notification, without the need to obtain the written approval of affected persons.
62 Transfer of permits to take & use groundwater <i>Refer POL 25, 77</i>	The transfer of a permit to take and use groundwater, to another site.	Controlled	a. The transfer is to another site within the same aquifer. b. The transfer is to a location at which the aquifer has the same or greater aquifer transmission and storage characteristics. c. The transfer shall not adversely affect any lawfully established efficient groundwater abstraction, ¹⁴⁰ which existed prior to transfer of the take. d. The transfer shall not cause any reduction in the flow of any river or spring.	a. Aquifer testing. b. Duration of consent. c. Review of consent conditions. d. Compliance monitoring. e. Volume of water required by, or reasonable needs of transferee. f. In the Tukituki River catchment, the efficient use of water having regard to POL TT12.	Consent applications will generally be considered without notification, without the need to obtain the written approval of affected persons.

ADVISORY NOTE:

- Notifying transfers of water permits** - Pursuant to section 136 of the RMA, the transfer of a water permit has no effect until written notice of the transfer has been received by the HBRC. In addition, section 136 also sets out the requirements for the transfer of a water permit in circumstances that do not comply with the rules above.

¹³⁹ "Stream Management Zone" refers to the reaches of a river and/or its tributaries governed by a single minimum flow site.

¹⁴⁰ For the purposes of this Plan "efficient abstraction" of groundwater means abstraction by a bore which penetrates an aquifer from which water is being drawn at a depth sufficient to enable water to be drawn all year (i.e. the bore depth is below the range of seasonal fluctuations in groundwater level), with a pump capable of drawing water to the land surface.

6.8 Use of River & Lake Beds

For information requirements refer to section 7.8

6.8.1 USE, REPAIR & MAINTENANCE OF STRUCTURES

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
63 Use of structures ¹⁴¹ Refer POL 79	The use ¹⁴² of any lawfully established structure ¹⁴³ in, on, under or over the bed of a river, lake or artificial watercourse.	Permitted			
64 Maintenance of structures ¹⁴⁴ Refer POL 79	The maintenance of any lawfully established structure in, on, under or over the bed of a river or lake, and <ul style="list-style-type: none"> • any associated disturbance of the river or lake bed, and • any associated discharge of sediment, and • any associated diversion of water except as provided for by Rule 70.	Permitted ¹⁴⁵	a. The activity shall not result in any increase in the area of river or lake bed occupied by the structure. b. There shall be no discharge of contaminants, other than sediment, into the river or lake. c. The disturbance of any river or lake bed, and any associated removal, flushing or deposit of bed material, shall only be to the extent necessary to maintain the functional integrity and operational efficiency of the structure. d. Any release of sediment shall not cause any conspicuous change ¹⁴⁶ in the colour or visual clarity of water after reasonable mixing. ¹⁴⁷ e. All materials removed from the structure and excess construction materials shall be removed from the bed by completion of the activity. f. All materials used shall not be toxic to aquatic ecosystems. g. The activity shall be undertaken in a manner that continues to provide for the existing passage of fish past the structure. h. There shall be no reduction in the ability of the channel to convey flood flows, or impedance to the passage of floating debris.		

¹⁴¹ a) Rule 63 does not apply to the use, maintenance and upgrading of existing electricity transmission activity structures. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

b) Rule 63 does not apply to the use of structures associated with plantation forestry activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.

¹⁴² For the purpose of Rule 63 'use' refers to the actual use of the structure and not to matters contained in Sections 14 and 15 of the Resource Management Act 1991.

¹⁴³ A "lawfully established structure" means a structure lawfully established either before or after this Plan was prepared.

¹⁴⁴ a) Rule 64 does not apply to the use, maintenance and upgrading of existing electricity transmission activity structures. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.

b) Rule 64 does not apply to the maintenance of structures associated with plantation forestry activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.

¹⁴⁵ If Rule 64 cannot be complied with, then the activity is a discretionary activity under Rule 69.

¹⁴⁶ For the purpose of Rule 64 "conspicuous change" means a change in colour of more than five points on the Munsell scale or more than 20% change in clarity as measured by a 200 mm black disc as per "Water Quality Guidelines Number 2" published by the Ministry for the Environment. For example, a change in water colour from blue to blue/green is 10 points on the Munsell scale.

¹⁴⁷ See the Glossary for a definition of "after reasonable mixing".

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			<ul style="list-style-type: none"> i. Any diversion of water for the purposes of carrying out the activity shall be for a period of no more than five consecutive days. j. Upon completion of any channel bank works within a river or lake bed, the banks shall be reinstated to a natural contour and revegetated. k. There shall be no damage or destruction to flood control or river protection works. l. In areas of fish spawning there shall be no disturbance by the use of mobile machinery of any part of the bed covered by water from 1 May to 30 September (fish spawning season) other than the necessary maintenance of culverts, drains or bridges and for the clearance of debris from structures. 		
<p>65</p> <p>Replacing and upgrading of structures 148</p> <p><i>Refer POL 79</i></p>	Any activity associated with the replacement and upgrading of any line or cable, owned or managed by a network utility operator, over the bed of any river or lake.	Permitted	<ul style="list-style-type: none"> a. There shall be no reduction in the ability of the channel to convey flood flows, or impedance to the passage of floating debris. b. There shall be no discharge of contaminants, other than sediment, into the river or lake. c. Any diversion of water for the purposes of carrying out the activity shall be for a period of no more than five consecutive days and for no more than 12 hours on any one day within those five days. d. Any release of sediment shall not cause any conspicuous change in the colour or visual clarity of water after reasonable mixing. 		

¹⁴⁸ a) Rule 65 does not apply to the use, maintenance and upgrading of existing electricity transmission activity structures. Refer to the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.
b) Rule 65 does not apply to the replacing and upgrading of structures associated with plantation forestry activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.

REMOVAL & DEMOLITION OF STRUCTURES

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p style="text-align: center;">66</p> <p>Removal & demolition of structures <small>148B</small></p> <p><i>Refer POL 79</i></p>	<p>The removal or demolition of a structure, or any part of a structure, in, on, under, or over the bed of a river or lake, and:</p> <ul style="list-style-type: none"> • any associated disturbance of the river or lake bed, and • any associated discharge of sediment, and • any associated diversion of water <p>except as provided for by Rule 70.</p>	<p>Permitted¹⁴⁹</p>	<p>a. There shall be no discharge of contaminants, other than sediment, into the river or lake.</p> <p>b. Any release of sediment shall not cause any conspicuous change in the colour or visual clarity of water after reasonable mixing.¹⁵⁰</p> <p>c. All removal and demolition material shall be removed from the bed by completion of the activity.</p> <p>d. All materials used shall not be toxic to aquatic ecosystems.</p> <p>e. The activity shall be undertaken in a manner that continues to provide for the existing passage of fish past the structure.</p> <p>f. There shall be no reduction in the ability of the channel to convey flood flows, or impedance to the passage of floating debris.</p> <p>g. Any diversion of water for the purposes of carrying out the activity shall be for a period of no more than five consecutive days.</p> <p>h. Upon completion of any channel bank works within a river or lake bed, the banks shall be reinstated to a natural contour and revegetated.</p> <p>i. There shall be no damage or destruction to flood control or river protection works.</p> <p>j. The HBRC shall be informed in writing of the removal or demolition of any of the following structures, at least 15 working days prior to the commencement of the activity:</p> <ul style="list-style-type: none"> i. Access structures in or on the bed of a river or lake, including bridges, culverts, and fords, which are located within a catchment greater than 50 hectares; ii. Structures which occupy more than 5 m² of the bed of the river or lake. <p>k. In areas of fish spawning there shall be no disturbance by the use of mobile machinery of any part of the bed covered by water from 1 May to 30 September (fish spawning season).</p>		

^{148B} Rule 66 does not apply to the removal and demolition of structures associated with plantation forestry activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.

¹⁴⁹ If Rule 66 cannot be complied with, then the activity is a discretionary activity under Rule 69.

¹⁵⁰ See Glossary for a definition of “**after reasonable mixing**”.

6.8.2 ERECTION & PLACEMENT OF DAMS & OTHER BARRIER STRUCTURES, & DAMMING OF WATER

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>67</p> <p>Dams, weirs & other barrier structures in rivers, lakes and artificial water – courses 150B</p> <p>Refer POL 79</p>	<p>The erection or placement of any dam¹⁵¹, weir or other barrier structure in, on, under, or over the bed of a river, lake and artificial watercourse, and:</p> <ul style="list-style-type: none"> any associated damming or diversion of water, and any associated discharge of sediment; and any associated disturbance of the river or lake bed. 	<p>Permitted¹⁵²</p>	<p>a. The catchment area of the <u>new</u> structure shall not exceed 50 hectares.</p> <p>b. The volume of water to be stored or retained by the <u>new</u> structure to spill level shall not exceed 20,000 m³.</p> <p>c. The height of the structure (as measured vertically from the downstream bed to the crest) shall be no greater than 4 m.</p> <p>d. A spillway shall be constructed to prevent the <u>new</u> structure being overtopped during storm events, unless the structure is designed to allow overtopping.</p> <p>e. The impounded water shall not encroach onto any property, nor impede any drainage system, beyond the subject property unless agreed to in writing by any affected property owners.</p> <p>f. Erection or placement of the structure shall not cause any erosion, scour or deposition beyond the area of erection or placement.</p> <p>g. The impounded water shall not cause any erosion or instability of bordering land.</p> <p>h. Within rivers and lakes, provision shall be made to maintain existing fish passage within the water body and, where the water body is permanently flowing, provision shall be made to maintain a residual flow immediately downstream of the structure of at least 1.2 l/min per hectare of catchment above the structure, except at times where such flow would not have occurred prior to the construction of the structure.</p> <p>i. Where the volume of water to be stored or retained by the structure to spill levels exceeds 10,000 m³ and where the structure is located within the catchment of a land drainage or flood control scheme area that is managed by a local authority exercising its powers, functions and duties under the Soil Conservation and River Control Act 1941, the Land Drainage Act 1908, or the Local Government Act 1974 the HBRC shall be informed about the erection or placement of the structure at least 15 working days prior to the commencement of works.</p> <p>j. There shall be no disturbance of any part of the bed covered by water from 1 May to 30 September (fish spawning season) except in relation</p>		

^{150B} Rule 67 does not apply to dams, weirs & other barrier structures in rivers, lakes and artificial watercourses associated with plantation forestry activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017

¹⁵¹ **Dams** - Include stock water dams, Irrigation dams, fire-fighting dams and dams in artificial water courses.

¹⁵² If Rule 67 cannot be complied with, then the activity is a discretionary activity under Rule 69.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			<p>to the erection of whitebait stands, maimai, and necessary access structures to these.</p> <p>k. In areas of fish spawning there shall be no disturbance of any part of the bed covered by water from 1 May to 30 September (fish spawning season) except in relation to the erection of whitebait stands, maimai, and necessary access structure to these.</p> <p>l. Conditions (a) to (d) do not apply to structures which are located in a land drainage or flood control area that is managed by a local authority exercising its powers, functions and duties under the Soil Conservation and Rivers Control Act 1941, the Land Drainage Act 1908 or the Local Government Act 1974.</p>		
<p>68</p> <p>Existing damming of water in rivers and lakes</p> <p><i>Refer POL 79</i></p>	<p>Any existing damming of water associated with a lawfully established dam¹⁵³, weir, or other barrier structure in, on, under, over the bed of a river, lake or artificial water course that is not provided for by Rule 67.</p>	Controlled	<p>a. The impounded water shall not encroach onto any property beyond the subject property, unless agreed to in writing by any affected property owners.</p>	<p>a. Stability of the land bordering the dam.</p> <p>b. Residual downstream flow.</p> <p>c. Flood risk in the event of failure.</p> <p>d. Maintenance of structure.</p> <p>e. Duration of the consent.</p> <p>f. Review of consent conditions.</p> <p>g. Compliance monitoring.</p>	<p>Consent applications will generally be considered without notification without the need to obtain the written approval of affected persons.</p>
<p>69</p> <p>River & lake bed activities that are not expressly regulated by other rules</p> <p><i>Refer POL 79</i></p>	<p>Any activity which cannot comply with any of the rules in section 6.8 of this Plan and which is not expressly regulated by other rules in this Plan.</p>	Discretionary			

ADVISORY NOTE:

- Water takes** – Note that a consent to take water is required for takes and uses of surface water in accordance with Rule 54 or 56.

¹⁵³ **Dams** - Include stock water dams, Irrigation dams, fire-fighting dams and dams in artificial water courses.

6.8.3 RIVER CONTROL & DRAINAGE WORKS & STRUCTURES

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>70</p> <p>River control & drainage works & structures</p> <p><i>Refer POL 79</i></p>	<p>Any activity, as described in the Hawke's Bay Regional Council Environmental Code of Practice for River Control and Drainage Works (1999), that is carried out by a local authority exercising its powers, functions and duties under the Soil Conservation and Rivers Control Act 1941, the Land Drainage Act 1908, or the Local Government Act 1974, in relation to flood control and drainage, including:</p> <ul style="list-style-type: none"> • edge protection works • planting • river protection maintenance works • irrigation intake maintenance • weed and vegetation control (excluding spraying) • drain maintenance, and drainage outlet maintenance • drain crossings • river mouth openings for the purpose of flood mitigation • river management and drainage for the maintenance of surface water quality • channel diversions within a river bed or drain, ancillary to the above activities <p>that would otherwise contravene:</p> <ul style="list-style-type: none"> • section 13 or section 14 of the RMA, or • section 15 of the RMA in relation to the discharge of sediment. 	<p>Permitted¹⁵⁴</p>	<p>a. The activity or structure shall be undertaken in a manner that continues to provide for the existing passage of fish past the structure.</p> <p>b. The appropriate Fish and Game Council, iwi and Department of Conservation office, shall be notified at least 5 working days before any channel diversion is undertaken.</p> <p>c. There shall be no discharge of contaminants, other than sediment, arising from the use of machinery in the bed of any river or lake.</p> <p>d. The activity shall not adversely affect any wetland.¹⁵⁵</p> <p>e. All activities shall be undertaken in accordance with the Hawke's Bay Regional Council Environmental Code of Practice for River Control and Drainage Works, 1999.</p>		

¹⁵⁴ If Rule 70 cannot be complied with, then the activity is a discretionary activity under Rule 69.

¹⁵⁵ For the purpose of this Plan the term '**wetland**' does NOT include:

- wet pasture land
- artificial wetlands used for wastewater or stormwater treatment
- farm dams and detention dams
- land drainage canals and drains
- reservoirs for firefighting, domestic or municipal water supply
- temporary ponded rainfall
- artificial wetlands.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>71</p> <p>Activities affecting river control & drainage schemes^{156, 157}</p> <p><i>Refer POL 79</i></p>	<p>Any of the following activities, where they are undertaken by persons other than the local authority or persons acting on their behalf, within a land drainage or flood control scheme area that is managed by a local authority exercising its powers, functions and duties under the Soil Conservation and Rivers Control Act 1941, the Land Drainage Act 1908, or the Local Government Act 1974:</p> <ul style="list-style-type: none"> • The introduction or planting of any plant including any tree in, on, or under the bed of any river, lake or artificial water course, or within 6 metres of the bed. • The erection of any building, fence or other structure in, on, or under the bed of any river, lake or artificial water course, or within 6 metres of the bed. • The deposition of any rock, shingle, earth, debris or other substance in, on, or under the bed of any river, lake or artificial water course, or within 6 metres of the bed. • The reclamation or drainage of the bed of any river, lake or artificial water course. • The undertaking of any other land disturbance activity which impedes access to the bed of any river, lake or artificial water course, or within 6 metres of the bed. • The erection of any structure and the undertaking of any land disturbance activity which interferes with the integrity of any defence against water.¹⁵⁸ 	<p>Discretionary ¹⁵⁹</p>			

¹⁵⁶ It is important to note that the Hawke's Bay Regional Council owns much of the land within River Control and Drainage Schemes, and thus has landowner rights and responsibilities in relation to this land.

¹⁵⁷ Any activity permitted by Rules 64 and 65 is not subject to Rule 71.

¹⁵⁸ "Defence against water" includes stopbanks and their foundations.

¹⁵⁹ The ongoing maintenance or repair of any structure authorized by a resource consent pursuant to Rule 71 is permitted pursuant to Rule 64.

6.8.4 ERECTION & PLACEMENT OF OTHER STRUCTURES (INCLUDING ACCESS STRUCTURES)

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>72</p> <p>Erection & placement of other structures, including bridges, culverts & other access structures^{160, 161}</p> <p><small>161A</small></p> <p><i>Refer POL 79</i></p>	<p>The erection or placement of any structure in, on, under, or over the bed of a river or lake, that is not expressly regulated by other rules within this Plan, and</p> <ul style="list-style-type: none"> any associated disturbance of the river or lake bed, and any associated discharge of sediment, and any associated damming or diversion of water. 	Permitted¹⁶²	<p>a. The scale of the structure shall comply with the following:</p> <ol style="list-style-type: none"> Access structures in or on the bed of a river or lake, including bridges, culverts, and fords, shall be located in a catchment that is no greater than 150 ha. Other structures in or on the bed of a river or lake shall occupy an area of bed no greater than 10 m². <p>b. The structure shall not change the natural course of any river or lake.</p> <p>c. Any release of sediment shall not cause any conspicuous change in the colour or visual clarity of water after reasonable mixing.¹⁶³</p> <p>d. There shall be no discharge of contaminants, other than sediment, into the river or lake.</p> <p>e. All materials used shall not be toxic to aquatic ecosystems.</p> <p>f. The activity shall be undertaken in a manner that continues to provide for the existing passage of fish past the structure.</p> <p>g. The structure shall not cause any increase in the risk of flooding or damage to any property during flood events, including the risk resulting from trapped debris.</p> <p>h. Any diversion of water for the purposes of carrying out the activity shall be for a period of no more than five consecutive days.</p> <p>i. The activity or structure shall not cause any erosion, scour or deposition beyond the area of the activity or structure or adversely affect any other lawfully established structure.</p> <p>j. All excess materials shall be removed from the bed by completion of the activity.</p> <p>k. In areas of fish spawning there shall be no disturbance of any part of the bed covered by water from 1 May to 30 September (fish spawning season) except in relation to the erection of whitebait stands, maimai, and necessary access structures to these, or where emergency works are required.</p> <p>l. Any whitebait structure shall be removed within 14 days of the end of any whitebait season.</p>		

¹⁶⁰ **Building permits** – Note that a building permit from the relevant territorial authority may be required.

¹⁶¹ For the purpose of this Rule “**access structures**” includes temporary crossings used in the harvesting of forests.

^{161A} Rule 72 does not apply to the erection & placement of structures associated with **plantation forestry** activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.

¹⁶² If Rule 72 cannot be complied with, then the activity is a discretionary activity under Rule 69.

¹⁶³ See Glossary for a definition of “**after reasonable mixing**”.

6.8.5 RIVER BED GRAVEL EXTRACTION

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>73</p> <p>Small scale river bed gravel extraction</p> <p><i>Refer POL 79</i></p>	<p>The extraction of sand, gravel or other material from the bed of a river using a hand-held, non-mechanical device (e.g. a shovel), and any associated disturbance of the bed.</p>	<p>Permitted</p>	<p>a. The quantity of bed material extracted by any person at any one time shall not exceed 0.25 m³.</p> <p>b. The total quantity of bed material extracted by any person shall not exceed 1 m³ per year.</p> <p>c. The material shall be extracted from an area of river bed that is not covered by water at the time of extraction.</p> <p>d. The area from which material is extracted shall be recontoured so that no mounds or depressions remain.</p> <p>e. There shall be no discharge of any contaminant directly into water.</p>		
<p>74</p> <p>Large scale river bed gravel extraction</p> <p><i>Refer POL 53, 79</i></p>	<p>The extraction of sand, gravel or other material from the bed of any river or lake, and:</p> <ul style="list-style-type: none"> • any associated disturbance of the bed, and • any associated discharge of sediment, and • any associated diversion of water <p>that is not provided for by Rule 73.</p>	<p>Restricted discretionary</p>		<p>a. Location of extraction sites and stockpile areas.</p> <p>b. Volume of gravel extracted.</p> <p>c. Rate of removal of gravel.</p> <p>d. Period of extraction.</p> <p>e. End use of the gravel.</p> <p>f. Dust management.</p> <p>g. Other matters set out in Policy 53.</p> <p>h. Financial contributions.</p> <p>i. Duration of consent.</p> <p>j. Review of consent conditions.</p> <p>k. Compliance monitoring.</p>	

6.8.6 OTHER DISTURBANCES OF RIVER & LAKE BEDS

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>75</p> <p>Other disturbances of river and lake beds <small>163B</small></p> <p><i>Refer POL 79</i></p>	<p>The disturbance of the bed of a river or lake, except as provided for by other rules.</p> <p>This may be caused for example by:</p> <ul style="list-style-type: none"> • tunnelling, or • drilling, or • excavation. 	Permitted ¹⁶⁴	<p>a. The maximum area of disturbance shall be no greater than 5 m².</p> <p>b. The disturbance shall not change the natural course of any river or lake.</p> <p>c. Any release of sediment shall not cause any conspicuous change¹⁶⁵ in the colour or visual clarity of water after reasonable mixing.¹⁶⁶</p> <p>d. There shall be no discharge of contaminants, other than sediment, into the river or lake.</p> <p>e. The activity shall be undertaken in a manner that continues to provide for the existing passage of fish past the structure.</p> <p>f. The disturbance shall not cause any increase in the risk of flooding or damage to any property during flood events, including the risk resulting from trapped debris.</p> <p>g. Any diversion of water for the purposes of carrying out the activity shall be for a period of no more than five consecutive days, and for no more than 12 hours, on any one day within those five days.</p> <p>h. The activity or structure shall not cause any erosion, scour or deposition beyond the area of disturbance or adversely affect any other lawfully established structure.</p> <p>i. All excess materials shall be removed from the bed by completion of the activity.</p> <p>j. There shall be no disturbance of any part of the bed covered by water from 1 May and 30 September (fish spawning season).</p>		

^{163B} Rule 75 does not apply to disturbances of river and lakes beds associated with plantation forestry activities. Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.

¹⁶⁴ Non compliance with Rule - If Rule 75 can not be complied with then the activity is a discretionary activity under Rule 69.

¹⁶⁵ For the purposes of Rule 75 “conspicuous change” means a change in colour of more than five points on the Munsell scale or more than 20% change in clarity as measured by a 200 mm black disc as per “Water Quality Guidelines Number 2” published by the Ministry for the Environment. For example, a change in water colour from blue to blue/green is 10 points on the Munsell Scale.

¹⁶⁶ See Glossary for a definition of “after reasonable mixing”.

6.8.7 INTRODUCTION & PLANTING OF PLANTS

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>76</p> <p>Planting of plants</p> <p><i>Refer POL 79</i></p>	<p>The introduction or planting of any plant or any part of any plant in, on, or under the bed of a river or lake, except as provided for by Rule 70, or Rule 71.</p>	<p>Permitted¹⁶⁷</p>	<p>a. The planting shall not result in any reduction in the ability of the water body to convey flood flows or any impedance to the passage of debris.</p> <p>b. The activity shall not cause any significant erosion, scour or deposition.</p> <p>c. The activity shall be undertaken in a manner that continues to provide for the existing passage of fish.</p> <p>d. There shall be no disturbance of any part of the bed covered by water from 1 May to 30 September (fish spawning season).</p> <p>e. Plantings undertaken in accordance with this rule shall not cause disturbance, damage or destruction of existing indigenous vegetation in the bed of a lake or in the bed of the continuously flowing portion of a river.</p>		

ADVISORY NOTES:

- Plant pests** -Pursuant to the Biosecurity Act 1993, it is an offence for anyone to sell, propagate or distribute any plant classified as a plant pest in the Regional Plant Pest Management Strategy.

¹⁶⁷ If Rule 76 cannot be complied with, then the activity is a discretionary activity under Rule 69.

6.9 Tukituki River Catchment Rules

6.9.1 LAND USE AND WATER QUALITY

Rule	Activity	Classification	Conditions/Standards/Terms/Matters of Control and Discretion /Notification
<p>TT1</p> <p>Production land use¹⁷³</p> <p>Refer to POLs TT1 to TT5</p>	<p>The use of production land on farm properties or farming enterprises in the Tukituki River catchment pursuant to s9(2) RMA.</p>	<p>Permitted</p>	<p>Conditions/Standards/Terms</p> <p>a. For farm properties or farming enterprises exceeding 4 hectares in area:</p> <p>(i) the records specified in Schedule XXI shall be retained for each year (1 June to 31 May) from 1 June 2013 onwards to enable a Nutrient Budget to be prepared, or</p> <p>(ii) copies of Nutrient Budget input and output files that have been prepared in accordance with an industry programme approved by Hawke's Bay Regional Council shall be kept; and</p> <p>those records or files shall be provided to the Hawke's Bay Regional Council upon request.¹⁶⁸</p> <p>b. For farm properties exceeding 4 hectares in area a Farm Environmental Management Plan shall be prepared in accordance with Schedule XXII by 31 May 2018 and thereafter implemented by 31 May 2020. The Farm Environmental Management Plan shall be updated at 3 yearly intervals from 1 June 2018 and include;</p> <p>(i) a Nutrient Budget¹⁶⁹, incorporating the measurement or modelling of whole of property nutrient losses (kg/ha/year) calculated using the annual records specified in Schedule XXI and the Overseer Nutrient Budget model (or an alternative model approved by Hawke's Bay Regional Council); and</p> <p>(ii) a Phosphorus Management Plan including details specified in Schedule XXII; and</p> <p>(iii) All other information relevant to the farm property required for Farm Environmental Management Plans by Schedule XXII.</p> <p>c. The records kept in accordance with condition (a) (i) and (a) (ii) shall be reviewed annually in accordance with an industry programme approved by Hawke's Bay Regional Council (or in the absence of an industry programme, as directed by Hawke's Bay Regional Council) to assess whether any farm system changes are evident. If such a change is evident, the Nutrient Budget for the farm system and from 31 May 2018 the Farm Environmental Management Plan must be updated to determine whether the nitrogen leached from the land exceeds the Tukituki LUC Natural Capital; Nitrogen Leaching Rates in Table 5.9.1D on a whole of farm property or whole of farming enterprise basis. All reviews and amended Nutrient Budgets must be made available to the Hawke's Bay Regional Council upon request.</p> <p>d. For farm properties or farming enterprises exceeding 4 hectares in area, after 1 June 2020 the nitrogen leached from the land (measured or modelled as a loss from the root zone using Overseer or an alternative model approved by Hawke's Bay Regional Council) shall not exceed Tukituki LUC Natural Capital; Nitrogen Leaching Rates in Table 5.9.1D on a whole of farm property or whole of farming enterprise basis, estimated using a 4 year rolling average;</p> <p>e. For single paddocks on land delineated in Schedule XX¹⁷⁰ as having a slope of 15 degrees or less all livestock (other than sheep) shall be excluded from the beds and margins of any lake, wetland and flowing river (whether intermittent or permanent) by 31 May 2020;</p>

¹⁶⁸ If this condition is not complied with, Nutrient Budget inputs will be determined in accordance with the methodology specified in Schedule XXI.

¹⁶⁹ A Nutrient Budget is defined in the Glossary.

¹⁷⁰ Schedule XX is based on slope classifications contained within the NZLRI and is at a coarse catchment scale. To determine compliance with Rule TT1 at a paddock scale, upon request HBRC will use the highest resolution Digital Elevation Model or LIDAR image available to determine the proportion of slope by using standard triangulation methods.

Rule	Activity	Classification	Conditions/Standards/Terms/Matters of Control and Discretion /Notification
			<p>f. For single paddocks on production land delineated in Schedule XX⁴¹ as having a slope of greater than 15 degrees and where the stocking rate of livestock excluding sheep exceeds 18 stock units per hectare either:</p> <p>(i) all livestock (other than sheep) shall be excluded from the beds and margins of any lake, wetland and any flowing river (whether intermittent or permanent) by 31 May 2020;</p> <p>or</p> <p>(ii) Outside of the Papanui, Porangahau, Maharakeke, Tukipo, Kahahakuri and upper Tukituki corridor catchments (as shown in Schedule XIVc, for individual farm properties or farming enterprises exceeding 4 hectares in size, by 31 May 2020 a Phosphorus Management Plan shall be prepared as part of a Farm Environmental Management Plan and it shall include stock exclusion requirements where stock exclusion is reasonably practicable and alternative phosphorus loss mitigation measures where stock exclusion is not reasonably practical.</p> <p>(iii) Within the Papanui, Porangahau, Maharakeke, Tukipo, Kahahakuri and upper Tukituki corridor catchments (as shown in Schedule XIVc Rule TT1(f)(i) must be complied with.</p> <p>g. Notwithstanding conditions (e) and (f), grazing of a permanently fenced riparian margin may occur for weed control purposes provided that:</p> <p>(i) The total period of grazing in any year does not exceed 7 days;</p> <p>(ii) The fenced riparian margin shall be grazed no more than twice in any year during the period 1 November to 30 April.</p> <p>h. Notwithstanding conditions (e) and (f), stock may continue to utilise managed stream crossing points (where stock are usually excluded from the surface water body but are actively herded across the surface water body by the farmer).</p> <p>i. Permanent and intermittent rivers that are crossed by formed stock races shall be bridged or culverted by 31 May 2020.</p> <p>j. After 31 May 2020, for farm properties or farming enterprises exceeding 4 hectares in area excluding:</p> <p>(a) Low intensity farming systems; and</p> <p>(b) Those that solely comprise plantation forestry (being forestry operations deliberately established for commercial purposes), nitrogen leached from the land shall be demonstrated¹⁷¹ to be not causing or contributing to any measured exceedance of the Table 5.9.1B limits for the 95th percentile concentration of nitrate-nitrogen or the limit for dissolved inorganic nitrogen at the downstream HBRC monitoring site nearest to the farm property or farming enterprise in the relevant mainstem or tributary of a river or to any measured exceedance of the Table 5.9.2 groundwater quality limits for nitrate-nitrogen.¹⁷²</p> <p>k. For farm properties or farming enterprises exceeding 4 hectares in area, contaminants leached from the land shall be demonstrated⁴² to be not causing or contributing to any breach of the Resource Management (National Environmental Standards for Human Drinking Water) Regulations 2007 or the guideline values or maximum acceptable values for determinands in the Drinking Water Standards of New Zealand (2005 Revised edition 2008) or subsequent version for any registered drinking water supply takes. (Note: Hawke's Bay Regional Council is satisfied that this permitted activity rule will not cause or contribute to any such breach for any registered drinking water supply but condition k. is included here for completeness.)</p> <p>l. Notwithstanding conditions (a) to (d) and (j) to (k) above, where a farm property or farming enterprise meets the Glossary definition of a low intensity farming system the requirements of conditions (a) and (b) above, shall only apply where the farm property or farming enterprise exceeds 10 hectares in area.</p>

¹⁷¹ "Demonstrated" means as a result of monitoring and/or modelling undertaken by the Hawke's Bay Regional Council. Individual land owners seeking Certificates of Compliance under Rule TT1 will not be required to undertake any modelling or water quality monitoring themselves.

¹⁷² By 31 May 2018 HBRC will develop a Procedural Guideline in collaboration with primary sector representatives setting out how POL TT4(1)(h) and conditions (j) and (k) of Rule TT1 will be implemented. The Guideline will include, but not be limited to: the process for monitoring water quality trends and alerting affected farming properties if water quality limits are being approached; delineation of the 'capture zone' for the relevant water body (the area of groundwater or surface water contributing to the particular part of the water body in question); and, where Rule TT2 is triggered, an adaptive management process for reducing nitrogen leaching from affected farming properties based on the implementation of progressively more stringent on-farm management practices.

Rule	Activity	Classification	Conditions/Standards/Terms/Matters of Control and Discretion /Notification
TT2 Production land use ¹⁷³ Refer to POLs TT1 to TT6	The use of production land on farm properties or farming enterprises pursuant to s9(2) RMA within the Tukituki River catchment that does not comply with Rule TT1.	Restricted Discretionary	<p>Conditions/Standards/Terms</p> <p>a. The nitrogen leached from the production land does not result in the Table 5.9.1D Tukituki LUC Natural Capital; Nitrogen Leaching Rates on a whole of farm property or whole of farming enterprise basis being exceeded by more than 30 percent.</p> <p>Matters of Discretion</p> <p>a. The actual or proposed nutrient loss from production land within the farm property or farming enterprise in relation to:</p> <ul style="list-style-type: none"> (i) Tukituki LUC Natural Capital; Nitrogen Leaching Rates on a whole of farm property or whole of farming enterprise basis in Table 5.9.1D having regard to POL TT4; (ii) The current surface water quality and the surface water quality limits in the catchment having regard to POL TT1; (iii) The current groundwater water quality and the groundwater water quality limits in the catchment having regard to POL TT2; (iv) Current estimates of catchment or water management zone loads of nitrogen and phosphorus having regard to POL TT4, TT5 and TT6; (v) Whether reasonable and practicable opportunities have been taken to reduce phosphorus losses from the farm property or farming enterprise having regard to POL TT5. (vi) Whether reasonable and practicable opportunities have been taken to reduce nitrogen losses from the farm property or farming enterprise having regard to POL TT4. <p>b. The adequacy of any proposed industry good practices and any associated Farm Environmental Management Plan designed to avoid, remedy or mitigate the effects of the activity having regard to POL TT6.</p> <p>c. The imposition of mitigation measures where stock are unable to be excluded from water as required by Rule TT1.</p> <p>d. The imposition of mitigation measures where the activity is likely to contribute to or cause a breach of the Drinking-Water Standards for New Zealand having regard to POL TT1 and POL TT2.</p> <p>e. Monitoring and reporting requirements having regard to POL TT15.</p> <p>f. Duration of consent having regard to POL TT6(3).</p> <p>g. Review of consent conditions.</p>
TT2A Production land use ¹⁷³ Refer to POLs TT1 to TT6	The use of production land pursuant to s9(2) RMA within the Tukituki River catchment that does not comply with Rule TT2.	Non-complying	

¹⁷³ 1. As of 1 May 2018 under regulation 6 of the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017, Rule TT1 and Rule TT2 prevail.
 2. Also refer to Resource Management (Stock Exclusion) Regulations 2020.

6.9.2 TAKES

Rule	Activity	Classification	Conditions/Standards/Terms/Matters of Control and Discretion /Notification
TT3 Takes Refer to POLs TT9 and TT15	The take and use of surface water or groundwater, including groundwater takes located outside of Groundwater Allocation Zones 1 to 3.	Permitted	Conditions/Standards/Terms a. The take is for the purpose of filling agrichemical spray tanks for use on the same farm property on which the take occurs. b. The take is from an existing take point that is either: i. solely used for filling agrichemical spray tanks; or ii. part of an existing irrigation system but the spray filling off-take is situated upstream of any pump.
TT3A Takes	The take and use of surface water from an artificial water body or canal for hydro-electric generation purposes, where a. The hydro-electric generation facility is associated with a Community Irrigation Scheme; and b. The full volume of water used in the generation facility will be returned to the artificial water body or canal from which it was taken; and c. The maximum generation output from each facility does not exceed 4MW.	Controlled	Conditions/Standards/Terms a. Fish shall be prevented from entering the water intake for the generation facility unless they are already being prevented from entering the canal or water storage facility at the initial point of take; b. There shall be an existing resource consent to dam, divert, take and discharge water for the purposes of a Community Irrigation Scheme; and c. There shall be an existing written agreement with the holder of the resource consents for that Scheme. Matters of Control Hawke's Bay Regional Council will restrict its control to the following matters: a. Duration of consent having regard to POL TT14; b. Lapsing of consent; c. Review of consent conditions; d. The collection, recording, monitoring and provision of information concerning the exercising of the consent having regard to POL TT15. Non-notification Consent applications will generally be considered without notification, and without the need to obtain the written approval of affected persons.
TT3B Takes Refer to POLs TT7 to TT15	The replacement of an existing resource consent for the take and use of: a. surface water, or b. groundwater located within Groundwater Allocation Zones 1 to 3.	Restricted Discretionary	Conditions/Standards/Terms a. The take, in addition to all existing consented takes but excluding takes consented in association with in-stream dams, does not result in any exceedance of the allocation limits in Table 5.9.4, 5.9.5 (Tranche 1) or 5.9.6 (whichever is applicable); and b. The take complies with the relevant minimum flow regime. Matters of Discretion Hawke's Bay Regional Council will restrict its discretion to the following matters: a. The rate, volume and timing of the take; b. The reasonable need for the quantities of water sought in accordance with POL 32, POL 42, POL TT9 and any records of actual water use; ba. The practical availability and accessibility of any alternative sources of water where water is being sought under POL TT9(1)(f)(iva);

Rule	Activity	Classification	Conditions/Standards/Terms/Matters of Control and Discretion /Notification
			<ul style="list-style-type: none"> c. Where used for irrigation, the intended irrigation system and methods, their technical efficiency compared to industry good practice, and the setting of timeframes for improving technical efficiency; d. For groundwater takes: <ul style="list-style-type: none"> (i) the matters addressed in POL TT11; (ii) the effects the take (on its own, or in combination with other takes) has on any other authorised takes (including well interference drawdown effects); e. For surface takes the effects of any intake structure on fish passage and the need for fish exclusion devices or screens; f. Duration of consent having regard to POL TT14; g. Lapsing of consent; h. Review of consent conditions; i. The collection, recording, monitoring and provision of information concerning the exercising of the consent having regard to POL TT15.
TT4 Takes Refer to POLs TT7 to TT15	The take and use of surface water or groundwater comprising: <ul style="list-style-type: none"> a. new surface water takes (applied for after 4 May 2013); b. new groundwater takes located within Groundwater Allocation Zones 1 to 3 (applied for after 4 May 2013); c. groundwater takes located outside of Groundwater Allocation Zones 1 to 3; d. new High Flow takes; e. Takes that do not comply with Rule TT3, TT3A or TT3B; excluding takes associated with a Community Irrigation Scheme involving an in-stream dam or any other in-stream dam (in which case Rule 55 applies).	Discretionary	Conditions/Standards/Terms <ul style="list-style-type: none"> a. The take, in addition to all existing consented takes but excluding takes consented in association with in-stream dams, does not result in any exceedance of the allocation limits in Table 5.9.4, 5.9.5 or 5.9.6 (whichever is applicable); and b. The take complies with the relevant minimum flow regime. c. No new groundwater takes from Groundwater Allocation Zones 2 and 3 utilising Tranche 2 groundwater may be exercised under this rule unless and until augmentation flows are discharged that are commensurate to the scale of effect of the proposed take, during the same irrigation season as the Tranche 2 groundwater takes are exercised, to each of the Waipawa River and the Upper Tukituki River or one or more of their respective tributaries at a rate of up to 715 l/s to each river catchment at the highest practicable elevation as required to maintain the relevant downstream minimum flows specified in Table 5.9.3.
TT5 Takes Refer to POLs TT7 to TT15	The take and use of surface water or groundwater that does not comply with Rules TT3, TT3A, TT3B or TT4, excluding takes associated with a Community Irrigation Scheme involving an in-stream dam or any other in-stream dam (in which case Rule 55 applies).	Non-Complying	

7 INFORMATION REQUIREMENTS FOR CONSENT APPLICATIONS

7.1 Background

- 7.1.1 When applying for a resource consent, adequate information must be provided by the applicant so that informed resource management decisions can be made. The HBRC recognises that the type and level of information required depends upon the location, scale and nature of the proposed activity. In addition, the HBRC has consent application forms, and guidelines for consent applicants (and submitters). **The HBRC therefore recommends that resource consent applicants discuss information requirements with Council staff, prior to lodging a consent application.**
- 7.1.2 All resource consent applications must be prepared and lodged in accordance with the procedures and requirements of section 88 of the RMA and the Fourth Schedule to the Act. Relevant components of section 88 and the Fourth Schedule are as follows:

SECTION 88 – MAKING AN APPLICATION

- (4) Subject to subsection (5), an application for a resource consent shall be in the prescribed form and shall include—
- (a) A description of the activity for which consent is sought, and its location; and
 - (b) An assessment of any actual or potential effects that the activity may have on the environment, and the ways in which any adverse effects may be mitigated; and
 - (c) Any information required to be included in the application by a plan or regulations; and
 - (d) A statement specifying all other resource consents that the applicant may require from any consent authority in respect of the activity to which the application relates, and whether or not the applicant has applied for such consents.
- (5) The assessment required under subsection (4)(b) in an application for a resource consent relating to a controlled activity, or a discretionary activity over which the local authority has restricted the exercise of its discretion, shall only address those matters specified in a plan or proposed plan over which the local authority has retained control, or to which the local authority has restricted the right to exercise its discretion, as the case may be.
- (6) Any assessment required under subsection (4)(b) or subsection (5)—
- (a) Shall be in such detail as corresponds with the scale and significance of the actual or potential effects that the activity may have on the environment; and
 - (b) Shall be prepared in accordance with the Fourth Schedule.

FOURTH SCHEDULE – ASSESSMENT OF EFFECTS ON THE ENVIRONMENT

1. Matters that should be included in an assessment of effects on the environment

Subject to the provisions of any policy statement or plan, an assessment of effects on the environment for the purposes of section 88(6)(b) should include—

- (a) A description of the proposal.
- (b) Where it is likely that an activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity.
- (c) *Repealed in 1993.*
- (d) An assessment of the actual or potential effect on the environment of the proposed activity.
- (e) Where the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment which are likely to arise from such use.
- (f) Where the activity includes the discharge of any contaminant, a description of—
 - (i) The nature of the discharge and the sensitivity of the proposed receiving environment to adverse effects, and
 - (ii) Any possible alternative methods of discharge, including discharge into any other receiving environment.
- (g) A description of the mitigation measures (safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect.
- (h) An identification of those persons interested in or affected by the proposal, the consultation undertaken, and any response to the views of those consulted.
- (i) Where the scale or significance of the activity's effect are such that monitoring is required, a description of how, once the proposal is approved, effects will be monitored and by whom.

2. Matters that should be considered when preparing an assessment of effects on the environment

Subject to the provisions of any policy statement or plan, any person preparing an assessment of the effects on the environment should consider the following matters:

- (a) Any effect on those in the neighbourhood and, where relevant, the wider community including any socio-economic and cultural effects.
- (b) Any physical effect on the locality, including any landscape and visual effects.
- (c) Any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity.

- (d) Any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural, or other special value for present or future generations.
- (e) Any discharge of contaminants into the environment, including any unreasonable emission of noise and options for the treatment and disposal of contaminants.
- (f) Any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.

7.1.3 Without limiting section 88 of the RMA, or the Fourth Schedule to the Act, the sections below set out the information to be submitted with an application for a consent, in relation to the range of activities subject to this Plan. Note that, for **controlled activities** and **restricted discretionary activities**, the assessment of environmental effects need only address those matters specified in this Plan over which the HBRC has retained control, or restricted its discretion, as the case may be.

7.2 General Information

7.2.1 Any resource consent application must, as a minimum, include the following information:

- (a) The name of the applicant, and of the land owner or occupier if different from the applicant.
- (b) The address of the applicant, and of the land owner or occupier if different from the applicant.
- (c) The location of the proposed activity, possibly including plans and maps.
- (d) A description of the activity for which consent is sought.
- (e) A statement specifying all other resource consents that the applicant may require from any consent authority in respect of the activity to which the application relates, and whether or not the applicant has applied for such consents.
- (f) An assessment of any actual or potential effects (including cumulative effects) on the environment (Note that in order to assess impacts on human health from resource consents reference may be made to "A Guide to Health Impact Assessment Guidelines for Public Health Services and Resource Management Agencies and Consents Applicants", Public Health Commission, 1995).
- (g) For activities likely to result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity.
- (h) A description of any proposed mitigation measures (safeguards and contingency plans where relevant) to help prevent or reduce adverse effects.
- (i) The extent to which relevant Codes of Practice or other guidelines will be complied with.
- (j) An identification of individuals and organisations interested in or affected by the proposal, including local hapu and the New Zealand Historic Places Trust, the consultation undertaken with those persons, and any response to the views expressed by them.
- (k) Where monitoring is required, a description of how, once the proposal is approved, effects will be monitored and by whom.

7.2.2 In addition to these general information requirements, the following sections provide guidance as to the type of information required for specific types of consent applications.

7.3 Land Use Activities

7.3.1 BORE DRILLING

Refer to Rule 2

- (a) Name and address of bore driller.
- (b) A site plan indicating:
 - (i) property boundaries
 - (ii) geographical location of property
 - (iii) location of proposed bore
 - (iv) location of any existing bores on property
 - (v) location of nearby bores.
- (c) Proposed works including the following information as far as it is known:
 - (i) bore hole diameter (mm)
 - (ii) bore casing diameter (mm)
 - (iii) bore depth (m)
 - (iv) casing depth (m)
 - (v) casing materials
 - (vi) screen materials
 - (vii) proposed screen depth.
- (d) Proposed use of bore.

7.3.2 LEAKING BORES

Refer to Rule 3

- (a) A site plan indicating:
 - (i) property boundaries
 - (ii) geographical location of property
 - (iii) location of leaking bore
 - (iv) location of other existing bores on property.
- (b) Rate of leakage.
- (c) The following information as far as it is known:
 - (i) bore hole diameter (mm)
 - (ii) bore casing diameter (mm)
 - (iii) bore depth (m)
 - (iv) casing depth (m)
 - (v) casing materials
 - (vi) screen materials
 - (vii) aquifer.
- (d) Use of bore (if bore is used).
- (e) Reason(s) why bore is leaking.
- (f) Name of sealing contractor.

7.3.3 FEEDLOTS AND FEEDPADS

Refer to Rule 6

- (a) Area of feedlot or feedpad.
- (b) Location of feedlot or feedpad in relation to surface and ground water bodies.
- (c) Description of feedlot or feedpad, including:
 - (i) construction
 - (ii) sealing
 - (iii) soil type
 - (iv) any bunding
 - (v) any contaminant management

- (vi) any maintenance.
- (d) Stock feeding regime, including:
 - (i) number and type of stock
 - (ii) feeding system
 - (iii) timing
 - (iv) duration
 - (v) frequency.

7.3.4 VEGETATION CLEARANCE

Refer to Rule 8

- (a) A site plan indicating:
 - (i) property boundaries
 - (ii) present land use
 - (iii) vegetation types and extents
 - (iv) soil type/land use capability unit
 - (v) nature, size and location of any water bodies (including those within 100 m of boundary)
 - (vi) contour of the land
 - (vii) existing soil erosion
 - (viii) rainfall distribution.
- (b) Nature and extent of the type of works proposed, including:
 - (i) when the proposed works will occur
 - (ii) where the proposed works will occur
 - (iii) duration of proposed works
 - (iv) scale of works over proposed time frame
 - (v) effects on vegetation.
- (c) Measures to address adverse effects on:
 - (i) water quality
 - (ii) natural vegetation cover
 - (iii) land stability.
- (d) Any proposed mitigation of detrimental effects.
- (e) The anticipated discharge of sediment into waterways as a result of soil erosion and land instability caused by the proposed works.
- (f) Proposed site erosion and sediment control management plan shall include:
 - (i) methods to control soil erosion and sedimentation of waterways
 - (ii) revegetation programme
 - (iii) monitoring and reporting programme.

7.4 Discharges Into Air

7.4.1 GENERAL DISCHARGES INTO AIR

Refer to Rules 14, 15, 18, 24, 26, 27, 28, 30, 52

- (a) Process (es) from which the discharge occurs.
- (b) Nature of discharge, including details of contaminants (including hazardous contaminants).
- (c) Any treatment prior to discharge.
- (d) Discharge method.
- (e) Discharge frequency.
- (f) Neighbouring land uses and features and zoning of land.
- (g) Actual or potential detrimental effects on the environment.
- (h) Likelihood of odour emissions, and their effects beyond the boundary of the site.
- (i) Likelihood of particulate discharges, and their effects beyond the boundary of the site.
- (j) Likely fate of discharged contaminants.
- (k) Extent to which the Environmental Guidelines for Air (outlined in section 5.3 of this Plan) will be complied with.
- (l) Any proposed reduction of discharge at source.
- (m) Any influence of meteorology and topography on the discharge.
- (n) Any proposed mitigation of detrimental effects.
- (o) Alternative methods of discharge and treatment considered.
- (p) Any proposed management plans or contingency plans.
- (q) For discharges with potentially significant adverse effects arising from odour or particulate matter, any modelling of the effects of the activity.

7.4.2 DISCHARGES OF AGRICHEMICALS

Refer to Rules 30, 52

- (a) Proximity of occupied dwelling houses, public land and other areas where people reside or congregate, in relation to the proposed activity.
- (b) Neighbouring land uses and features.
- (c) Effect of prevailing weather conditions, including wind speed and direction.
- (d) Type of agrichemical and carrying agent to be discharged.
- (e) Proposed method of application, including the type of spray equipment to be used, the spray volume and droplet size, the direction of the spraying and the height of release above the ground.
- (f) The name(s) of the operator(s) and the nature of any training undertaken by the operator in respect of the use of agrichemicals.
- (g) Extent to which the applicator can avoid spray drift.
- (h) Extent to which the agrichemical may cause chronic or acute human health effects, odour, nuisance, or adverse effects on amenity values.
- (i) Extent to which the agrichemical may cause adverse effects on non-target flora, fauna, or ecosystems (particularly aquatic ecosystems).
- (j) Records to be kept and notification of potentially affected parties to be undertaken.

7.5 Discharges Into Water

Refer to Rules 33, 36, 38, 39, 40, 41, 44-46, 51, 52

- (a) Nature of discharge, including details of contaminants.
- (b) Method of discharge.
- (c) Maximum volume of discharge.
- (d) Maximum rate of discharge.
- (e) Frequency of discharge.
- (f) Description of waste collection, treatment and discharge system.
- (g) Any proposed maintenance of waste collection, treatment and discharge system.
- (h) Likely fate of contaminants discharged.
- (i) Estimated zone of reasonable mixing.
- (j) Description of receiving environment, including:
 - (i) any aquatic life
 - (ii) any areas used for food gathering
 - (iii) any wetlands
 - (iv) any recreational activities
 - (v) any other discharges in the vicinity of the discharge
 - (vi) any areas of particular cultural, spiritual, aesthetic, scientific or amenity value in the vicinity of the discharge.
- (k) Description of possible detrimental effects on the environment, paying particular attention to the matters listed in (j).
- (l) Extent to which the Environmental Guidelines for Surface Water Quality (outlined in section 5.4 of this Plan) will be complied with.
- (m) Fate of any sludge or solid waste that may be generated.
- (n) For discharges of stormwater, effect on the environment in the event that the capacity of the discharge pipe (or other discharge mechanism) is exceeded.
- (o) Any proposed mitigation of detrimental effects.
- (p) Alternative methods of discharge and treatment considered.
- (q) Any proposed management plans or contingency plans.

7.6 Discharges Onto or Into Land

Refer to Rules 33, 36, 38, 39, 40, 41, 43, 51, 52

- (a) Nature of discharge, including details of contaminants.
- (b) Method of discharge.
- (c) Area of discharge.
- (d) Maximum volume of discharge.
- (e) Maximum rate of discharge.
- (f) Frequency of discharge.
- (g) Description of waste collection, treatment and discharge system.
- (h) Any proposed maintenance of waste collection, treatment and discharge system.
- (i) Likely fate of contaminants discharged.
- (j) Description of receiving environment, including:
 - (i) soil type
 - (ii) vegetative cover of land
 - (iii) contour/slope of discharge area
 - (iv) groundwater conditions
 - (v) proximity of surface water bodies and groundwater bores.
- (k) Description of possible detrimental effects on the environment, paying particular attention to the matters listed in (j).
- (l) Likelihood of odour emissions, and their effects beyond the boundary of the site.

- (m) Extent to which the Environmental Guidelines for Land, Surface Water Quality, and Ground Water Quality (outlined in sections 5.2, 5.4, and 5.6 of this Plan) will be complied with.
- (n) Fate of any sludge or solid waste that may be generated.
- (o) For discharges of stormwater, effect on the environment in the event that the capacity of the discharge pipe (or other discharge mechanism) is exceeded.
- (p) Any proposed mitigation of detrimental effects.
- (q) Alternative methods of discharge and treatment considered.
- (r) Any proposed management plans or contingency plans.

7.7 Water Takes, Uses, Damming & Diversions

7.7.1 TAKE AND USE OF GROUNDWATER

Refer to Rule 55

- (a) Location of the take.
- (b) Purpose for which water is to be taken.
- (c) Where water is to be taken for crop irrigation, a description of:
 - (i) type of crop to be irrigated
 - (ii) area of crop to be irrigated
 - (iii) method of irrigation, including scheduling.
- (d) Maximum volume of water to be taken.
- (e) Rate at which water is to be taken.
- (f) Description of bore(s) from which water is to be taken.
- (g) Results of any pump tests carried out.
- (h) Description of any water conservation measures.
- (i) The identity and location of neighbouring abstractors likely to be affected.
- (j) Description of likely detrimental effects of the activity, particularly on nearby bores, springs and surface water bodies, and any action proposed to reduce such effects.
- (k) The details of any bore including diameter, depth, screen location, static water level and bore log.

7.7.2 TAKE AND USE OF SURFACE WATER

Refer to Rule 55

- (a) Purpose for which water is to be taken.
- (b) Where water is to be taken for crop irrigation, a description of:
 - (i) type of crop to be irrigated
 - (ii) area of crop to be irrigated
 - (iii) method of irrigation, including scheduling.
- (c) Maximum volume of water to be taken.
- (d) Rate at which water is to be taken.
- (e) Source of water, and description of water resource.
- (f) Intake screening and associated structure.
- (g) Description of any water conservation measures.
- (h) The identity and location of other abstractors within the vicinity.
- (i) Description of likely detrimental effects of the activity, particularly on the natural character of the surface water body, the quantity or flow of water in the water body, downstream users, aquatic ecosystems, and ground water bodies, together with any action proposed to reduce such effects.

7.7.3 DAMMING OF WATER

Refer to Rules 68, 69

- (a) Purpose for which water is to be dammed.
- (b) Full description of dam specifications, including existing works or works to be constructed, and the location of the works.
- (c) Whether a qualified/experienced consultant is to be involved in the design and/or construction of the proposed works.
- (d) Expected date of completion of any works to be constructed
- (e) Source of water.
- (f) Whether or not dam will be across a permanently flowing stream.
- (g) Description of the environment being dammed.
- (h) Sketch plan/design of dam.
- (i) Any other options considered.
- (j) Description of likely detrimental effects of activity on the environment, including:
 - (i) downstream flows
 - (ii) fish passage
 - (iii) flooding
 - (iv) erosion or scour
 - (v) potential damage in the event of dam failure
 - (vi) effects on other uses of the water body
 - (vii) effects on the natural character of the surface water body.

7.7.4 DIVERSION OF WATER

Refer to Rule 59

- (a) Purpose for which water is to be diverted.
- (b) Description of source and fate of diverted water, and quantity of water diverted.
- (c) Full description of specifications, including existing works or works to be constructed, and location of those works.
- (d) Whether a qualified/experienced consultant is to be involved in the design and/or construction of the proposed works.
- (e) Expected date of completion of any works to be constructed.
- (f) Source of water.
- (g) Description of the topography, soil type, and vegetation.
- (h) Details of the diversion.
- (i) Any other options considered.
- (j) Description of likely detrimental effects of activity on the environment, including:
 - (i) downstream flows
 - (ii) fish passage
 - (iii) flooding
 - (iv) erosion or scour
 - (v) effects on other uses of the water body
 - (vi) effects on the natural character of the surface water body.

7.8 River and Lake Bed Activities

7.8.1 RIVER AND LAKE BED STRUCTURES

Refer to Rules 69 & 71

- (a) Description and plan of the structure's dimensions.
- (b) Where a structure is to be altered or reconstructed, a description of any change in the size of the structure.
- (c) Expected construction period.
- (d) Description of the proposed method of construction including:
 - (i) materials to be used to erect, place, extend, alter or reconstruct the structure
 - (ii) equipment to be used
 - (iii) construction plan.
- (e) Description of the design specifications, and the hydraulic performance of the structure in the event of design capacity exceedence during floods (if applicable).
- (f) Description of the site, nature of the river or lake bed and banks, and vegetation.
- (g) Description of whether the activity will be in an area covered by water at the time the activity takes place.
- (h) Description of the anticipated lifetime of the structure, the proposed maintenance schedule, and provision for its removal (if applicable).
- (i) Description of likely detrimental effects of the activity, including effects on:
 - (i) the stability of the river bed, banks, and flood protection works
 - (ii) the flow of water
 - (iii) ground water recharge areas
 - (iv) existing structures
 - (v) neighbouring properties
 - (vi) fish passage, habitat, and spawning areas
 - (vii) habitat of other fauna, particularly native species
 - (viii) amenity values, including cultural and recreational attributes
 - (ix) the natural character of any water body
 - (x) sediment concentrations in any water body.
- (j) Likelihood of dust generation, and any dust suppression measures proposed.
- (k) Assessment of the effect on any natural hazard, including the extent to which it is likely to create or exacerbate a natural hazard.

7.8.2 RIVER AND LAKE BED DISTURBANCES, INCLUDING DEPOSITION OF MATERIAL, RECLAMATION AND DRAINAGE, EXCLUDING GRAVEL EXTRACTION

Refer to Rules 69 & 71

- (a) Description of the nature, scale, timing and frequency of the proposed bed disturbance.
- (b) Description of the proposed method, including the equipment to be used and any dewatering.
- (c) Description of the site, nature of the river or lake bed and banks, and vegetation.
- (d) Description of whether the activity will be in an area covered by water at the time the activity takes place.
- (e) Description of likely detrimental effects of the activity, including effects on:
 - (i) the stability of the river bed, banks, and flood protection works
 - (ii) the flow of water
 - (iii) ground water recharge areas
 - (iv) existing structures
 - (v) neighbouring properties
 - (vi) fish passage, habitat, and spawning areas
 - (vii) habitat of other fauna, particularly native species
 - (viii) amenity values, including cultural and recreational attributes
 - (ix) the natural character of any water body
 - (x) sediment concentrations in any water body.
- (f) Likelihood of dust generation, and any dust suppression measures proposed.
- (g) Assessment of the effect on any natural hazard, including the extent to which it is likely to create or exacerbate a natural hazard.

- (h) In the case of bed excavation or disturbance, a description of the depth and area of excavation, the volume of material to be removed or disturbed, and the fate of any material removed.
- (i) In the case of a reclamation or deposition of a substance onto or into the bed of a river or lake, a description of the source and composition of the material to be deposited, the volume of material to be deposited, and the existing and resultant contours of the affected area.

7.8.3 RIVER BED GRAVEL EXTRACTION

Refer to Rule 74

- (a) Location of extraction site(s).
- (b) Location of stockpile area(s).
- (c) Volume of gravel to be extracted.
- (d) Intended rate of removal of the gravel.
- (e) Proposed period(s) and frequency of extraction.
- (f) Proposed end use of the gravel.
- (g) Method(s) of extraction.
- (h) Description of whether the activity will be in an area covered by water at the time the activity takes place.
- (i) Description of likely detrimental effects of the activity, including effects on:
 - (i) the stability of the river bed, banks, and flood protection works
 - (ii) neighbouring properties
 - (iii) fish passage, habitat, and spawning areas
 - (iv) habitat of other fauna, particularly native species
 - (v) sediment concentrations in any water body.
- (j) Likelihood of dust generation, and any dust suppression measures proposed.
- (k) Assessment of the effect on any natural hazard, including the extent to which it is likely to create or exacerbate a natural hazard.

7.8.4 INTRODUCTION AND PLANTING OF PLANTS

Refer to Rule 69

- (a) Identification of the plants proposed to be introduced and the methods to be used to introduce the plant.
- (b) Purpose for introducing the plants.
- (c) Description of whether the plants are already in the area of the proposed introduction.
- (d) Assessment of the environmental effects of the activity including:
 - (i) the stability of the river bed, banks, and flood protection works
 - (ii) the flow of water
 - (iii) ground water recharge areas
 - (iv) existing structures
 - (v) neighbouring properties
 - (vi) fish passage, habitat, and spawning areas
 - (vii) habitat of other fauna, particularly native species
 - (viii) amenity values, including cultural and recreational attributes
 - (ix) the natural character of any water body
 - (x) sediment concentrations in any water body.
- (e) Assessment of the effect on any natural hazard, including the extent to which it is likely to create or exacerbate a natural hazard.

8 ADMINISTRATIVE MATTERS

8.1 Introduction

8.1.1 The chapter covers a number of administrative matters for which HBRC has responsibilities and functions under the RMA:

Section 8.2 Provides guidelines for resource consent applicants by setting out the resource consent processes and procedures.

Section 8.3 Sets out the circumstances under which the HBRC will use financial contributions.

Section 8.4 Addresses cross-boundary issues, including the need for integrated management and local authority responsibilities in relation to natural hazards and hazardous substances.

Section 8.5 Outlines the procedures to be used to assess the suitability and effectiveness of this Plan, through monitoring and review.

8.2 Guidelines for Resource Consent Applicants

8.2.1 As part of granting resource consents under the RMA there are administrative matters that are followed to ensure the processing of consents occurs in a structured and effective manner. Section 7.2 of this plan sets out detailed guidelines to assist the applicant in understanding the administrative steps involved in processing resource consents.

8.2.2 THE PROCESS

8.2.2.1 Any person may apply to the HBRC for resource consents where the activity would otherwise contravene sections of the Act. In doing so it would be assumed that an activity that has not been permitted under this Plan has actual or potential effects on the environment. In many cases the HBRC must consider whether these effects are adverse and impact on other parties. If this is the case then the HBRC may require the consent to be go through a public notification procedure.

8.2.2.2 Once an application is received by HBRC the duration of the consent must be considered. Changes to the Plan that affect resource consent conditions apply to new consents and may apply to existing consents. Where there are new environmental standards in the plan, the conditions of existing consents may be reviewed as set out in sections 7.2.4.1 (b) and (c).

8.2.2.3 The following sections provide more detailed guidelines to assist the applicant in understanding the administrative matters which are considered during the processing of resource consents.

8.2.3 NON-NOTIFICATION OF RESOURCE CONSENTS

8.2.3.1 In order to assess whether notification of a resource consent application is required the HBRC uses the following activity classification:

(a) **Controlled activities**

The HBRC will consider resource consent applications for controlled activities without notification or the need to obtain the written approval of affected persons in accordance with section 94 (1) (b) RMA, except as expressly stated otherwise in specific rules in this Plan.

(b) **Restricted discretionary activities**

The HBRC will consider resource consent applications for restricted discretionary activities without notification or the need to obtain the written approval of affected persons in accordance with section 94 (1A) RMA, in circumstances where the proposed activity is unlikely to affect any of the following persons:

- (i) Lawfully established resource users.
- (ii) Other land owners within the vicinity.
- (iii) Organisations with statutory responsibilities in relation to the resources that may be affected by the proposed activity.
- (iv) Tangata whenua who have a special relationship with the resources not shared by the rest of the community.
- (v) Land owners or occupiers of the affected site, who will not be involved in undertaking the proposed activity.
- (vi) Alternatively, the HBRC will consider resource consent applications for restricted discretionary activities without notification where written approval has been obtained from all of the above persons who are affected by the proposed activity.

(c) **Discretionary activities**

The HBRC will generally consider resource consent applications for discretionary activities with notification, on the basis that these activities are likely to have more than minor adverse effects on the environment.

8.2.4 CONSENT DURATION

8.2.4.1 The Regional Council will grant:

- (a) Land use consents for land use activities pursuant to section 9 of the RMA, and reclamations pursuant to section 13 of the RMA, for an **unlimited period**, and
- (b) Resource consents for other activities for a period of **20 to 35 years**.

8.2.4.2 Unless one or more of the following exceptions apply:

- (a) The activity has a duration of less than 20 years, in which case a consent will be granted for the duration of the activity.
- (b) There is a need to align the consent expiry date with others, in order that the cumulative effects of activities can be considered through a common consent renewal process.
- (c) The consent is for the allocation of gravel or another resource whose availability changes over time in an unpredictable manner.
- (d) The type of activity has effects that are unknown or potentially significant for the locality in which it is undertaken.

8.2.5 CONSENT REVIEW

- 8.2.5.1 For resource consents that are granted, the HBRC will establish at the time of considering the application and on a case by case basis the need to review consent conditions during the term of the consent. A review of consent conditions will be the preferred means (as opposed to a short term-consent) for:
- (a) Dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage. This type of review will be invoked only where a more than minor change in adverse effects, or any unanticipated significant effect, arises during the exercise of the consent.
 - (b) Requiring the holder of a discharge permit to adopt the best practicable option to remove or reduce any adverse effect on the environment. This type of review will be invoked when it is necessary in order to utilise technological developments or to meet new environmental standards.
 - (c) Giving effect to any operative regional rules relating to maximum or minimum levels of flows or rates of use of water, or minimum standards of water quality or air quality.
 - (d) Determining the degree of consistency between the volume of water authorised to be taken and actual water need as recorded through actual water use, including an assessment of efficiency of water use.
 - (e) Addressing staged improvements or changes planned by the consent holder, which are unlikely to increase the level of adverse effects on the environment.
 - (f) Reviewing the appropriateness of any condition requiring the holder of a resource consent to supply the consent authority information relating to the exercise of the resource consent.
- 8.2.5.2 There are situations where a review can be undertaken only of those conditions of a resource consent for which a review is specified.
- 8.2.5.3 The timing and frequency of any such review will be determined on a case by case basis, but the maximum frequency will generally be in the order of **5 to 10 years**.

8.2.6 CONSENT LAPSING

- 8.2.6.1 In addition to the requirements set out in section 125 of the Act in respect of lapsing consents the HBRC will take into account the following:
- (a) the existing level of allocation from the catchment from which consents have been granted
 - (b) the level of demand for water from that catchment
 - (c) the activity for which consent has been sought.

8.2.7 ENFORCEMENT PROCEDURES

- 8.2.7.1 The HBRC will use enforcement measures as a means of achieving compliance with:
- (a) resource consents
 - (b) permitted activity rules, and
 - (c) the environmental guidelines set out in Chapter 5 of this Plan for unregulated activities (using the enforcement provisions available under section 17 of the RMA).

8.2.7.2 The HBRC will adopt the following approach for the use of enforcement measures:

- (a) The HBRC will, in all its activities, place emphasis on holding discussions and providing information as the primary means of addressing non-compliance by resource users.
- (b) In the event that further action is necessary, the HBRC may adopt a range of methods to seek to address the problem, including one or more of the following:
 - (i) Working in collaboration with an organisation representing the resource user, if such an organisation exists.
 - (ii) Promoting the use of community working groups which bring affected people together in order to discuss the problem.
 - (iii) Using an independent facilitator to mediate between disputing parties.
 - (iv) Using the services of independent experts to carry out investigations.
- (c) However, in the event of a blatant breach of conditions of a rule in the plan where there is no serious or ongoing environmental harm occurs, Council will use infringement notices as a punitive measure in order to encourage observance of RMA requirements.

8.2.7.3 Notwithstanding the approach set out above, in the event of single instances of non-compliance that have serious adverse environmental effects, the HBRC may immediately use the enforcement provisions under the RMA to control adverse effects.

8.2.7.4 In considering the range of enforcement action proceedings available Council will consider (but not limit itself to) the following factors:

- The significance and scale of environmental effect.
- Mitigation and remedial measures undertaken since the event.
- The culpability of the alleged offender.
- The occurrence of previous incidents and any associated warnings.
- The quality of Council evidence.
- Whether a deterrent is needed.

8.2.8 EXISTING ACTIVITIES VERSUS NEW ACTIVITIES

8.2.8.1 Any environmental guidelines introduced in this Regional Plan, or by way of later changes to this Regional Plan, apply to both existing and new resource consent holders. However, in the event that existing consent holders do not comply with new environmental standards (introduced by way of rules), they will be given a period of time within which to achieve compliance. Any such period of time will be decided after discussion with the consent holder, but will generally be in the order of 5 to 10 years, or at the time of granting a new consent upon expiry.

8.2.8.2 The following factors will be taken into account when deciding an appropriate timeframe for any required improvement:

- (a) The degree of non-compliance with the new standards.
- (b) The degree of adverse effects on the environment caused by non-compliance with the new standards.
- (c) The availability of technology which will allow the new standards to be met, and
- (d) The financial implications of meeting the new standards.

8.2.8.3 It is important to note that the HBRC cannot review the conditions of existing resource consents to recognise new environmental standards, unless the standards are introduced by way of rules in a Plan in accordance with

section 128 (1) (b) of the RMA or the resource consent expressly allows such a review. This means, for example, that the environmental guidelines set out in Chapter 2 of this Plan cannot be used to review the conditions of an existing consent, unless the consent expressly allows this. However, they can be used at the time of consent renewal.

8.3 Financial Contributions

8.3.1 Where the HBRC grants a resource consent, it may impose a condition requiring that a financial contribution be made for the purposes specified in this Plan.

8.3.2 The term “financial contribution” is defined in section 108 (9) of the RMA as:

“... a contribution of:

- (a) money, or
- (b) land, including an esplanade reserve or esplanade strip (other than in relation to a subdivision consent), but excluding Maori land within the meaning of the Maori Land Act 1993 unless that Act provides otherwise, or
- (c) a combination of money and land.”

8.3.3 Section 108 (10) of the RMA states that:

“A consent authority must not include a condition in a resource consent requiring a financial contribution unless:

- (a) The condition is imposed in accordance with the purposes specified in the plan (including the purpose of ensuring positive effects on the environment to offset any adverse effect); and
- (b) The level of contribution is determined in the manner described in the plan.”

8.3.4 Financial contributions may, therefore, be required for a variety of purposes, including the purpose of offsetting any adverse effects. In accordance with section 111 of the RMA, any financial contribution of money collected by the HBRC must be used in reasonable accordance with the purposes for which the money was received.

8.3.5 The following provisions reflect the requirements of the Act and set out:

- (a) the circumstances when a financial contribution may be imposed
- (b) the purposes for which the contribution may be used, and
- (c) the manner in which the level of contribution will be determined.

8.3.6 CIRCUMSTANCES

8.3.6.1 The HBRC will only use financial contributions as a resource management tool in relation to resource consents granted for river bed gravel extraction.

8.3.7 PURPOSES

8.3.7.1 The purposes for which financial contributions will be sought from river bed gravel extractors are as follows:

- (a) Construction of, or maintenance of, roads, fences and gates that are used or will be used to access the gravel extraction site.
- (b) Stop bank restoration or enhancement to offset the effects of gravel extraction on flooding.
- (c) Strengthening or restoration of affected flood control or river stabilisation works.

- (d) Replanting of vegetation removed, destroyed or damaged by gravel extractors accessing gravel extraction sites, or by the gravel extraction process.
- (e) Downstream planting of riparian margins to offset erosion caused or exacerbated by gravel extraction.

8.3.8 LEVEL OF CONTRIBUTION

8.3.8.1 The level of contribution will be determined in the following manner:

- (a) The total annual cost of the works and services to be funded by the contributions (as determined in each year's annual plan prepared pursuant to the Local Government Act 1974) divided by the total annual estimated volume of river bed gravel extraction, thereby giving rise to a uniform financial contribution per cubic metre of gravel extracted.
- (b) The final actual financial contributions sought will fairly and reasonably reflect the degree of adverse effects arising as a result of river bed gravel extraction.

8.4 Cross Boundary Issues

- 8.4.1 The RMA requires that regional policy statements and regional plans set out the processes to be used to deal with issues which cross local authority boundaries, and issues between territorial authorities or between regions. The Act also enables regional policy statements to establish which local authority (i.e. the regional council or territorial authority) shall have responsibility for developing objectives, policies, and rules relating to the control of the use of land for:
- (a) the avoidance or mitigation of natural hazards, and
 - (b) the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances.
- 8.4.2 Section 8.4.3 below sets out the procedures for dealing with cross boundary issues, and section 8.4.4 sets out the respective roles of the HBRC and territorial authorities in relation to natural hazards and hazardous substances.

8.4.3 PROCEDURES FOR CROSS BOUNDARY ISSUES

- 8.4.3.1 Cross boundary issues can occur between the HBRC and adjacent regional councils who share regional boundaries; between the territorial local authorities within the region (Wairoa District, Napier City, Hastings District, Central Hawke's Bay District, Taupo District, and Rangitikei District Councils); and between the HBRC and these territorial local authorities.
- 8.4.3.2 Cross boundary issues generally occur when the environmental effects of one resource use are felt in another part of the environment (e.g. effects of water quality caused by land use activities). Integrated management aims to minimise the effects of cross boundary issues and promote complementary, efficient and effective management of all natural and physical resources.

8.4.3.3 Integrated management involves a consideration of:

- (a) The effects of the use of one natural and physical resource on other natural and physical resources or on other parts of the environment, recognising that such effects may occur across space and time.
- (b) The functions and roles of other agencies for managing natural and physical resources.
- (c) The objectives and interests of the community, recognising that natural and physical resources cannot be managed without having regard to social, economic and cultural factors.

8.4.3.4 The processes that will be used to deal with issues which cross local authority boundaries, and issues between territorial authorities or between regions, are as follows:

- (a) Having regard under sections 61 and 66 of the RMA to the policy statements and plans (including management plans and strategies prepared under other Acts) of territorial authorities and neighbouring regional councils, and the extent to which this Plan needs to be consistent with those documents.
- (b) Liaising and sharing information with the Gisborne District Council, Bay of Plenty Regional Council, Waikato Regional Council and Manawatu Wanganui Regional Council in respect of the management of land, air, water, and discharges, particularly in respect of the extent to which there should be cross boundary consistency.
- (c) Liaising and sharing information with the Wairoa District, Napier City, Hastings District, Central Hawke's Bay District, Taupo District, and Rangitikei District Councils on cross boundary issues affecting resource management, particular in respect of the management of incompatible land uses, hazardous substances and natural hazards and contaminated sites.
- (d) Establishing procedures with the territorial local authorities set out in (c) for ensuring efficient resource management processes in areas where there are overlaps in the functions of regional councils and territorial authorities under the RMA.
- (e) Making submissions on district plans prepared by the territorial local authorities set out in (c) aimed at ensuring that those plans are not inconsistent with this regional plan, and are not unnecessarily inconsistent with each other.
- (f) Undertaking transfers of functions, powers or duties under section 33 the RMA, where this would result in more efficient or effective resource management processes or outcomes.
- (g) Exercising the following functions and powers under the RMA in relation to resource consent applications:
 - (i) Making submissions on resource consent applications made to other consent authorities, and advising affected territorial authorities and adjoining regional councils (where appropriate) of resource consent applications lodged with the HBRC.
 - (ii) Holding joint hearings with the territorial local authorities set out in (c) for resource consent applications that have cross boundary issues.
 - (iii) Co-ordinating information to be submitted with applications for resource consents that have cross boundary issues.
 - (iv) Involving other management agencies in pre-hearing meetings under section 99 of the RMA, in circumstances where their statutory or declared area of interest is affected.
 - (v) Co-ordinating and facilitating consultation between resource consent applicants, key resource user groups, tangata whenua, and statutory organisations (including territorial local authorities, the Department of Conservation, the Fish and Game Council, network utility operators and representatives of the health sector).

- (h) Adopting a proactive approach in achieving environmental solutions through cooperation with territorial authorities (including the formation of joint committees where appropriate), where resource management issues which cross territorial and regional boundaries arise.

8.4.4 LOCAL AUTHORITY RESPONSIBILITIES FOR NATURAL HAZARDS & HAZARDOUS SUBSTANCES

- 8.4.4.1 Section 62 (1) (b) (h) of the RMA enables regional policy statements to set out the respective responsibilities of the regional council, and territorial authorities within the region concerned, for developing objectives, policies, and rules relating to the control of the use of land for:
 - (a) the avoidance or mitigation of natural hazards, and
 - (b) the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances.
- 8.4.4.2 If no responsibilities are identified in accordance with this provision of the Act, the regional council retains primary responsibility for natural hazards and hazardous substances.
- 8.4.4.3 This section describes the respective functions of the HBRC, and of territorial authorities within Hawke's Bay, in relation to natural hazards and hazardous substances. This section is written in accordance with section 62 (1) (ha) of the RMA (and in keeping with the fact that this Regional Plan incorporates the role and provisions of a regional policy statement).
- 8.4.4.4 It is important that the HBRC and territorial authorities work together in the management of natural hazards and hazardous substances. To this end, the HBRC and territorial authorities have, through discussions and refinement of earlier arrangements set out in the former Hawke's Bay Regional Policy Statement (HBRC, 1995), reached the following agreements on their respective responsibilities.

8.4.4.5 NATURAL HAZARDS

- 8.4.4.5.1 Both the HBRC and the territorial authorities within the Hawke's Bay region will be responsible for developing **objectives** and **policies** for managing the use of land for the purpose of avoiding and mitigating natural hazards. Territorial authorities will be responsible for developing methods controlling the use of land for the purposes of avoiding or mitigating natural hazards, except in relation to coastal hazards. In relation to coastal hazards, both the HBRC and territorial authorities may be responsible for developing methods controlling the use of land for the purpose of the avoidance or mitigation of coastal hazards.
- 8.4.4.5.2 To support the territorial authorities in developing and implementing their plan provisions in relation to natural hazards, the HBRC will be the key information provider. The HBRC will provide relevant, up to date and accurate data in an appropriate form for the territorial authorities to use. The HBRC will also use this information itself for natural hazard management and planning purposes, and for Civil Defence management in accordance with the Civil Defence Act 1983.
- 8.4.4.5.3 The information and assistance to be provided by the HBRC will include the following, as it becomes available:
 - (a) Identification and distribution of information on those parts of the region at risk from flooding, earthquakes, tsunami, and volcanic eruptions. At the time of writing this Plan, this work had largely been completed. The main remaining tasks were the identification of flood hazard areas throughout the Heretaunga Plains and investigations into the flood risk to Wairoa township from movement of the Wairoa River mouth.
 - (b) Ongoing provision of expertise and assistance to the regional engineering lifelines project through assistance to the Lifelines Steering Committee.
 - (c) Ongoing maintenance and improvement of flood forecasting and assessment data, together with the provision of models of flood and storm events for emergency management purposes.

- (d) An ongoing commitment to a programme of work for identifying flood hazard areas throughout the Heretaunga Plains, and
- (e) Maintenance of the regional civil defence and emergency management capability, and a sharing of related information and expertise with the territorial authorities.

8.4.4.6 HAZARDOUS SUBSTANCES

8.4.4.6.1 With respect to the management of hazardous substances, the respective responsibilities of the HBRC and territorial authorities will be as follows:

- (a) **HBRC** – The HBRC will have responsibility for hazardous substances as they relate to the discharge of contaminants to air, water and land as defined by section 15 of the RMA. The HBRC will also have responsibility for the use, storage, and transportation of hazardous substances where these are associated with the control of the use of land of any river or lake under section 13 of the RMA.
- (b) **Territorial authorities** - The territorial authorities will have responsibility for the use, storage, disposal, and transportation of hazardous substances where these are associated with the control of the use of land under section 9 of the RMA.

8.4.4.6.2 This split in functions is based on the wider functions of regional councils and territorial authorities under the Act. Notwithstanding the functional split set out above, several integrated systems need to be developed or maintained, including:

- (a) The ongoing receipt and storage by the HBRC of unwanted agricultural chemicals.
- (b) Encouragement and support for the inclusion of district plan provisions to give effect to this functional split, and
- (c) Establishment of agreed procedures and facilities in relation to the collection, storage and disposal of hazardous substances (especially from urban areas).

The HBRC will work closely with territorial authorities with regard to this functional split and the process issues outlined above in order to resolve these outstanding issues. This resolution will provide certainty for the community about what they can do to dispose of unwanted hazardous substances in an environmentally sound manner.

8.5 PLAN MONITORING AND REVIEW

8.5.1 Statutory Requirements

Under sections 62 and 67 of the RMA, this Plan is required to state the procedures to be used to:

- (a) review the contents of this Plan (including a review of its role as the Regional Policy Statement); and
- (b) monitor the effectiveness of this Plan (including a review of its role as the Regional Policy Statement) as a means of achieving its objectives and policies.

These obligations link directly to section 35 (2) (b) of the RMA, which requires the HBRC to monitor the suitability and effectiveness of any policy statement or plan for the region.

Section 79 of the RMA sets out the procedures for reviewing policy statements and plans:

Section 79. Review of policy statements and plans

- (1) Every regional council shall commence a full review of its regional policy statement, and each of its regional plans, not later than 10 years after the statement or plan became operative.
- (2) Every territorial authority shall commence a full review of its district plan not later than 10 years after the plan became operative.
- (3) If, after reviewing a policy statement or plan under this section, a regional council or territorial authority considers:
 - (a) that the statement or plan requires change or replacement, it shall change or replace the statement or plan in a manner set in the First Schedule and this part
 - (b) That the statement or plan can remain without change or replacement, it shall publicly notify that statement or plan as if it were a proposed policy statement or plan in a manner set out in the First Schedule and this Part.
- (4) When a regional council or territorial authority is reviewing a policy statement or plan, it shall review all sections of, and all changes to, the policy statement or plan regardless of when those sections or changes became operative.
- (5) A policy statement or plan shall not cease to be operative by virtue of being due for review or while it is being reviewed.
- (6) The obligations of each regional council and territorial authority under this section are in addition to its duty to monitor under section 35.

8.5.2 Plan Monitoring

The monitoring of the suitability and effectiveness of this Plan will be completed as part of the HBRC's Regional Monitoring Strategy, as discussed in Section 4.7, including:

- state of the environment monitoring
- compliance monitoring, and
- effects-based monitoring.

This will be supplemented with an audit of policies and methods, regional rules (especially permitted activity rules), certificates of compliance issued by the council, and resource consent processes, to ascertain whether;

- The specified policies have been interpreted and applied consistently.
- Non-regulatory methods have been implemented.
- Rules have been interpreted and applied consistently.
- Council's discretion to grant consents has been applied consistently.
- The conditions attached to resource consents have applied consistently, and
- The procedures for addressing cross-boundary issues have resulted in efficient resource management processes.

The results of this monitoring will be evaluated, as part of the annual State of the Environment updates, culminating in a five-yearly State of the Environment report, to determine the effectiveness of the Plan as a means of achieving the council's objectives and policies.

8.5.3 Plan Review

In accordance with Section 79 of the RMA, the council will undertake a complete review of this Plan within ten years of it becoming operative. At that time, the entire Plan will be reviewed, including any changes made to it over that period.

The overall thrust of this Plan is to deregulate the management of resource use activities while providing a framework of sustainable management. As this is the first combined regional policy statement/regional plan for the Hawke's Bay region, there may be a need to review the Plan or change parts of it at an earlier stage. In particular, the Council will assess the need to initiate an early review, or make changes to the Plan where:

- (a) Administrative difficulties arise from implementation of the Plan.
- (b) There is a need to make changes to introduce more catchment-specific policy frameworks.

- (c) Information obtained as part of the state of the environment monitoring program indicates the need for a review or change.
- (d) Changes in national policy, including new or amended laws, regulations, national policy statements and national environmental standards require a regional response.
- (e) A request to change the Plan needs to be actioned.

The procedures to review this Plan will include:

- (a) An assessment of the state of the environment, based on information derived from the regional state of the environment monitoring programme.
- (b) An assessment of the efficiency and effectiveness of policies and methods of implementation including rules, in achieving the objectives of the Plan.
- (c) An assessment of the resource consents process, including the types of consents, the information required to be submitted with applications, the benefits and costs of the process, the time taken to process applications, and other administrative matters, and
- (d) Formal and informal liaison with public authorities and key interest groups regarding the effectiveness of the Plan.

9 GLOSSARY

In this Plan, the following terms have the meaning as described. Terms shown with an asterisk (*) have the meaning provided in the Interpretation section (s 2) of the Resource Management Act 1991.

9.1 **Abrasive blasting**

The cleaning, smoothing, roughening, cutting or removal of part of the surface of any article by the use, as an abrasive, of a jet of sand, metal, shot or grit or other material propelled by a blast of compressed air or steam or water or by a wheel.

- Dry abrasive blasting means abrasive blasting using materials to which no water has been added.
- Wet abrasive blasting means abrasive blasting to which water has been added.

9.2 **Accelerated erosion**

Intensification of the natural rate of erosion of the land surface (including soil, regolith and bedrock), induced by human activity.

9.3 **Accretion**

The gradual build-up of deposited material (sediment, gravel etc).

9.4 **Act**

The Resource Management Act 1991 including any amendments thereto.

9.4A **Advanced primary treatment**

in relation to the treatment of wastewater, means primary treatment with the addition of an effluent outlet solids control device (outlet filter).

9.5 **Aerial discharge**

The discharge of a substance from an aircraft.

9.6 **Aerosol**

A system of particles consisting of water containing contaminants which may be carried in the atmosphere by the movement of air, with the aerodynamic diameter of the particles ranging from 0.05 to 50 microns.

9.7 **After reasonable mixing**

(a) In relation to flowing surface water bodies, for the purposes of rules in this Plan, means the mixing of contaminants in surface water at whichever of the following is the least:

- (i) a distance 200 metres downstream of the point of discharge, or
- (ii) a distance equal to seven times the bed width of the surface water body, but which shall not be less than 50 metres, or
- (iii) the distance downstream at which mixing of contaminants has occurred across the full width of the surface water body, but which shall not be less than 50 metres.

(b) In relation to lakes, for the purposes of rules in this Plan, means the mixing of contaminants in lake water at a distance 15 metres from the point of discharge.

(c) In relation to groundwater bodies, for the purposes of rules in this Plan, means the mixing of contaminants in groundwater at whichever of the following is the least:

- (i) a distance 100 metres from the point of discharge, or
- (ii) the boundary of the subject property.

Alternatively, for activities that are subject to resource consents, "reasonable mixing" may be determined on a case by case basis through the resource consent process.

9.8 **Agrichemical**

Any substance, whether inorganic or organic, man-made or naturally occurring, modified or in its original state, that is used to eradicate, modify or control flora and fauna, excluding fertiliser and pheromones.

9.9 **Agrichemical spray drift**

The airborne movement of agrichemicals, as droplets, vapour or solid particles, onto a non-target area.

9.9A **Airshed**

means

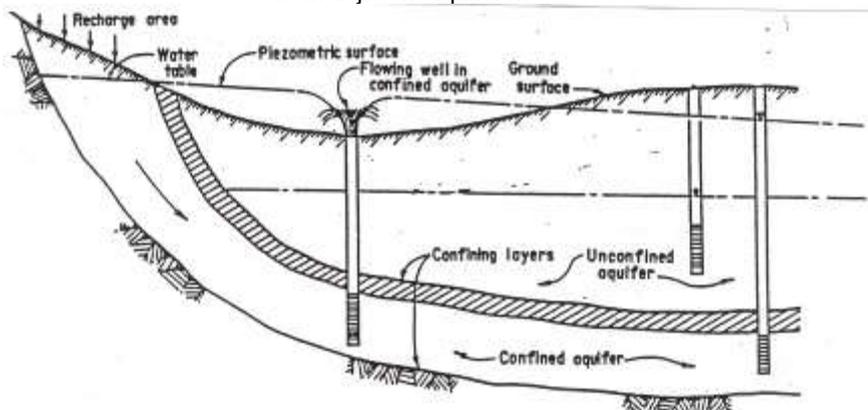
- a) the region of a regional council excluding any area specified in a notice under (b)
- b) a part of the region of a regional council specified by the Minister for the Environment by a notice in the Gazette to be a separate airshed.

Maps of airsheds gazetted under (b) are incorporated by reference in Schedule XIII.

- 9.10 **Allocatable volume**
The volume of water flow available for out-of-stream use e.g. irrigation. It is the volume of the total river flow available over a set period (e.g. the average daily flow or average seven day flow) that may be abstracted from a river or stream without causing the minimum flow to occur so often as to cause a continuing change in the nature of the aquatic ecosystem.
- 9.11 **Ambient air quality**
The air quality beyond the boundary of the subject property and beyond any area of local air quality.
- 9.12 **Amenity values**
Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.
- 9.13 **Animal effluent**
Animal excreta (excluding human waste) that is collected and managed by people, including associated process water, contaminants, and sludges.
- 9.14 **Animal remedy**
Any drug, medicine, remedy or therapeutic preparation, or any biochemical substances for:
(a) curing, diagnosing, treating, controlling or preventing any disease in animals, or
(b) destroying or preventing parasites on or in animals, or
(c) maintaining or improving the health, condition, productivity or appearance of any animals, or
(d) capturing or immobilising any animal.
- 9.15 **Aquifer**
A saturated permeable geologic unit that can transmit significant quantities of water at a rate which is useful for water supply under ordinary hydraulic gradients.

Related terms include:

Unconfined Aquifer	An aquifer which has its upper boundary at the Earth's surface.
Confined Aquifer	An aquifer which is confined between aquitards and therefore contains water under pressure.
Aquitard	A geologic formation through which virtually no water moves.
Aquiclude	A saturated but poorly permeable formation that may transmit water to or from adjacent aquifers.



Note: This diagram is explanatory only, not representative of any particular aquifer

- 9.16 **Archaeological site**
Any place in New Zealand that
(a) Either
(a) was associated with human activity that occurred before 1900, or
(i) is the site of the wreck of any vessel where that wreck occurred before 1900; and
(b) is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand.
- 9.17 **Artificial watercourse**
Includes an irrigation canal, water supply race, canal for the supply of water for electricity power generation, and farm drainage canal [see definition of 'river' under the RMA].

- 9.17A **AS/NZS 1547**
means the Australian/New Zealand Standard for On-site domestic wastewater management, published 24 February 2012 and referred to as AS/NZS 1547:2012.
- 9.18 **Asphalt plant**
Any process for the blending or coating of road chip with any material based on tar or bitumen or asphalt and intended for road surfacing application.
- 9.19 **Atua**
The celestial deities born to Ranginui and Papatuanuku.
- 9.20 **Bed ***
Means:
(a) In relation to any river:
(i) For the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which the waters of the river cover at its annual fullest flow without overtopping its banks.
(ii) In all other cases, the space of land which the waters of the river cover at its fullest flow without overtopping its banks, and
(b) In relation to any lake, except a lake controlled by artificial means:
(i) For the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which the waters of the lake cover at its annual highest level without exceeding its margin, and
(ii) In all other cases, the space of land which the waters of the lake cover at its highest level without exceeding its margin, and
(c) In relation to any lake controlled by artificial means, the space of land which the waters of the lake cover at its maximum permitted operating level, and
(d) In relation to the sea, the submarine areas covered by the internal waters and the territorial sea.
- 9.21 **Bed form**
The topography or shape of the bed of a lake or river.
- 9.22 **Benefits and costs ***
Includes benefits and costs of any kind, whether monetary or non-monetary.
- 9.23 **Berm**
That area of land located adjacent to the river bed that is periodically covered by flood waters that overtop the banks of the river.
- 9.24 **Best irrigation management practice**
The optimum application of irrigation water to a crop in a manner that takes into account
 - appropriate scheduling
 - rate of application
 - crop type
 - soil and site characteristics, and
 - application method
to avoid wastage of water.
- 9.25 **Best practicable option ***
In relation to a discharge of a contaminant or an emission of noise, means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to:
(a) The nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects, and
(b) The financial implications, and the effects on the environment, of that option when compared with other options, and
(c) The current state of technical knowledge and the likelihood that the option can be successfully applied.
- 9.26 **Biochemical oxygen demand (BOD)**
A measure of the amount of oxygen consumed during the decomposition of organic matter in water.
- 9.27 **Biodiversity**
The variability among indigenous living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems.

- 9.28 **Biosolids**
Processed sludges from industrial activities (excluding human waste and agricultural effluents) that are suitable for reuse as soil conditioners or fertiliser substitutes.
- 9.29 **Biota**
All living components of the environment, excluding humans.
- 9.30 **Blackwater**
Wastes discharged from the human body either direct to a vault toilet or through a water closet (flush toilet) and/or urinal.
- 9.31 **Bore**
Any pipe, cylinder or hole inserted into the ground that either:
(i) is created for the purpose of accessing underground water, oil or gas, or
(ii) penetrates a confined aquifer, or
(iii) in any way causes the release of water from a confined aquifer, or
(iv) is created for the purpose of exploring water, oil or gas resources but excludes piezometers installed for monitoring purposes.
- 9.32 **Buffer zone**
The distance between the boundary of an activity and an identified sensitive area.
- 9.33 **Bund**
In relation to stored contaminants, means a constructed embankment or low wall designed to contain accidental spillage of a stored liquid.
- 9.33A **Business Activities**
means any commercial or industrial activity.
- 9.34 **Catchment**
The total area from which a single water body collects surface and subsurface runoff.
- 9.34A **Catchment area**
For the purpose of this Plan, means a grouping of surface water catchments and groundwater catchments. Indicative location of each Catchment Area is set out in Appendix A to Chapter 3.1A.
- 9.35 **Catchment management plan**
For the purpose of this Plan a catchment management plan refers to a plan prepared for a catchment or catchments to show how that system will be managed for stormwater runoff.
- 9.36 **Chimney**
Any structure designed for venting the airborne products of combustion upwards and above the ceiling height of the topmost floor of the building to which it is associated.
- 9.37 **Cleanfill**
Natural materials such as clay, soil, rock and such other materials as concrete, brick, old asphalt or demolition products that are free of:
(a) Combustible or putrescible components apart from up to 10% by volume untreated timber in each load.
(b) Hazardous substances or materials (such as municipal waste) likely to create leachate by means of biological or chemical breakdown.
(c) Any products or materials derived from hazardous waste treatment, stabilisation or disposal processes.
- 9.37A **Coastal environment**
means an environment in which the coast is a significant element or part, and includes:
(a) the coastal marine area;
(b) any areas identified as being affected by, or potentially affected by, coastal flooding or coastal erosion;
(c) any of the following:
(i) tidal waters and the land above mean high water springs;
(ii) dunes;
(iii) beaches;
(iv) areas of coastal vegetation and coastal associated fauna;
(v) coastal cliffs
(vi) salt marshes;
(vii) coastal wetlands, including estuaries; and

- (viii) areas where activities occur or may occur which have a direct physical connection with, or impact on, the coast.

For the purposes of this Plan, the coastal environment comprises all of the coastal marine area of Hawke's Bay and the coastal margin. The inland boundary of the coastal margin and coastal environment is as shown on the planning maps in Volume 2 of the Hawke's Bay Regional Coastal Environment Plan.¹

9.37B **Coastal margin**

means an area of the coastal environment identified for the purposes of the Hawke's Bay Regional Coastal Environment Plan to manage activities and the effects of activities occurring within the coastal environment. It does not include any part of the coastal marine area.

9.38 **Coastal marine area ***

Means 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.

9.39 **Coastal water ***

Means seawater within the outer limits of the territorial sea and includes:

- (a) Seawater with a substantial fresh water component, and
- (b) Seawater in estuaries, fiords, inlets, harbours, or embayments.

9.40 **Commercial User**

For the purpose of provisions relating to the application of agrichemicals, means any person, group or organisation using agrichemicals in the course of their business activities. It includes any council or local authority managing the use of agrichemicals in public places and amenity areas, roadside, waterways and on noxious weeds.

9.41A **Community Irrigation Scheme**

A water supply system that is capable of providing irrigation water to multiple production land properties and other ancillary uses.

9.41 **Composting**

The biological reduction of organic waste to a relatively stable product.

9.42 **Conditions**

In relation to plans and resource consents, includes terms, standards, restrictions, and prohibitions.

9.43 **Confined aquifer**

See 'Aquifer'.

9.44 **Consent authority**

The Minister of Conservation, a regional council, a territorial authority, or a local authority that is both a regional council and a territorial authority, whose permission is required to carry out an activity for which a resource consent is required under the Resource Management Act 1991.

9.45 **Constructed wetland**

See 'Wetland'.

9.46 **Contaminant ***

Includes any substance (including gases, liquids, solids, and micro-organisms) or energy (excluding noise) or heat, that either by itself or in combination with the same, similar, or other substances, energy, or heat:

- (a) When discharged into water, changes or is likely to change the physical, chemical, or biological condition of water, or

¹ NOTE: The term 'Coastal Environment' is not defined in the RMA but is used in s6 of the Act and in the New Zealand Coastal Policy Statement. It was defined under the now repealed Town and Country Planning Act 1977 as an environment in which the coast is a significant part or element. The Environment Court has held that the coastal environment is usually accepted as extending to the crest of the nearest skyline. In some cases, the coastal environment for the purposes of s6 and/or the New Zealand Coastal Policy Statement may extend inland of the coastal environment as shown on the Regional Coastal Environment Plan's planning maps. However, the provisions of this Plan only apply landward of the inland coastal environment boundary shown on those planning maps.

- (b) When discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged.

9.46B **Contaminated Land**

Means land that has a hazardous substance in or on it that –

- (a) Has significant adverse effects on the environment; or
(b) Is reasonably likely to have significant adverse effects on the environment.

9.47 **Contaminated site**

A site at which hazardous substances or organic waste occur at concentrations above background levels and where assessment indicates it poses, or is likely to pose, an immediate or long-term hazard to human health of the environment. Background levels refer to ambient levels of a contaminant in the local area of the site under consideration.

9.48 **Contractor**

Any person or organisation who by agreement with the owner, occupier or manager of any land, undertakes activities for hire or reward. It does not include an employee, owner, occupier or manager.

9.49 **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 the standards and terms specified in a plan or proposed plan for such activities; and
(c) is assessed according to matters over which 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.

9.50 **Contravene**

Includes fail to comply with.

9.51 **Crop**

Any vegetative crop (including a crop of trees) established by humans.

9.52 **Crossing**

Any bridge, ford or conduit, including pipe or culvert, in, on, or over the bed of any river or lake.

9.53 **Cultivation**

Land tillage and other land disturbance activities for the purposes of establishing and growing a crop, or pasture establishment.

9.53A **Custom designed pellet boiler**

means solid fuel burning equipment that is specifically designed and manufactured as a boiler fuelled by wood pellets and where the pellets and air are mechanically delivered to an enclosed combustion chamber at a controlled rate. This does not include solid fuel burning equipment that has been modified or customised after its manufacture.

9.54 **Dam**

Any structure across the bed of a river or lake or artificial watercourse which impounds water.

9.55 **Dangerous**

See Section 6.1.4 of this Plan.

9.55A **Deep Groundwater**

That groundwater abstracted from wells with a top screen depth of 50m or greater (metres from land surface). In the Lower Tukituki River catchment, below Red Bridge, deep groundwater is that groundwater sourced from wells with a top screen depth of 40m or greater.

9.56 **Deposition**

The deposition of any substance, other than water or water-borne contaminants (discharge), or fill material (reclamation).

9.56A **Diesel**

Means a refined petroleum distillate having a viscosity and distillation range intermediate between those of kerosene and light fuel oil, whether or not it contains additives, intended for use as fuel in internal combustion equipment and external combustion equipment, but excludes re-refined oil and used oil or waste oil. Diesel must

have properties that conform to the limits specified in Schedule 3 of the Petroleum Products Specifications Regulations 1988, when tested by the methods specified in that Schedule.

9.57 **Diffuse source discharge**

A discharge that does not have a particular point of origin or is not introduced into receiving waters from a specific outlet, but arises from a wide or diffuse area.

9.58 **Discernible change**

For the purposes of Rule 6 and Rule 7 “discernible change” means a change in colour of more than five points on the Munsell scale or more than 20% change in clarity as measured by a 200 mm black disc as per “Water Quality Guidelines Number 2” published by the Ministry for the Environment. For example, a change in water colour from blue to blue/green is 10 points on the Munsell Scale.

9.59 **Discharge**

Includes emit, deposit, and allow to escape.

9.60 **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.

9.61 **District plan**

An operative plan approved by a territorial authority under the First Schedule of the Act; and includes all operative changes to such a plan (whether arising from a review or otherwise).

9.62 **District rule**

A rule made as part of a district plan or proposed district plan in accordance with section 76 of the Act.

9.63 **Disturbance**

Includes excavation, dredging, drilling and tunnelling.

9.64 **Diversion**

In relation to the diversion of water, means the process of redirecting the flow of water from its existing course to another by modification of its course.

9.65 **Domestic needs**

See “Reasonable domestic needs”.

9.66 **Domestic purposes**

The use of agrichemicals by a person, group or organisation in a private capacity, who do not use agrichemicals in the course of their business activities.

9.67 **Domestic sewage**

See ‘Sewage’.

9.68 **Drainage**

The activity of lowering the water table to achieve productive land use to facilitate the stability of land or structures, or to achieve some other resource use activity. This generally involves the diversion of water.

9.69 **Drainage water**

The water that drains from a drainage system as defined in Section 9.68.

9.70 **Dry abrasive blasting**

See “Abrasive blasting.”

9.71 **Dust**

All solid particulate matter that is suspended in the air, or has settled after being airborne. By way of example, ‘dust’ may be derived from sand, cement, fertiliser, coal, soil, paint, ash, animal products, or wood.

9.72 **Dwellinghouse**

Any building, whether permanent or temporary, that is occupied, in whole or in part, as a residence, and includes any structure or outdoor living area that is accessory to, and used wholly or principally for the purposes of, the residence, but does not include the land upon which the residence is sited.

- 9.72A **DWSNZ**
Drinking water standards for New Zealand (2005 Revised edition 2008) or subsequent version.
- 9.73 **Earthworks**
The disturbance of land surfaces by blading, contouring, ripping, moving, removing, placing or replacing soil or earth, or by excavation, or by cutting and filling operations.
- 9.74 **Ecosystem**
A dynamic complex of plant, animal and micro-organism communities and their non-living environment, interacting as a functional unit.
- 9.75 **Edge protection works**
Works established to provide protection to a river bank.
- 9.76 **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.
- 9.77 **Efficient**
The use of a resource in a manner that maximises net benefits to the region. Net benefits are determined by subtracting total costs (including negative effects on the environment) from total benefits (including positive effects on the environment).
- 9.77A **Efficient allocation and use**
Efficient allocation and use has the same meaning as given in the 2011 NPSFM's interpretation section. For the purposes of this Plan, economic efficiency means water use which results in the optimum outcome for the environment and community; technical efficiency means the amount of water beneficially used in relation to that taken; and dynamic efficiency means the adaptability of water allocation to achieve ongoing improvements in efficiency.
- 9.78 **Efficient groundwater take**
Abstraction by a bore which penetrates the aquifer from which water is being drawn at a depth sufficient to enable water to be drawn all year (i.e. the bore depth is below the range of seasonable fluctuations in groundwater level), with the bore being adequately maintained, of sufficient diameter and screened to minimise drawdown, with a pump capable of drawing water from the base of the bore to the land surface.
- 9.79 **Efflux**
The velocity of gases leaving a chimney, pipe or other exhaust.
- 9.80 **Energy**
The capacity of a body or a system to do work.
- 9.81 **Environment**
Includes:
(a) ecosystems and their constituent parts, including people and communities
(b) all natural and physical resources
(c) amenity values, and
(d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters.
- 9.81A **Environmental State Indicator**
The numerical value for a water quality parameter that defines the desired state in order to safeguard the life supporting capacity of the water body.
- 9.82 **Erosion**
The natural (geological) processes of the wearing away of the land surface (including soil, regolith or bedrock) by natural agents and the transport of the derived material. Erosion includes sheet, wind, creep, slump, flow, rill gully, tunnel gully and stream erosion.

- 9.82A **Existing**
For the purpose of Objective TT4, Policies TT1 to TT15 and Rules TT1 to TT5, existing means as at 4 May 2013.
- 9.83 **Existing fish passage**
Includes the passage of fish that occurs in a given waterbody over the course of a year.
- 9.84 **Existing systems**
For the purpose of this Plan existing systems do not include systems that have been modified or replaced after notification of this Plan (15 April 2000).
- 9.84A **External combustion**
means a fuel combustion process that is not internal combustion, but utilises a heat furnace primarily to generate *thermal* energy. External combustion typically involves fully aspirated burning of the fuel to heat another fluid such as water (for steam), other exchange liquids or gases, air directly, or any component or part of a process that requires thermal energy. Unlike internal combustion, mechanical energy from external combustion can only be generated indirectly, by the furnace heating a fluid within a closed circuit – typically utilising phase change of the heated fluid between liquid and gas to generate physical motion, such as via a steam turbine driven by a boiler/cooler circuit.
- 9.84B **Farming Enterprise**
Means an aggregation of parcels of land within the same Surface Water Allocation Zones identified in Schedule XVI, held in single or multiple ownership (whether or not held in common ownership) that constitutes a single farming operating unit.
- 9.84C **Farm Environmental Management Plan**
Means a whole of farm environmental management plan which addresses environmental risks associated with irrigation management, animal effluent management, nutrient management, stock management and soil management and is prepared in accordance with the requirements listed in Schedule XXII.
- 9.84D **Farm System Change**
Means a change in farming practices beyond routine fluctuations that arise as a result of rotational, annual or seasonal variations in climatic and/or market conditions.
- 9.85 **Fauna**
All the animal life of a given place.
- 9.86 **Feedlot**
An area of land upon which animals are kept and fed for more than 15 days in any 30 day period, where the activity precludes the maintenance of pasture or ground cover.
- 9.87 **Feedpad**
An area of land to which animals are brought for supplementary feeding on a regular basis, where the activity precludes the maintenance of pasture or ground cover.
- 9.88 **Fertiliser**
Any substance which is described as or held out to be suitable for sustaining or increasing growth, productivity or quality of plants or animals through the application of the following essential nutrients to plants or soil, whether in solid or fluid form:
- nitrogen, phosphorous, potassium, sulphur, magnesium, calcium, chlorine, sodium as major nutrients, or
 - manganese, iron, copper, boron, cobalt, molybdenum, selenium as minor nutrients or additives
- and any other product which is considered to meet identified soil or plant nutrient deficiencies and is applied with this principal objective.
- 9.89 **Financial contribution**
A contribution as described in section 108 (9) of the Resource Management Act, and as set out in section 7.2 of this Plan.
- 9.90 **Flood carrying capacity**
The capacity of any channel to convey flood waters.
- 9.91 **Flora**
All the plant life of a given place.

- 9.91A **Flow Management Site**
Means a site on the river where minimum flow limits are set and monitored.
- 9.92 **Foreshore**
Any land covered and uncovered by the flow and ebb of the tide at mean spring tides and, in relation to any such land that forms part of the bed of a river, does not include any area that is not part of the coastal marine area.
- 9.92A **Freestanding Burner**
means an appliance designed to be installed as a solid fuel burner in all areas of a residential dwelling except in a concrete or masonry fireplace or recessed into a building structure or fitting.
- 9.93 **Freshwater**
All water except coastal water and geothermal water.
- 9.93A **Freshwater objective**
has the same meaning as given in the 2011 NPSFM's interpretation section.
- 9.94 **Fuel burning equipment**
Any enclosed fireplace, stove, incinerator, boiler, furnace, turbine, or internal or external combustion engine, in which the combustion of fuel or waste is carried out in a manner whereby the oxygen content, temperature, turbulence and residence time can be controlled.
- 9.95 **Gravel**
Includes all rock and soil material located in a river bed, and which is derived from catchment erosion processes and includes all technical categories of such material including shingle, silts and clays, and includes other generally accepted terms such as aggregates.
- 9.95A **Greater Heretaunga / Ahuriri Catchment Area**
Means a catchment area including the Ahuriri Estuary, Karamū Stream, Ngaruroro River, Tutaekuri River, their tributaries, plus associated Heretaunga Plains groundwater catchments. Indicative location of the Greater Heretaunga / Ahuriri Catchment Area is set out in Appendix A to Chapter 3.1A.
- 9.95B **Greater Region Airshed**
means an airshed covering those parts of the region which have not been specified by the Minister for the Environment in a notice in the Gazette to be a separate airshed.
- 9.96 **Greywater**
The domestic wastes from baths, showers, basins, laundries and kitchens, specifically excluding water closet and urinal wastes. Greywater does not normally contain human wastes unless laundry tubs or basins are used to rinse soiled clothing or baby's napkins.
- 9.97 **Groundwater**
In terms of this Plan, water which is below the surface of the ground, or the bed of any lake or river, whether the water is flowing or not, and if it is flowing, whether it is in a defined channel or not.
- 9.97A **Ground Water Allocation Zone (Tukituki)**
An area of the catchment as shown in Schedule XVII that has a defined allocation limit for groundwater abstraction set in Table 5.9.5.
- 9.98 **Groundwater protection zone**
An area of land in which land use and water use activities are to be managed to protect the underlying groundwater resource.
- 9.99 **GROWSAFE Introductory Certificate**
A certificate which is administered by the New Zealand Agrichemical Education Trust, and awarded for successful completion of the GROWSAFE Introductory Course.
- 9.100 **Guideline**
A numerical concentration or narrative statement recommended to support and maintain an identified environmental value or resource use.
- 9.101 **Habitat**
The place or type of site where an organism or population normally occurs.

- 9.102 **Hand-held appliance**
In relation to agrichemicals, means a knapsack sprayer, a handgun sprayer, a motorised knapsack sprayer, or a hand-held sprayer with a rate and volume of application no greater than these devices.
- 9.103 **Hapu**
Families (whanau) that have an eponymous ancestor.
- 9.103A **Hastings Airshed**
means an airshed specified by the Minister for the Environment by a notice in the Gazette over the Hastings urban area and surrounds for the purposes of managing local ambient air quality. The area covered by the Hastings Airshed is incorporated by reference in Schedule XIII, and comprises Airzone 1 and Airzone 2.
- 9.103B **Hastings Airshed Airzone 1**
means the area of the Hastings Airshed covered by Airzone 1 as shown in Schedule XIII.
- 9.103C **Hastings Airshed Airzone 2**
means the area of the Hastings Airshed covered by Airzone 2 as shown in Schedule XIII.
- 9.104 **Hazard mitigation**
In relation to natural hazards, means lessening the risks posed by natural hazards to human welfare and physical infrastructure.
- 9.105 **Hazardous substance**
Means, unless expressly provided otherwise by regulations prepared under the Hazardous Substances and New Organisms Act 1996, any substance:
(a) with one or more of the following intrinsic 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 or more of the properties specified in paragraph (a) of this definition.
- 9.106 **HBRC**
The Hawke's Bay Regional Council.
- 9.106A **Heavy fuel oil**
means the residual fuel oil remaining after light fuel oil and the lighter fractions have been removed from crude oil during the refining process. Heavy fuel oil is more dense and viscous and has a higher sulphur content than light fuel oil.
- 9.106B **Heretaunga Plains sub-region**
means the part of the Hawke's Bay region identified in Schedule XIV.
- 9.106C **High Flow Take**
Means a water take that occurs from a river that is flowing in excess of its median flow under the provision of Policy TT10.
- 9.107 **Historic place**
Any land (including an archaeological site); or any building or structure (including part of a building or structure); or any combination of land and a building or structure that forms part of the historical and cultural heritage of New Zealand and lies within the territorial limits of New Zealand; and includes anything that is in or fixed to such land.
- 9.108 **Horticulture**
The growing of vegetables, fruit, flowers, plants in nurseries, grapes, other orchard trees, ornamental trees, and forest tree nurseries for commercial purposes.
- 9.109 **Hydraulic head**
The sum of elevation head and pressure head at a given point (well) within an aquifer.
- 9.110 **Ihi**
Psyche, human mind or soul.

- 9.110A **Incinerator**
means a device that is capable of burning solid fuel and waste, but the combustion is not able to be controlled and is not totally enclosed.
- 9.111 **Indigenous vegetation**
Vegetation that occurs naturally in New Zealand or arrived in New Zealand without human assistance.
- 9.112 **Individual premises**
Any building (or buildings) and any areas of adjoining land in common ownership.
- 9.113 **Individual's reasonable domestic needs**
See "Reasonable domestic needs".
- 9.113A **Industrial Greenfield Growth Area**
means land identified for business activities that has not been previously developed for this use.
- 9.114 **Industrial or trade premise***
Means:
(a) any premises used for any industrial or trade purposes, or
(b) any premises used for the storage, transfer, treatment, or disposal of waste materials or for other waste-management purposes, or used for composting organic materials, or
(c) any other premises from which a contaminant is discharged in connection with any industrial or trade process but does not include any production land.
- 9.115 **Industrial or trade process**
Includes every part of a process from the receipt of raw material to the dispatch or use in another process or disposal of any product or waste material, and any intervening storage of the raw material, partly processed matter, or product.
- 9.115A **Industry Good Practice**
Refers to any farm management practice, the use of technology or changes to farming systems that provide for sound farm production methods, improved performance and reduces the environmental impact of the use of production land on the environment and that is promoted by the relevant primary production sector as industry good practice.
- 9.115B **Insert burner – no wetback**
means a solid fuel burning appliance designed to be installed in a fireplace or a suitably flued masonry enclosure, but not connected to the hot water supply system within a residential dwelling.
- 9.115C **Insert burner – wetback**
means a solid fuel burning appliance designed to be installed in a fireplace or a suitably flued masonry enclosure and is connected to the hot water supply system within a residential dwelling.
- 9.116 **Instream values**
Those uses or values of rivers and streams that are derived from within the river system itself and include amenity values, cultural and spiritual values of tangata whenua, and values associated with freshwater ecology and recreational, scenic, aesthetic and educational uses.
- 9.117 **Intake structure**
The device by which water is taken from a water body.
- 9.118 **Intensive pig farming**
Pig farming carried out predominantly within buildings or fenced outdoor areas where the stocking density precludes the maintenance of pasture or ground cover, and involving the keeping, breeding or rearing of more than five pigs that have been weaned, or more than two sows.
- 9.118A **Intermittent River**
A river that does not flow continuously and has a bed that is predominantly unvegetated and comprises silt, sand, gravel, boulders or similar material.
- 9.118B **Internal combustion**
means a fuel combustion process within an engine in which *mechanical* energy is produced by the explosion of a fuel-and-air mixture within the engine (either within cylinders in the case of engines powered by fuels like petrol or diesel, or within gas turbines in the case of jet engines). While the primary purpose of an internal combustion

process is to convert the energy from combustion of the fuel directly into mechanical energy, note that a significant proportion of the energy is also converted to waste heat.

- 9.119 **Intrinsic values***
In relation to ecosystems, means those aspects of ecosystems and their constituent parts which have value in their own right, including:
(a) their biological and genetic diversity, and
(b) the essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience.
- 9.120 **Io Mataukore**
The "parentless one."
- 9.121 **Iwi**
Tribe, people; a confederation of hapu that have an eponymous ancestor.
- 9.122 **Iwi authority**
The authority which represents an iwi and which is recognised by that iwi as having authority to do so.
- 9.123 **Iwi management plan**
A relevant planning document recognised by an iwi authority affected by this Plan, to which local authorities shall have regard. An iwi management plan may include a combination of management plans prepared by hapu.
- 9.124 **Kaitiaki**
A person or entity responsible for the exercise of kaitiakitanga. A kaitiaki may be spiritual or physical and may assume many different forms.
- 9.125 **Kaitiakitanga**
The exercise of guardianship; and, in relation to a resource, includes the ethic of stewardship based on the nature of the resource itself. It recognises the origins of taonga tuku iho and the rights of future generations.
- 9.126 **Kauae Runga**
Upper jaw (being fixed to the head is an analogy for the changeless nature of Tikanga).
- 9.127 **Kauae Raro**
Lower jaw (being flexible, is an analogy for the dynamic nature of Kawa).
- 9.128 **Kawa**
The protocol.
- 9.129 **Kawanatanga**
Governorship, government.
- 9.129A **Kerosene**
means a highly refined fuel, also known as paraffin oil, used whenever a pure, low contamination liquid fuel is required, as in certain types of lamps, and domestic heating devices and industrial fuel burning equipment. Kerosene fuels are a clear, colourless hydrocarbon liquid and are characterised by low volatility and moderately high flash points which make them difficult to ignite and burn cleanly without preheating.
- 9.130 **Kotahitanga**
A unification of people, things, ideas; the tikanga maori value concept of unanimity, accord or consensus through consultation.
- 9.130A **kW (kilowatt)**
means a measure of power (the rate at which work is being done) where $1 \text{ kW} = 10^3$ (1000) Joules per second.
- 9.131 **Lake**
A body of fresh water which is entirely or nearly surrounded by land.
- 9.132 **Land**
Includes land covered by water and the air space above land.
- 9.133 **Land based discharge**
The discharge of a substance from a device or other structure in contact with land at the time of the discharge.
- 9.134 **Land fill**
A waste disposal site of any size used for the controlled deposit of predominantly solid wastes onto or into land.

- 9.135 **Land holder**
Includes land owner, lessee and occupier.
- 9.136 **Land use capability**
Refers to the assessed capability of an area of land to sustain a range of land use activities.
- 9.136A **Land Use Capability Class (LUC)**
Means a classification of areas of land within a farm property or farming enterprise in terms of its physical characteristics or attributes (e.g. rock, soil, slope, erosion, vegetation). The land use capability classes can be derived either from the New Zealand Land Resource Inventory or a suitably qualified person specifically assessing and mapping the land use capacity classes of land within a farm property or farming enterprise. Where the LUC is assessed by a suitably qualified person that person shall use the land use capacity survey handbook – a New Zealand handbook for the classification of land. 3rd Edition, Hamilton., Ag. Research; Lincoln, Landcare Research; Lower Hutt, GNS Science.
- 9.137 **Leachate**
A liquid contaminant resulting from the liquid being exuded from or percolated through predominantly solid matter.
- 9.137A **Level of Habitat Protection**
In relation to Tukituki River catchment minimum flow limits, relates to the level of habitat protection as a percentage relative to the habitat available at the Mean Annual Low Flow.
- 9.137B **Light fuel oil**
means residual oil of grade No. 5 or less (as described in USEPA Chapter 1 of the Compilation of Air Pollutant Emission Factors, AP-42, (January 1995) Fifth Edition, Volume I: Stationary Point and Area Sources), and contains less than 2% sulphur by weight. This does not include distillate oils such as kerosene and diesel.
- 9.137C **Limit**
Has the same meaning as given in the 2011 NPSFM's Interpretation section.
- 9.137D **Liquefied petroleum gas (LPG)**
means butane, propane or a mixture of the two.
- 9.138 **Local Air Quality**
The air quality outside buildings or structures affected by a variety of sources causing a cumulative effect within a relatively small area. It does not mean indoor air nor individual source discharges.
- 9.139 **Local authority**
A regional council or territorial authority.
- 9.139A **Low intensity farming system**
Means farm properties or farming enterprises that contain no more than 8 stock units per hectare including permanent horticultural and viticultural crops (such as orchards, vineyards) and lifestyle properties; but does not include
 - a) Properties used for the production of rotational vegetable crops;
 - b) Dairy farms;
 - c) Grazed forage crops.
- 9.139B **MACNL**
Means Maximum Allowable Catchment Nitrogen Load which is the maximum amount of nutrient (in units of tonnes/year) that can be lost from land (root zone loss) within the Tukituki Catchment above Black Bridge. This includes land that is that is regulated by way of permitted activity or resource consent and land that is not regulated (e.g. native forest). Compliance with the MACNL is determined from root zone losses modelled using Overseer (or an alternative model approved by Hawke's Bay Regional Council).
- 9.140 **Mahinga kai**
Food cultivation.
- 9.141 **Mahinga mataitai**
Areas from which food resources are gathered and/or propagated.

- 9.142 **Maintenance**
In relation to structures, means to keep in existing order, to prevent loss or deterioration, or to restore to working order. It does not include extending, replacing, removing or demolishing a structure, or any substantive change to the form, orientation, or outline of the structure.
- 9.142A **MALF**
Means Mean Annual Low Flow of a river and the average of the annual low flows occurring over 7 consecutive days for the years where river flow records are available for a river.
- 9.143 **Mana**
Empowerment, entitlement, authority, prestige, influence or control.
- 9.144 **Mana moana**
Rights to the sea.
- 9.145 **Mana whenua**
Customary authority exercised by an iwi or hapu in an identified area.
- 9.146 **Manaakitanga**
The process of caring for, protection of, or giving benefit to others; the tikanga maori value concept that denotes the voluntary rangatiratanga gesture of benevolence for people.
- 9.146A **Managed stock crossing**
Managed stream crossing refers to a point(s) along a stream where stock are actively herded across to access another paddock or part of the farm. It is intended that this activity be infrequent, not on formed raceways and that stock shall be actively managed.
- 9.147 **Management agency**
Any body having functions, powers and duties under the Act or having functions, powers or duties transferred to it under the Act.
- 9.147A **Management entity**
In relation to Policy TT12, a legally established entity with authority from a group of consent holders to manage temporary transfers of water between consent holders.
- 9.148 **Manufacture**
For the purposes of this Plan manufacture excludes sites which deal solely with the handling, storage and mixing of goods.
- 9.149 **Mauri**
The indefinable essence described as the 'life-force'.
- 9.150 **MCI – Macro Invertebrate Community Index**
An index of the proportion of sensitive to tolerant species (in relation to the quality of a water body), among the community of benthic invertebrates that can be seen with the naked eye.
- 9.151 **Mean high water springs**
The average line of spring high tide.
- 9.151A **MERI**
A Monitoring Evaluation Reporting and Improvement Plan prepared as part of the Tukituki Catchment Implementation Plan which outlines how the non-regulatory approaches in Change 6 (Tukituki Catchment) will be implemented.
- 9.152 **Mineral**
Has the same meaning as in section 2 of the Crown Minerals Act 1991, which is: "a naturally occurring inorganic substance beneath or at the surface of the earth, whether or not under water; and includes all metallic minerals, non-metallic minerals, fuel minerals, precious stones, industrial rocks and building stones, and a prescribed substance within the meaning of the Atomic Energy Act 1945".
- 9.153 **Minimum flow**
A critical flow set to ensure sufficient water is left in a river to maintain the life-supporting capacity of aquatic ecosystems and/or other identified values, during low flow conditions.

- 9.153A **Minimum flow regime**
Comprises the minimum flows in Table 5.9.3 and Table 5.9.6, together with the manner in which takes will be managed in relation to those minimum flows as described in POL TT7, POL TT9, POL TT10, POL TT11 and POL TT13A.
- 9.154 **Moana**
Sea.
- 9.154A **Modified NESAQ compliant burner:**
means a small scale solid fuel burner that meets the requirements of Part C Schedule XII after modification, and is specifically included on an approved modified burner list².
- 9.154B **Modified pellet boiler**
means solid fuel burning equipment that has been modified after manufacture and/or installation to convert it to a boiler fuelled by wood pellets and where the pellets and air are mechanically delivered to an enclosed combustion chamber at a controlled rate.”
- 9.154C **Mohaka Catchment Area**
means a catchment area including the Mohaka River, its tributaries, plus associated groundwater catchments. Indicative location of the Mohaka Catchment Area is set out in Appendix A of Chapter 3.1A.
- 9.155 **Mouth ***
For the purpose of defining the landward boundary of the coastal marine area, means the mouth of the river either:
(a) as agreed and set between the Minister of Conservation, the regional council, and the appropriate territorial authority in the period between consultation on, and notification of, the proposed regional coastal plan, or
(b) as declared by the Planning Tribunal under section 310 of the Act upon application made by the Minister of Conservation, the regional council, or the territorial authority prior to the plan becoming operative.
- 9.155A **Multi-fuel burner**
means a small scale fuel burner designed to burn more than one type of solid fuel.
- 9.155B **MW (megawatt)**
means a measure of power (the rate at which work is being done) where 1 MW = 10⁶ (1 million) Joules per second, or 1000 kW.
- 9.155C **Napier Airshed**
means an airshed specified by the Minister for the Environment by a notice in the Gazette over the Napier urban area and surrounds for the purposes of managing local ambient air quality. The area covered by the Napier Airshed is incorporated by reference in Schedule XIII, and comprises Airzone 1 and Airzone 2.
- 9.155D **Napier Airshed Airzone 1**
means the area of the Napier Airshed covered by Airzone 1 as shown in Schedule XIII.
- 9.155E **Napier Airshed Airzone 2**
means the area of the Napier Airshed covered by Airzone 2 as shown in Schedule XIII.
- 9.155F **National Ambient Air Quality Standard**
means a standard specified under the Resource Management (National Environmental Standards for Air Quality Regulations 2004).
- 9.156 **National Policy Statement**
A statement issued under section 52 of the Act.
- 9.157 **Natural and physical resources**
Land, water, air, soil, minerals, and energy, all forms of plants and animals (whether native to New Zealand or introduced), and all structures.
- 9.157A **Natural gas**
means a mixture of naturally occurring hydrocarbons that are gaseous under normal conditions of temperature and pressure, comprising methane and small amounts of ethane, propane and other gases.

² A list of approved modified burners (i.e. those burning appliances that have been modified to comply with the NESAQ) is available from the Hawke's Bay Regional Council on request.

- 9.158 **Natural hazard**
Any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.
- 9.159 **Natural temperature**
The temperature which occurs naturally when the water is not influenced by known discharges or activities which may cause an increase or decrease in the temperature of the water.
- 9.159A **NESAQ**
refer to National Ambient Air Quality Standard.
- 9.159B **NESAQ compliant burner**
means a small scale solid fuel burner that meets the requirements in Schedule XII, and is specifically stated on an approved burner list.³
- 9.159C **NES-DW**
Means National Environmental Standard for Sources of Human Drinking Water 2007, as referenced in the Resource Management (National Environmental Standard for Sources of Human Drinking Water) Regulations 2007
- 9.159CA **NES-F**
means National Environmental Standard for Freshwater 2020, as referenced in the Resource Management (National Environmental Standard for Freshwater) Regulations 2020.
- 9.159CB **NES-OTS**
means National Environmental Standard for Outdoor Tyre Storage 2021, as referenced in the Resource Management (National Environmental Standard for Outdoor Tyre Storage) Regulations 2021.
- 9.159D **Net Density**
The number of lots or dwellings per hectare (whichever is the greater). Where:
1. the area (ha) includes land for:
 - a) Residential purposes, including all open space and on-site parking associated with residential development;
 - b) Local roads and roading corridors, including pedestrian and cycle ways, but excluding State Highways and regional arterial roads;
 - c) Local (neighbourhood) reserves; and
 2. the area (ha) excludes land that is:
 - a) Stormwater retention and treatment areas;
 - b) Geotechnically constrained (such as land subject to subsidence or inundation);
 - c) Set aside to protect significant ecological, cultural, heritage or landscape values;
 - d) Set aside for esplanade reserves or access strips that form part of a larger regional or sub-regional reserve network;
 - e) For local community services and retail activities, or for schools, hospitals or other district, regional or sub-regional facilities.
- 9.159E **Net site area (NSA)**
means a single contiguous area of a property set aside for the exclusive use of its owners, leasees or tenants and shall exclude all common use areas, access lots or access strips and entrance strips.
- 9.160 **Network utility operator**
The meaning set out in section 166 of the Act.
- 9.161 **New Zealand Coastal Policy Statement**
A statement issued under section 57 of the Act.
- 9.162 **Noa**
Open, available (i.e. state of not being tapu or rahui).
- 9.163 **Noise**
Includes vibration.

³ A list of approved burners (i.e.: those burning appliances that comply with the NESAQ) is available from the Hawke's Bay Regional Council on request.

- 9.164 **Non-hazardous by-products**
By-products from industrial processes that are not hazardous substances and are not contaminated by hazardous substances.
- 9.165 **Non-point source discharge**
See “Diffuse source discharge”.
- 9.166 **Noxious**
See Section 6.1.4 of this Plan
- 9.166A **NPSFM**
National Policy Statement for Freshwater Management.
- 9.166B **Nutrient Budget**
A Nutrient Budget means:

A statement of the total nutrient balance for a particular farm property or farming enterprise, taking into account all the nutrient inputs and all the outputs. It must be prepared or approved:

(i) using standard protocols recognised and approved by the Hawke’s Bay Regional Council such as “Overseer Best Practice Input Standards”; and

(ii) by a person who is a Certified Nutrient Management Advisor or who has completed both the “Intermediate” and the “Advanced” courses in “Sustainable Nutrient Management in New Zealand Agriculture” conducted by Massey University.

The information requested by the Hawke’s Bay Regional Council shall be provided in an electronic format compatible with HBRC information systems and may include but shall not be limited to the following reports from Overseer or their equivalent if an alternative model is used: Nutrient Budget, Nitrogen, Phosphorus, Summary, Nitrogen Overview.
- 9.167 **Objectionable**
See Section 6.1.4 of this Plan
- 9.168 **Offensive**
See Section 6.1.4 of this Plan
- 9.169 **On-site sewage treatment system**
A system used for the collection, treatment and land application of wastewater within the boundary of the same property title that generate that wastewater. Treatment systems include basic septic tank units, alternative septic tank units, dry vault units (e.g. pit privies), wet vaults (e.g. septic closet) systems for blackwater with separate greywater disposal (e.g. sullage tanks), aerated wastewater treatment systems, sand media and alternative filters, wetlands etc. Disposal systems include soakage trenches and beds, modified trench and bed systems relying in full or in part on evapo-transpiration, subsurface and surface irrigation systems, absorption wells/infiltration pits, and above ground treatment/disposal (fill and mound) systems.

See also definitions of ‘blackwater’, ‘greywater’, ‘septic tank’ and ‘sewage.’
- 9.169A **On-site wastewater system**
See ‘on-site sewage treatment system.’
- 9.169B **Open fire**
means a fireplace or similar device installed in, or attached to, any building which is capable of burning solid fuel, but where the combustion is not totally enclosed.
- 9.170 **Operative**
In relation to a policy statement or plan, or a provision of a policy statement or plan, means that the policy statement, plan, or provision has become operative in terms of clause 20 of the First Schedule of the Act and has not ceased to be operative.
- 9.171 **Organic material**
Putrescible material of plant, animal or microbial origin.
- 9.171A **Outdoor burning**
means the combustion of any material in the open air, other than in purpose-built fuel burning equipment designed to control the combustion process. Outdoor burning includes the use of any fire, or bonfire or burning

in drums and backyard rubbish incinerators, but does not include the burning of fuels in hangi and barbeques for food cooking purposes.⁴

9.171C **OVERSEER**

Overseer is a Nutrient Budget model that calculates and estimates the nutrient flows in a productive farming system and estimates nutrient losses on a long term average basis (in units of kg/ha/year). It is owned and administered by the Ministry of Primary Industries, Fertiliser Association of New Zealand and AgResearch.

9.172 **Papatuanuku**

Earth Mother, wife of Ranginui to whom she had some 70 children called atua, or deities.

9.172A **Particulate matter**

means solid and aerosol matter that exists in the atmosphere. For the purposes of this Plan, it includes smoke, deposited particulates, suspended particulates, respirable particulates and visibility-reducing particulates. Particles range in size from 100 microns down to aggregation of molecules. Particulate matter that is less than 10 microns in aerodynamic diameter is referred to as PM₁₀.

9.172B **Pellet burner**

Means any small-scale solid fuel burning appliance that burns only wood pellets where the pellets and air are mechanically delivered to an enclosed combustion chamber at a controlled rate.

9.172C **Periphyton**

Is a complex mixture of algae and slimes that attach to submerged surfaces in rivers.

9.173 **Permitted activity**

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 of the RMA) specified in the plan.

9.173A **Phosphorus Management Plan (PMP)**

Means a plan prepared generally in accordance with industry code of practices which identifies the inherent environmental risks on the farm property or farming enterprise associated with phosphorus and sediment loss, the significance of those risks, and identifies management practices to be implemented to avoid or reduce the risks. In particular a PMP shall:

- a. Aim to maintain or reduce phosphorus loss from the farm property;
- b. Include a Nutrient Budget;
- c. Identify critical source areas for phosphorus loss on a farm map;
- d. Evaluate, using appropriate techniques, a range of farm specific phosphorus loss mitigation measures including, but not limited to:
 - (i) achieving optimum Olsen P levels in the soil;
 - (ii) the optimal use of phosphorus fertilisers;
 - (iii) sealing effluent ponds, practicing deferred irrigation of effluent and avoiding overland flows of effluent;
 - (iv) stock exclusion from water bodies;
 - (v) avoiding intensive animal feeding operations and the grazing of forage crops on shallow soils underlain by shingle or sand;
 - (vi) the mitigation measures listed in POL TT5(1)(f)(iii) to (v).
- e. Include a time bound implementation plan that outlines which mitigation methods are to be used to maintain or reduce phosphorus loss from the farm property;
- f. Be certified as being technically appropriate by an approved person who is a Certified Nutrient Management Advisor or who has completed both the “Intermediate” and the “Advanced” courses in “Sustainable Nutrient Management in New Zealand Agriculture” conducted by Massey University.

⁴ NOTE: The NESAQ contains clauses prohibiting the burning of certain materials in the open and overrides rules contained elsewhere in this Plan.

- 9.174 **Piezometer**
An observation well designed to measure the elevation of the water table or hydraulic head of groundwater at a particular level. The well is normally quite narrow and allows groundwater to enter only at a particular depth, rather than through its length.
- 9.175 **Pilots chemical rating**
A rating which is administered by the Civil Aviation Authority, and is awarded to pilots involved in the aerial application of agrichemicals.
- 9.176 **Pipeline**
A pipeline constructed or used to convey any matter or substance, and includes all necessary incidental equipment, including compressor stations.
- 9.176A **Plantation Forest or Plantation Forestry**
means a forest deliberately established for commercial purposes, being—
(a) at least 1 ha of continuous forest cover of forest species that has been planted and has or will be harvested or replanted; and
(b) includes all associated forestry infrastructure; but
(c) does not include -
(i) a shelter belt of forest species, where the tree crown cover has, or is likely to have, an average width of less than 30 m; or
(ii) forest species in urban areas; or
(iii) nurseries and seed orchards; or
(iv) trees grown for fruit or nuts; or
(v) long-term ecological restoration planting of forest species; or
(vi) willows and poplars space planted for soil conservation purposes
as defined in the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.
- 9.176B **PM₁₀**
means particulate matter that is less than 10 microns in aerodynamic diameter (ie: less than 0.01mm diameter).
- 9.177 **Point of discharge**
in relation to a drainage system, means the location in a system that the drainage system operator ceases to control the discharge to the environment.

in relation to on-site sewage treatment systems, means the depth below or above ground level that a distribution line is placed, or if a trench or bed is used, the base of that trench or bed (not the depth at which the distribution line is placed within the trench or bed).
- 9.178 **Point source discharge**
A discharge that has been collected and controlled in some manner, such as a discharge that has been pumped through a pipe.
- 9.178A **Potable**
Water that is suitable for human consumption.
- 9.179 **Preservation**
In relation to a resource, means the maintenance, so far as is practicable, of its existing values.
- 9.180 **Primary production**
The use and development of land for the production of primary products including agricultural, horticultural, pastoral and forestry products.
- 9.181 **Private land**
Land which is not public land.
- 9.182 **Production cropping**
Planting, growing and harvesting crops on production land.
- 9.183 **Production land ***
(a) Means any land and auxiliary buildings used for the production (but not processing) of primary products (including agricultural, pastoral, horticultural and forestry products):

(b) Does not include land or auxiliary buildings used or associated with prospecting, exploration, or mining for minerals—
and ‘production’ has a corresponding meaning.

9.184 **Productive aquifer**

An aquifer:

- (a) that has a quantity and flow of water such that it can be used for water supply purposes, and
- (b) where the benefits of utilisation outweigh the costs (especially where the aquifer has existing contamination).

See also ‘aquifer’.

9.185 **Prohibited activity**

Any 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.

9.186 **Property**

Refers to one or more allotments as contained in a single certificate of title, and also includes all adjacent land that is in the same ownership.

9.187 **Proposed plan**

A proposed plan, or variation to a proposed plan, or change to a plan that has been notified under clause 5 of the First Schedule but has not become operative in terms of clause 20 of the First Schedule; but does not include a proposed plan or change originally requested by a person other than a local authority or a Minister of the Crown, unless the proposed plan or change is adopted and notified by the local authority under clause 25 (2) (a) of the First Schedule.

9.188 **Protection**

In relation to a resource means its maintenance so far as is practicable, in its current state, but includes:

- (a) its restoration to a former state
- (b) its augmentation, enhancement or expansion.

9.189 **Public land**

Land to which the public has free access at the time an activity is undertaken in accordance with a rule in this Plan.

9.190 **Public notice**

- (a) When given by a Minister of the Crown in relation to any matter other than a restricted coastal activity, a notice published in one or more daily newspapers circulating in the main metropolitan areas.
- (b) When given by a local authority, consent authority, or requiring authority (including the Minister of Conservation in the case of a restricted coastal activity decision), a notice published in:
 - (i) one or more daily newspapers circulating in the region or district of the local authority or to which the consent or requirement relates, or
 - (iii) one or more other newspapers that have at least an equivalent circulation in that region or district together with such other public notice (if any) as the Minister, local authority, consent authority, or requiring authority thinks desirable in the circumstances.

“Publicly notify” and “public notification” have corresponding meanings.

9.191 **Rahui**

A temporary prohibition or closure e.g. closure of fishing grounds in the vicinity of where someone has drowned.

9.191A **Raised bed**

means an area that wastewater is discharged into/onto that has been raised above surrounding ground level by the importation of additional soil/fill. For the purposes of this definition, raised beds include Wisconsin Mounds and ETA/ETS design where these are built up above the existing ground level.

9.192 **Rangatiratanga**

Denotes the status of the individual, whanau, hapu, iwi, in which mana reposes or sits; Tikanga Maori value concept from which Maori derive the right and responsibility to exercise kaitiakitanga. Tino rangatiratanga is the ultimate status.

9.193 **Ranginui**

Sky Father, husband of Papatuanuku, both of whom were created by Io Matuakore.

- 9.194 **Reasonable domestic needs**
Refers to needs associated with occupation of a dwellinghouse. “Domestic uses” and “Domestic purposes” have corresponding meanings. See also the definition of “Dwellinghouse”.
With respect to the taking and use of water for an individual’s reasonable domestic needs, as a guideline this should involve the taking and use of up to 15 m³ over any seven day period per dwellinghouse.
- 9.195 **Reasonable mixing**
See “after reasonable mixing”.
- 9.196 **Reclamation**
The permanent infilling of a water body or part of a water body with sand, rock, quarry material, concrete, or other similar material, for any purpose, and includes any embankment or causeway, but does not include any structure above water where that structure is supported by piles, or any deposition of material or infilling that is not permanent.
- 9.196A **Regional Coastal Environment Plan**
means a combined regional coastal plan and regional plan applicable to the coastal environment of the Hawke’s Bay region.
- 9.197 **Regional coastal plan**
An operative plan approved by the Minister of Conservation under the First Schedule (of the Act) and includes all operative changes to such a plan (whether arising from a review or otherwise).
- 9.198 **Regional council**
Has the same meaning as in the Local Government Act 1974.
- 9.199 **Regional plan**
An operative plan (including a regional coastal plan) approved by a regional council or the Minister of Conservation under the First Schedule (of the Act); and includes all operative changes to such a plan (whether arising from a review or otherwise).
- 9.200 **Regional policy statement**
An operative regional policy statement approved by a regional council under the First Schedule (of the Act); and includes all operative changes to such a policy statement (whether arising from a review or otherwise).
- 9.201 **Regional rule**
A rule made as part of a regional plan or proposed regional plan in accordance with Section 68 of the Act.
- 9.202 **Registered chemical applicator**
Any person who is, for the time being, recognised as a registered chemical applicator in accordance with the scheme of registration conducted by the New Zealand Agrichemical Education Trust.
- 9.203 **Registered historic place**
Any historic place registered under Part II of the Historic Places Act 1993.
- 9.204 **Regulation**
Regulations made under the RMA 1991.
- 9.204A **Residential Greenfield Growth Area**
means land identified for residential activities that has not been previously developed for this use.
- 9.205 **Residential property**
A property that contains at least one permanent dwellinghouse, and which is used primarily for domestic purposes. For the purposes of this Plan this refers to non-sewered properties.
- 9.206 **Resource consent**
The meaning set out in section 87 of the Act; and includes all conditions to which the consent is subject.
- 9.207 **Reticulated system, or reticulation**
The means by which water, stormwater, sewage or any water-borne contaminant is collected and delivered prior to discharge.

- 9.208 **Riparian management**
The activities and practices that can be applied to the riparian margin in order to improve the natural characteristics and functioning of the whole riparian zone (which includes the waterway itself as well as the riparian margins).
- 9.209 **Riparian margin**
A strip of land of varying width adjacent to a waterway and which contributes or may contribute to the maintenance and enhancement of the natural function, quality and character of the waterway and its margins.
- 9.210 **River ***
A continually or intermittently flowing body of fresh water, and includes a stream and modified watercourse, but does not include any artificial watercourse (including an irrigation canal, water supply race, canal for the supply of water for electricity power generation, and farm drainage canal).
- 9.211 **River bed**
See 'bed.'
- 9.212 **Rongoa**
A medicine or cure.
- 9.213 **RMA**
The Resource Management Act 1991, including any amendments thereto.
- 9.214 **Runanga**
Assembly, council.
- 9.214A **Seasonal volume**
Is the actual crop water requirement required over a crops growing season (including any crop rotation).
- 9.215 **Septage**
The contents of a wastewater primary treatment unit, removed during desludging operations, including scum, sludge and tank liquid.
- 9.216 **Sewage**
Any wastewater, including faecal matter, urine, household and commercial wastewater that contains human waste.
- 9.216A **Small-scale fuel burner**
means any fuel burning equipment which burns solid fuel, diesel, oil or other liquid fuels for cooking, space or water heating or other purposes, where the net heat output from the combustion is not greater than 70 kilowatts (kW) for any gaseous or liquefied gaseous fuel, or not greater than 40 kW for any other fuel.
- 9.216B **Small-scale pellet burner**
refer to pellet burner.
- 9.216C **Small-scale solid fuel burner**
means fuel burning equipment with a heat generation of up to 40 kilowatts (kW), in which solid fuel is burnt for heating or cooking, and is primarily used in dwelling houses. It includes (but is not limited to) appliances for interior space heating in buildings, such as wood burners, pellet burners, pot belly and domestic ranges and stoves, water heaters or central heating units, multi-fuel burners, and similar appliances, but excludes small-scale devices used for smoking food. For the purposes of this Plan, a small-scale solid fuel burner does not include an incinerator or an open fire.
- 9.217 **Smoke**
Any product of combustion, complete or incomplete, other than water vapour, which is, or could be, visible in daylight or artificial light.
- 9.217A **Social Infrastructure**
Assets that accommodate social services such as health (hospitals), education (schools and universities), state housing, justice (police stations), places of assembly and community recreation (for example, halls, sport stadiums and parks).
- 9.218 **Soil conditioning purposes**
The application of organic material to improve the structure and quality of the soil.

- 9.219 **Soil Health**
Means:
- physical parameters including soil structure and porosity
 - biological parameters including soil organic matter and earthworms, and
 - chemical parameters including contaminants but excluding soil chemical properties generally accepted as measurements of soil fertility.
- 9.219A **Solid fuel**
means a solid substance that releases useable energy when burnt (e.g. wood, manufactured fuel pellets, coal and its derivatives).
- 9.220 **Solid waste**
Primarily solid contaminants for which disposal by discharge into the environment is intended.
- 9.221 **Solid waste management**
All means for addressing issues relating to the creation, minimisation, reuse, recycling, treatment, disposal or containment of solid waste.
- 9.222 **Spray**
In relation to agrichemicals, means the discharge into the air of agrichemicals whether in liquid, emulsified, mist, granular, powdered, pelletised or any other physical form or forms.

'Spraying' has a corresponding meaning.
- 9.222A **Stack**
refer to Chimney.
- 9.223 **Stock feed**
Organic material that can be consumed by farmed animals.
- 9.224 **Stormwater**
Runoff of water that is not absorbed by land and includes testing water used by network utility operators.
- 9.225 **Stormwater network**
A system of piped or open drains that drain an area to a point of discharge.
- 9.225A **Strategic Infrastructure**
Those necessary facilities, services and installations which are of greater than local significance, and can include infrastructure that is nationally significant. The following are examples of strategic infrastructure:
- a) strategic transport networks
 - b) Hawke's Bay Regional Airport
 - c) Port of Napier
 - d) Omarunui Regional Landfill
 - e) strategic telecommunications and radiocommunications facilities
 - f) the electricity transmission network and electricity distribution networks
 - g) renewable electricity generation activities
 - h) pipelines and gas facilities used for the transmission and distribution of natural and manufactured gas
 - i) public or community sewage treatment plants and associated reticulation and disposal systems;
 - j) public water supply intakes, treatment plants and distribution systems
 - k) public or community rural water storage infrastructure, including distribution systems
 - l) public or community drainage systems, including stormwater systems
 - m) flood protection schemes
 - n) other strategic network utilities.
- 9.225B **Strategic Transport Networks**
Transport networks and operations of national or regional significance. These include the strategic road network including State Highway and major arterial roads (as defined in district plans, the Regional Land Transport Strategy and the State Highway Classification System) and the rail network, along with the region's core public passenger transport operations and significant regional transport hubs such as the Hawke's Bay Regional Airport and the Port of Napier.
- 9.226 **Structure ***
Any building, equipment, device, or other facility made by people and which is fixed to land; and includes any raft.

- 9.226A **Structure Plan**
A plan that guides the development (or redevelopment) of an area by showing proposed future development and land-use patterns, areas of open space, the layout and nature of infrastructure (including transportation links), and other key features for managing the effects of development.
- 9.227 **Subject property**
The legally defined property, whether private land or public land, within which the subject activity occurs and includes all land that is under common ownership.
- 9.228 **Surface water**
In terms of this Plan, water which is above the surface of the ground, whether flowing or not, including rivers, lakes, artificial watercourses and wetlands.
- 9.228A **Surface Water Allocation Zone (Tukituki)**
An area of the catchment as shown in Schedule XVI that has a defined allocation limit for surface water abstraction set in Table 5.9.4.
- 9.229 **Suspended solids**
Particulate matter carried in suspension within water.
- 9.230 **Sustainable management ***
Means 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.
- 9.231 **Taking**
In relation to the taking of water, is the process of extracting the water for any purpose and for any period of time.
- 9.232 **Tane**
The atua responsible for separating ranginui (sky) and papatuanuku (earth) that lead to the third state of Maori reality – Te Ao Marama. Tane created the forests and the original human being.
- 9.233 **Tangaroa**
The atua responsible for the oceans and its creatures.
- 9.234 **Tangata whenua ***
In relation to a particular area, means the iwi, or hapu, that holds mana whenua over that area.
- 9.235 **Taonga**
Treasure, property; prized and protected as sacred possessions of the relevant hapu which exercises kaitiaki over it.
- 9.236 **Taonga raranga**
Plants used for weaving.
- 9.237 **Taonga tuku iho**
All gifts from god including knowledge, language, culture, as well as the natural and physical resources.
- 9.238 **Tapu**
Sacred or forbidden.
- 9.238A **Target**
has the same meaning as given in the NPSFM's Interpretation section.
- 9.239 **Target area**
In relation to the use of agrichemicals, means the physical target of the agrichemical application. "Non-target area" has the opposite meaning.
- 9.240 **Tauranga waka**
Landings for waka.

- 9.241 **Tawhirimatea**
The atua responsible for the elements.
- 9.242 **Te Ao Marama**
The world of light achieved through the separation of Ranginui and Papatuanuku.
- 9.243 **Te Kore Kore**
Nothingness – the first state of Maori reality.
- 9.243A **Telemetry**
Is a method of transmitting data electronically via data transfer mechanisms, a telephone or computer network, optical link or other wired communications like phase line carriers.
- 9.244 **Te Po**
The ‘night’ or darkness – the second state of Maori reality.
- 9.245 **Territorial local authority**
A city council or a district council under the Local Government Act 1974.
- 9.245A **Thermal efficiency**
means the ratio of useable heat energy output to energy input.
- 9.246 **Tikanga Maori ***
Means Maori customary values and practices.
- 9.247 **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.
- 9.247A **Tranche**
A specified portion of groundwater from the Ruataniwha Aquifer.
- 9.248 **Transfer station**
An industrial or trade premises which receives solid waste for the purpose of sorting and/or aggregating prior to being transported to a disposal facility.
- 9.249 **Treaty of Waitangi ***
Has the same meaning as the work ‘Treaty’ as defined in section 2 of the Treaty of Waitangi Act 1975.
- 9.249A **TT**
In reference to policy and rule titles means Tukituki and indicates that the policies and rules so referenced relate to the Tukituki Catchment only.
- 9.249B **Tukituki Catchment Area**
means a catchment area including the Waipawa River, Tukituki River, Makāretu River, Makaroro River, Makara Stream, Omakere Stream, their tributaries, plus associated groundwater catchments. Indicative location of the Tukituki Catchment Area is set out in Appendix A of Chapter 3.1A.
- 9.250 **Unconfined aquifer**
See ‘aquifer’.
- 9.250A **Urban Activities**
Includes any one or combination of the following:
 - a) residential activities at a density of more than one dwelling per 2500m² of site area;
 - b) commercial and industrial business, retailing and other commercial activities;
 - c) use of social infrastructure;
 - d) papakainga or other marae-based housing;
 - e) any other land use within urban limits.
- 9.250B **Urban Limits**
The outer extent of the areas within which urban activities are located or which are committed for future urban expansion.

- 9.251 **Use**
In relation to water, means the use of water but not the processes of extraction, damming, diversion or discharge. Uses of water include human consumption, irrigation of a crop (excluding the taking of water for irrigation), and recreational uses of a water body.
- 9.252 **Vegetation**
Any vegetation, exotic or indigenous.
- 9.253 **Vegetation clearance**
The cutting, burning, clearing or destruction (including destruction by spraying) of trees, shrubs or plants but excluding grasses, forest thinnings, agricultural and horticultural crops and noxious weeds covered by the Regional Plant Pest Management Strategy prepared under the Biosecurity Act 1993. It excludes the normal maintenance of legally established structures, roads, tracks, railway lines and river beds.
- 9.253A **Vegetative matter**
means any tree branches, roots, leaves, grass cuttings, seed pods, stalks and stubble (stems), prunings, wood and similar organic plant material.
- 9.254 **Ventilation**
Includes both natural ventilation and artificial ventilation (including air conditioning units, extraction vents, mechanical fans, hoods and ducts) for the purpose of controlling temperature or providing air movement within a workplace.
- 9.254A **Versatile Land**
In relation to the Heretaunga Plains sub-region, means contiguous, flat to undulating terrain within the Heretaunga Plains sub-region that acts collectively to support regionally (and nationally) significant primary production and associated secondary services on the Heretaunga Plains, based around^{4A}:
- a) an exceptionally high proportion of versatile Class 1-3 soils (comprising almost 90%);
 - b) Class 7 soils that are internationally recognised as having very high value for viticultural production (comprising almost 7%);
 - c) its proximity to a cluster of national and international processing industries and associated qualified labour force; and
 - d) its proximity to the Port of Napier and other strategic transport networks providing efficient transport of produce.
- 9.255 **Waahi**
A place, site or location.
- 9.256 **Waahi Tapu**
Sacred site, as defined locally by the hapu which are the kaitiaki for the waahi tapu.
- 9.257 **Wairuatanga**
Spirituality; a Tikanga Maori value concept that acknowledges the source of all taonga plus the duty to exercise perpetual guardianship.
- 9.258 **Waka**
Water craft.
- 9.259 **Waste**
Any contaminant, discharged into the environment, which is unwanted or economically unusable at the time of discharge. This definition excludes 'cleanfill'.
- 9.260 **Waste oil**
means oil that has been utilised for a process (typically lubrication, either in internal combustion engines or moving parts to minimise component wear) that results in contaminants building up in the oil. Contaminants may include heavy metal particles, combustion by-products, fuel and used additives. Note: while some 'purification' processes may result in the removal of a number of these contaminants, the oil even though described as 'processed waste oil' is still defined to be waste oil because the removal is often only partial.

^{4A} While this definition is based around matters in (a) to (d), the Environment Court's decision in Canterbury Regional Council v Selwyn District Council [W142/96] provides a statement from Judge Treadwell about the wider range of factors he took into account regarding land versatility.

- 9.260A **Wastewater**
means all water or other liquid including waste matter in solution or suspension from any source which is to be discharged into a wastewater system. Wastewater includes sewage, greywater and blackwater.
- 9.260B **Wastewater system**
means a system for the collection, treatment and disposal of wastewater. It includes on-site sewage treatment systems, and reticulated wastewater systems.
- 9.261 **Water ***
(a) Means water in all its physical forms whether flowing or not and whether over or under the ground.
(b) Includes fresh water, coastal water, and geothermal water.
(c) Does not include water in any form while in any pipe, tank, or cistern.
- 9.262 **Water body ***
Means fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area.
- 9.263 **Water conservation order ***
Has the meaning set out in section 200 (of the RMA), and refers to a status applied to a water body which has significant environmental, or recreational values.
- 9.264 **Water harvesting ***
Means in terms of this Plan, the taking of water from rivers and streams during high flows and storing it to provide water for use in the dry season.
- 9.264A **Water Management Zone**
An area of the catchment as shown in Schedule XV that has defined surface water quality limits set out in Policy TT1 and Table 5.9.1A and 5.9.1B.
- 9.265 **Water table**
The layer of unconfined water. See also 'aquifer'.
- 9.266 **Wehi**
Awe, wonderment.
- 9.267 **Wet abrasive blasting**
See "abrasive blasting".
- 9.268 **Wetland**
1. in the RPS (only), it includes:
 (a) permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions; and
 (b) those areas mapped in Schedule 24 (a to d) and commonly known as:
 i) Lake Whatuma (previously known as Hatuma);
 ii) Atua Road north swamp;
 iii) Wanstead Swamp;
 iv) Lake Poukawa.
2. in the regional plan (only), it includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions, except for:
 (a) wet pasture or cropping land;
 (b) artificial wetlands specifically designed, installed and maintained for any of the following purposes:
 i) wastewater or stormwater treatment;
 ii) farm stock water dams, irrigation dams, and flood detention dams;
 iii) reservoirs, dams and other areas specifically designed and established for the construction and/or operation of a hydro-electric power scheme;
 iv) land drainage canals and drains;
 v) reservoirs for fire fighting, domestic or municipal supply;
 vi) beautification or recreation purposes.
- 9.269 **Whakapapa**
Kinship links established through genealogy.

- 9.270 **Whanau**
An extended family unit.
- 9.271 **Whanaungatanga**
Relationships; Tikanga Maori value concept for various relationships based on spiritual and physical origins of Maori.
- 9.272 **Wood**
Includes logs, sawn timber, bark, shavings, sawdust and wood chips.
- 9.272A **Wood burner**
means a small-scale solid fuel burner that burns wood, but does not include:
(a) an open fire; or
(b) a multi-fuel burner, a pellet burner, or a coal burner; or
(c) wood fired cooker
- 9.272B **Wood pellets**
means individual pellets of between 6 mm and 8 mm in diameter and a maximum length of 38 mm made from wood shavings or sawdust bonded together by the woods natural resins through the process of pelletisation. Wood pellets made using wood, wood shavings or sawdust that has been treated with preservatives or impregnated with chemicals are excluded from this definition, except for negligible amounts of antispain where, in the pellets⁵, the concentration of copper does not exceed 10 mg/kg dry, and the concentration of chlorine does not exceed 0.02 w-% dry⁶.
- 9.273 **Wood fired cooker**
means a wood fuelled cooking appliance containing an oven of not less than 20 L capacity and a hot plate and is specifically included on an approved wood fired cooker list⁷. A 'wood fired cooker' does not include a pot belly, chip heater or a wood burner.

⁵ Concentrations of copper and chlorine in a pellet shall be sampled, tested and reported in accordance with DIN51731:1996 or a similar method. DIN51731:1996 is a standard accepted in the European Union, where a 120kg sample is taken in irregular amounts over 5 consecutive working days; then that sample is split into thirds, leaving 1x40kg sample; then that 40kg sample is further split in 2 leaving 1x20kg sample; then that 20kg sample is split in 2 leaving 1x10kg sample for copper and chlorine concentration testing.

⁶ ie: ≤ 200mg/kg of dry pellets.

⁷ A list of approved wood fired cookers (i.e. those appliances that comply with the definition of 'wood fired cooker'); is available from the Hawke's Bay Regional Council on request.